# Temple University Undergraduate Bulletin 2013-2014 

## Welcome from the President

It is my special pleasure to introduce the Temple University Undergraduate Bulletin, one of the most important tools available to you as you map out your path to complete your Temple University degree.

The Undergraduate Bulletin provides a wealth of information regarding your opportunities here at Temple, including

- overviews of degree programs and the requirements necessary to complete 140 undergraduate majors, as well as all undergraduate minors, concentrations and certificates;
- a searchable database with descriptions of more than 4,000 undergraduate courses offered at Temple;
- assistance in exploring opportunities to study abroad and engage in faculty-guided research;
- important information on academic policies and procedures that affect your academic planning and responsibilities; and
- a reference guide to the full array of support services available at Temple to ensure your success in fulfilling your degree requirements in a timely fashion and readying yourself for employment after you graduate.

I encourage you to consult regularly with your academic advising staff and faculty to get the most out of your academic experience here at Temple. Above all else, be prepared to work hard to earn your Temple degree. Your dedication will pay off throughout your life and career!

Sincerely,
Neil D. Theobald
President

## About This Bulletin

The Undergraduate Bulletin is produced by the Office of the Provost to present general information about Temple University and specific information about undergraduate academic programs. Although every effort is made to provide complete and accurate information, the descriptions of programs and policies are announcements only and in no way serve as a contract.

If you are a new undergraduate student at Temple this year, this Bulletin contains the requirements of programs into which you will be enrolling. For that reason, your advisors may refer to Fall 2013 as "your Bulletin year." Current students who started at Temple before Fall 2013 should click on the "Archived Bulletins" link on the left to find the requirements of their program of study for their Bulletin year.

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

New freshmen starting in the 2013-2014 academic year are required to complete the GenEd curriculum. Students who have fewer than 15 transferable credits are considered freshmen. Additionally, students whose transfer credits were earned while in high school, regardless of the number of transfer credits, are considered freshmen.

New transfer students starting in the 2013-2014 academic year are required to complete the GenEd curriculum. Students who attempted 15 or more transferable credits after high school and prior to being admitted to Temple University are considered transfer students.

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

We hope this Undergraduate Bulletin will prove informative and useful to you as a Temple student. Questions or suggestions regarding the content of the Undergraduate Bulletin may be directed to the Office of the Senior Vice Provost for Undergraduate Studies (phone: 215-2042044).

The Undergraduate Bulletin was updated in May 2014.

Please note that all information contained in the Undergraduate Bulletin are announcements only and in no way serve as a contract between the student and Temple University. All prospective and current students are responsible for contacting individual departments regarding the latest information on regulations, policies, program requirements and course offerings.
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## Course Subject Names \& Abbreviations

Below is a list of course subject names and their abbreviations that may be found throughout the Bulletin:

## Subject Name ... Abbreviation

Accounting ... ACCT
Actuarial Science ... AS
Adult \& Organizational Development ... AOD
Advertising ... ADV
Aerospace Studies ... AIRF
African American Studies ... AAS
American Studies ... AMST
Ancient Greek ... GRKA
Anthropology ... ANTH
Arabic ... ARBC
Architecture ... ARCH
Art ... ARTU
Art Education ... ARTE
Art History ... ARTH
Asian Studies ... ASST
Bioengineering ... BIOE
Biology ... BIOL
Botany ... BOT
Business Administration ... BA
Business Education ... BSED
Career \& Technical Education ... CTE
Chemistry ... CHEM
Chinese ... CHI
Civil \& Construction Engineering Technology ... CMT
Civil Engineering ... CEE
College of Education ... COED
College of Health Professions \& Social Work... CHP
College of Liberal Arts ... CLA
College of Science \& Technology ... SCTC
Communication Sciences \& Disorders ... CSCD
Communication Studies ... CMST
Communications \& Theater ... COMM
Community \& Regional Planning ... CRP
Community Development ... CDEV
Computer \& Information Science ... CIS
Counseling Psychology ... CPSY
Crafts ... CRFT
Criminal Justice ... CJ
Critical Languages Center ... CRIT
Curricular Instruction \& Technology in Education ... CITE
Dance ... DANC
Disability Studies ... DSST
Distributive Education ... DSED
Early Childhood Education ... ECED
Earth \& Environmental Science ... EES
Economics ... ECON
Education ... EDUC
Educational Administration ... EDAD
Educational Psychology ... EPSY
Electrical Engineering ... ECE
Electrical Engineering Technology ... EET
Elementary Education ... ELED
Engineering ... ENGR
Engineering Technology ... ENGT

English ... ENG
English Education, Elementary ... ENEE
English Education, Secondary ... ENES
Environmental Engineering Technology ... ENVT
Environmental Science ... ENVS
Environmental Studies ... ENST
Film \& Media Arts ... FMA
Finance ... FIN
Foreign Language Education, Secondary Education ...
FLED
Foundation Program (Tyler) ... FDPR
French ... FREN
Geography \& Urban Studies ... GUS
German ... GER
Graphic Arts \& Design ... GAD
Greek, Ancient ... GRKA
Greek, Modern ... GRKM
Greek \& Roman Classics ... GRC
Health Information Management ... HIM
Health Related Professions ... HRPR
Healthcare Management ... HCM
Hebrew ... HEBR
Hindi ... HIN
History ... HIST
Honors Program, Upper Division ... HONS
Horticulture ... HORT
Human Resource Management ... HRM
Intellectual Heritage ... IH
International Business Administration ... IB
International Business Studies (TUJ) ... JIBS
Italian ... ITAL
Japanese ... JPNS
Jewish Studies ... JST
Journalism ... JRN
Kinesiology ... KINS
Korean ... KRN
Landscape Architecture ... LARC
Latin ... LAT
Latin American Studies ... LAS
Legal Studies ... LGLS
Lesbian, Gay, Bisexual \& Transgender Studies ... LGBT
Management Information Systems ... MIS
Management Science/Operations Management ... MSOM
Marketing ... MKTG
Math Education, Elementary Education ... MAEE
Math Education, Secondary Education ... MAES
Mathematics ... MATH
Mechanical Engineering ... MEE
Mechanical Engineering Technology ... MET
Media Studies \& Production ... MSP (formerly
Broadcasting, Telecommunications \& Mass Media,
BTMM)
Middle Grades Education ... MGRE
Military Science ... MLSC

Modern Greek ... GRKM
Music ... MUSC
Music Education ... MUED
Music Studies ... MUST
Naval Science ... NAVS
Neuroscience ... NSCI
New Media Interdisciplinary Concentration ... NMIC
Nursing ... NURS
Occupational Therapy ... OTHR
Organizational Studies ... ORGS
Painting, Drawing \& Sculpture ... PDS
Physical \& Health Education Teacher Education ... PHTE
Philosophy ... PHIL
Physical Therapy ... PHTH
Physics ... PHYS
Political Science ... POLS
Portuguese ... PORT
Psychology ... PSY
Public Health ... PBHL
Real Estate ... RE
Religion ... REL
Risk Management \& Insurance ... RMI
Russian ... RUS
School of Business \& Management... SBM
School of Environmental Design ... SED
School of Tourism \& Hospitality Management ... STHA
School Psychology ... SPSY
Science Education, Elementary Education ... SCEE

Science Education, Secondary Education ... SCES
Science, Secondary Education ... SCSE
Secondary Education ... SECE
Slavic Languages \& Literature ... SLVC
Social Studies Education, Elementary Education ... SSEE
Social Studies Education, Secondary Education ... SSES
Social Work - Undergraduate ... SSWU
Sociology ... SOC
Spanish ... SPAN
Special Education ... SPED
Statistics ... STAT
Strategic Communication ... STRC
Strategic Management ... SGM
Student Teaching, Elementary Education ... STEE
Student Teaching, Secondary Education ... STCS
Theater ... THTR
Therapeutic Recreation ... THRC
Topical Studies ... TS
Tourism \& Hospitality Management ... STHM
TUJ International Business Studies ... JIBS
(Tyler) Foundation Program ... FDPR
Tyler School of Art ... TYLE
University Seminar ... UNVS
Upper Divisions Honors Program ... HONS
Urban Education ... URBE
Vietnamese ... VTNM
Visual Studies ... VS
Women's Studies ... WMST

## Academic Calendar

| Fall 2013 |  |
| :---: | :---: |
| Fall 2013 classes begin | Monday, August 26 |
| Labor Day holiday | Monday, September 2 |
| Last day to drop a course | Monday, September 9 |
| Last day to withdraw from a course | Tuesday, October 22 |
| Priority Registration begins for Spring 2014 | Wednesday, October 23 |
| *Calendar Adjustment for Thanksgiving break | Tuesday, November 26 - Wednesday, November 27 |
| Thanksgiving holiday break | Thursday, November 28 - Sunday, December 1 |
| Weekday classes end | Wednesday, December 4 |
| Study days | Thursday, December 5 - Friday, December 6 |
| Weekend classes end | Saturday, December 7 |
| Final examinations | Monday, December 9 - Saturday, December 14 |
| Winter recess begins | Saturday, December 14 at 10:00pm |
| *TUESDAY, NOVEMBER 26 - FOLLOW YOUR THURSDAY CL <br> *WEDNESDAY, NOVEMBER 27 - FOLLOW YOUR FRIDAY CL |  |


|  | Spring 2014 |
| :--- | :--- |
| Spring 2014 classes begin | Tuesday, January 21 |
| Last day to drop a Spring 2014 course | Monday, February 3 |
| Spring recess | Sunday, March 2 - Sunday, March 9 |
| Last day to withdraw from a course | Tuesday, March 25 |
| Priority Registration begins for Summer 2014 | Wednesday, March 26 |
| Priority Registration begins for Fall 2014 | Thursday, April 3 |
| Classes end | Monday, May 5 |
| Study days | Tuesday, May 6 - Wednesday, May 7 |
| Final examinations | Thursday, May 8-Wednesday, May 14 |
| Commencement | Thursday, May 15 |


| Summer Sessions 2014 |  |
| :--- | :--- |
| Summer 2014 (session 1) classes begin | Monday, May 19 |
| Memorial Day holiday | Monday, May 26 |
| Last day to drop a Summer 2014 (session 1) course | Monday, June 2 |
| Last day to withdraw from a Summer 2014 (session 1) course | Monday, June 16 |
| Summer 2014 (session 1) classes end | Wednesday, June 30 |
| Independence Day holiday | Thursday, July 4 |
| Summer 2014 (session 2) classes begin | Monday, July 7 |
| Last day to drop a Summer 2014 (session 2) course | Monday, July 18 |
| Last day to withdraw from a Summer 2014 (session 2) course | Monday, August 4 |
| Summer 2014 (session 2) classes end | Saturday, August 16 |
| Diploma date | Friday, August 29 |

## About Temple University

## Mission Statement

Temple University is a national center of excellence in teaching and research with an international presence. Our talented faculty and broad curriculum of over 300 academic programs provide superior educational opportunities for academically talented and highly motivated students, without regard to their status or station in life. Temple's richly diverse student population and the dramatic growth of our residential campus community of student scholars enrich the educational and extracurricular life of our people.

While the University especially serves students from Greater Philadelphia, it is enlivened by a rapidly increasing number of students from across Pennsylvania, throughout the nation, and around the world. We maintain an international presence with campuses in Tokyo and Rome and programs in London, Beijing, and six other locations worldwide.

A long-time leader in professional education, Temple prepares the largest body of practitioners in Pennsylvania; we are among the nation's largest educators in the combined fields of medicine, dentistry, pharmacy, podiatry and law.

In addition, we offer more than four dozen doctoral and more than 100 master's degree programs that contribute to research and scholarship. Temple seeks to create new knowledge that improves the human condition and uplifts the human spirit. To achieve this goal, we maintain our commitment to recruiting, retaining, and supporting outstanding faculty that prize diversity of thought, excel in scholarly endeavors, and support the aspirations of capable students.

## A View of Temple University

As a comprehensive, public research university, Temple University offers a commitment to teaching combined with a desire to learn from new experiences. The university is dedicated to new technologies and cutting-edge research built upon decades of practical experience in the field.

Located in the heart of metropolitan Philadelphia, Temple's Main Campus reflects the history and diversity of over 125 years of educating men and women. Since its humble beginnings in 1884, Temple University continues to affirm its commitment to learning, teaching and living with the help of dedicated faculty and staff, as well as the construction of various facilities, including state-of-the-art "smart" classrooms in Tuttleman Learning Center; the Liacouras Center (a thriving sports, entertainment and recreation complex); the TECH Center (one of the largest on-campus computer facilities of its kind in the United States); Alter Hall (the new home for the Fox School of Business and Management); the Tyler School of Art building; and the new Architecture Building. Renovations were recently completed for Pearson McGonigle Halls (a state-of-the-art basketball practice facility that also includes additional recreational space, classrooms, offices and atrium) and Edberg-Olsen Hall (a football practice facility that includes an expanded weight training room, a new physical training and injury rehabilitation center and teaching, collaboration and study space for the student athletes). Mitchell and Hilarie Morgan Hall, which consists of a 27-story residential tower along with adjacent low- and mid-rise structures and a dining facility, is scheduled to open in Fall 2013. Construction has started for a new seven-story Science Education and Research Center, scheduled to open in 2014.

As an internationally-recognized institution, Temple has earned its reputation. Temple's commitment to teaching and research has attracted top faculty members to each of its 140 bachelor's degree programs, as well as to its professional, master's, and doctoral programs. A recent university initiative has resulted in the hiring of many new faculty members from top institutions across the country. Temple professors are committed not only to research and teaching but to their students as well. A 15:1 student-to-faculty ratio ensures that students and professors develop a close rapport that enhances the learning experience.

Temple's campus extends further than its North Philadelphia roots. It offers campuses and programs of study in Center City Philadelphia, Ambler, Fort Washington and Harrisburg, Pennsylvania. The Temple University Health Sciences Center, located just two miles north of the Main Campus, is home to the Temple University School of Medicine, the Maurice H. Kornberg School of Dentistry, and the School of Pharmacy. It also includes the Temple University Hospital, a world-class medical facility. The Temple University School of Podiatric Medicine is located two miles southeast of the Main Campus. Temple's appreciation for diversity and international experiences is reflected in the various international programs offered at the university. Temple has campuses in Rome and Tokyo, as well as opportunities to study on almost every continent in countries such as Brazil, France, Germany, Ghana, Great Britain, India, Mexico, Puerto Rico, Senegal and Spain. Additionally, on campus, programs such as the Latin American Studies Semester provide an in-depth study of foreign cultures right at home.

Temple understands that the college experience is not limited to what happens in the classroom. To that extent, the university offers an array of recreational and cultural activities that reflect the diversity of its student body. There are dozens of student-run organizations in health, business, recreation, politics or religion that fit the student's background or desire to learn. There are also many social and professional Greek associations to join. The university offers art galleries on the Main Campus as well as in the Old City cultural district. Temple University's Boyer College of Music and Dance offers a wide variety of music and dance recitals and concerts throughout the year at on-campus and off-campus locations. The university has men's and women's teams that compete in a variety of intercollegiate sports, including basketball, crew, fencing, gymnastics, and track and field, most at the national-collegiate level. Temple University also offers a variety of intramural sports and sports clubs for its students. New on-campus student housing and the attractively-renovated Howard Gittis Student Center underscore Temple's commitment to enriching campus life. In fact, more students now live on campus than at any point in Temple's history, reflecting a broader change of the university from a commuter school to an expanding residential community.

Off campus, students can explore all that Philadelphia has to offer. The city is home to the Philadelphia Museum of Art, the Philadelphia Zoo, and the Philadelphia Orchestra. Students can tour the historic neighborhoods of Philadelphia, and visit the Liberty Bell and Independence Mall, the birthplace of the country. The city also offers world-class theater from touring Broadway shows and local performances at the Kimmel Center for the Performing Arts. The Philadelphia Sports Complex in South Philadelphia showcases a variety of entertainment opportunities. Students can catch any of Philadelphia's professional sports teams and minor league teams in action, as well as concerts by any band or artist imaginable. Large or small, in the city or around the world, on the field or in the classroom, Temple University gives students every opportunity to grow as individuals, learn in a variety of unique settings, and explore the possibilities.

## The University: Where We've Been and Where We're Going

Temple University was founded in 1884 by Dr. Russell H. Conwell as an outgrowth of his ministry at the Baptist Temple. Dr. Conwell wanted to make higher education available to all
capable and motivated students regardless of their backgrounds and finances. His college began as informal classes for seven people and was first housed in the meeting rooms of his church.

Over 125 years later, having emerged as a major educational enterprise, Temple University continues the Conwell mission. Today, Temple enrolls about 38,648 students, is the 25th largest university in the United States and is one of the nation's leading centers of professional education (law, dentistry, medicine, pharmacy, and podiatric medicine).

Temple is a world-class center of teaching, research, and health care. The university is identified in the Carnegie Classification of Institutions of Higher Education as one of only 98 public institutions nationally (and one of four in Pennsylvania) that are designated as a "Research University - High Research Activity." Temple serves as a vital research center for the United States government and is one of the three national survey research facilities.

From its roots in the historical and cultural richness of Philadelphia, Temple has become a major international university. With seven regional campuses as well as foreign campuses in Tokyo, Japan, and Rome, Italy, Temple attracts students from across the nation and around the world. In addition to its campuses in Tokyo and Rome, Temple has connections to campuses on virtually every continent, and its professors are known both nationally and internationally.

Through its 17 schools and colleges, Temple University offers academic programs on both undergraduate and graduate levels. There are 2 associate degree programs, 140 bachelor's programs, 126 master's programs, 57 doctoral programs, and 7 first professional programs. In addition, there are 17 undergraduate level and 64 graduate level certificate programs. In the 2011-12 academic year, Temple University awarded 8,813 degrees as follows: 8 Associate's degrees, 6,057 Bachelor's degrees, 1,561 Master's degrees, 235 Doctoral degrees and 952 first professional (J.D., M.D., D.M.D., D.P.M., Pharm.D.) degrees.

The university is proud of its distinguished faculty, many of whom possess national and international reputations. These award-winning scholars and teachers offer students at the undergraduate, graduate, and professional levels the education and training they need to succeed. At the undergraduate level, the average class size is 27 , and most of these classes are taught by senior faculty. One of the nation's major centers of teaching, research, and service, Temple is one of three public research universities in Pennsylvania and the second largest in the state. It is a leader in medicine and biomedical research, and the Temple University Health System, Inc., provides the most advanced care for thousands of residents throughout the region.

Temple has also been a leader in bold curricular initiatives. It was one of the first public research institutions to establish a rigorous, university-wide Core curriculum in its undergraduate schools and colleges. In 2007, Temple launched the General Education program for incoming freshmen, and this program has expanded to include transfer students. Temple also has received national recognition for its Learning Communities, in which incoming freshmen form small groups according to their majors and interests. In addition, the university's Honors program is a model for other colleges and universities as it engages students in intellectually-stimulating and challenging coursework throughout their undergraduate career.

Temple University is a member of the Commonwealth System of Higher Education in Pennsylvania and is supported by student tuition; annual appropriations from the Commonwealth; federal grants; gifts from alumni, corporations, and friends; and income from endowments. The university is governed by a 36 -member Board of Trustees.

Temple University is accredited by the Middle States Association of Colleges and Schools, Commission on Higher Education. Most of Temple's schools and colleges have received additional accreditation from other agencies, noted in each school and college's section of this Bulletin.

For more information on Temple University, visit the university's home page at www.temple.edu, view the Temple University Factbook at www.temple.edu/ir/factbook/irfactbook.html, and see more about Temple at www.temple.edu/about.

The Undergraduate University Policies specified in this Bulletin cover all students taking courses at all Temple University campuses worldwide. Maps and descriptions of Temple University's Pennsylvania campuses are provided in the Campuses section of this Bulletin.

## Main Campus

Founded 1884
Peter R. Jones
Senior Vice Provost for Undergraduate Studies
215-204-7000 (general number)
www.temple.edu
Located one mile north of Center City Philadelphia, Temple's 115-acre Main Campus serves students from the Delaware Valley area, from throughout the United States, and from 103 foreign nations. There are approximately 27,100 undergraduates and 8,450 graduate and professional school students attending classes on the Main Campus.

The Main Campus can be reached easily by public transportation using SEPTA bus routes 4 or 16 on Broad Street, the Broad Street Subway (Cecil B. Moore Avenue stop), AMTRAK at North Broad Street Station, and SEPTA Commuter Rail Lines at the Temple/Cecil B. Moore Station, Ninth and Berks Streets.

The major facilities of the Main Campus are located between 10th and 16th Streets and between Oxford and Diamond Streets. Ten Temple schools and colleges with undergraduate programs have their central administrative offices at the Main Campus, as well as most of their classrooms. These include the Fox School of Business and Management; the School of Media and Communication; the College of Education; the College of Liberal Arts; the College of Science and Technology; the College of Engineering; the School of Social Work; the School of Tourism
and Hospitality Management; and the Center for the Arts, which consists of the Esther Boyer College of Music and Dance, the Tyler School of Art, and the Division of Theater, Film and Media Arts. The Graduate School and the James E. Beasley School of Law are also located on Main Campus. Many of these schools and colleges offer programs and courses on other campuses and at various extension centers. Those offerings are described in each individual college section and are listed on the "Programs Offered" chart at www.temple.edu/bulletin/Academic_programs/chart_degrees/chart_program/chart.shtm

## Programs Offered

All of the programs listed in the chart of Temple programs are offered on the Main Campus except those of the School of Environmental Design (Landscape Architecture, Horticulture, and Community Development); most of the programs of the College of Health Professions \& Social Work, the Maurice H. Kornberg School of Dentistry, the School of Medicine, and the School of Pharmacy, which are offered at the Health Sciences Center only; the programs of the School of Podiatric Medicine, which are offered at 8th and Race Streets; and those programs only offered in Temple University Japan.

## Physical Facilities

In addition to housing the major classroom and administrative facilities of ten of the schools and colleges of Temple, the Main Campus is also the central location of the university's Library System and Computer Center. Other facilities include two stages for theatrical productions (Tomlinson Theater and Randall Theater), two music recital halls (Klein Recital Hall and Rock Hall), a dance laboratory theater (Conwell Dance Lab), and the Temple Performing Arts Center.

The Main Campus is home to the Media Learning Center for the study of Critical Languages and other self-study courses and the Presser Learning Center, a nationally-known multimedia laboratory for teacher education in music. The university's 24-hour classical and jazz radio station, WRTI-FM, is located at the Entertainment and Community Education Center, behind the Liacouras Center at 1509 Cecil B. Moore Avenue, Third Floor, Philadelphia, PA 19121-3410.

The Liacouras Center, a venue for sports, entertainment, cultural, and educational activities, consists of a 10,200-seat concert and convocation center and is home to the Temple Owls Basketball teams, the Esther Boyer Theater, the Independence Blue Cross Student Recreation Center, the Entertainment and Community Education Center, and a 1,200-car garage.

The world-class TECH Center, located on 12th and Montgomery, features many technology resources available to students. The facility includes hundreds of computers, a help desk, the university Welcome Center, faculty wing, specialty labs, an internet lounge, social spaces, and private breakout rooms for studying.

The Howard Gittis Student Center includes the Valaida S. Walker Food Court, a Barnes \& Noble Bookstore, The UPS Store, Philadelphia Federal Credit Union, an information center, the student newspaper, Temple Student Government Offices, Main Campus Program Board, the school
yearbook, the Office of the Dean of Students, television lounge, quiet lounge and student organizational space.

Recreation facilities include a student fitness complex in the Independence Blue Cross Student Recreation Center, with free weights and racquetball courts; two Olympic-size swimming pools, several gymnasia, weight-training rooms, including a cardiovascular fitness center, in the newly renovated Pearson McGonigle Halls; an eight-lane, 400-meter outdoor track; an indoor track in the Independence Blue Cross Student Recreation Center; a lighted outdoor recreation and sports complex that includes four acres of artificial turf and a 4,500 seat arena. The Main Campus also has a student recreation facility consisting of a 39,000-square foot Student Pavilion with lighted tennis courts and an outdoor in-line skating surface. Main campus also houses TU Fitness (TUF), a fitness facility with over 16,000 square feet of space that includes cardio equipment, strength training equipment, an 11-piece selectorized equipment circuit, and a stretching area.

Tuttleman Learning Center is a hub for emerging learning technologies, with flexible classrooms, distance learning sites, student lounges, and personalized areas for small group activities, and is home to the University Writing Center, the University Honors Program, and International Programs.

Liacouras Walk, a major pedestrian way running through the center of campus, provides retail shops, food service, and the Conwell Inn. The Academic Resource Center, Math and Science Resources Center, and the Academic Advising Centers for the College of Liberal Arts and the College of Science and Technology are located at 1810 Liacouras Walk.

## Ambler Campus

Founded 1958

| William E. Parshall |
| :--- |
| Executive Director |
| Temple University Ambler |
| 580 Meetinghouse Road |
| Ambler, PA 19002 |
| 267-468-8020 |
| ambler@temple.edu |
| www.ambler.temple.edu |

Temple University Ambler, a respected innovator in research and education in social, economic, and environmental studies, delivers high-quality undergraduate, graduate, and non-credit courses and programs to meet the needs of the region and provide a rewarding life experience for students of all ages. Ambler Campus faculty members and administrators promote responsible citizenry through curricular and extracurricular activities and applied research that demonstrate
and promote concepts central to the creation of strong, sustainable communities: studentcentered learning, community engagement, and respect for the environment.

The Ambler Campus, with an undergraduate student population of 2,300, is an ideal campus to pursue higher education, with a convenient location, courses in a variety of disciplines, and a friendly atmosphere. Located in suburban Montgomery County, just 18 miles north of the Main Campus (and minutes from Route 309 and the Pennsylvania Turnpike), Ambler offers the benefits of a small college campus with the excitement and vast resources of a large university. Ambler attracts students who live or work in the greater Philadelphia area, including those from Philadelphia, Bucks, Lehigh, Montgomery, and Northampton counties. The Blue Route (Route 476) also makes Temple University Ambler easily accessible to students from Chester and Delaware counties.

Students enjoy Ambler's stunning grounds, student organizations and activities, and recreational facilities that include an exercise/weight room, outdoor pool, and tennis, basketball and volleyball courts. The campus is also home to Temple University's baseball, softball, and men's and women's soccer NCAA Division I teams.

Ambler's facilities include science laboratories, a library, top-quality computer labs, smart classrooms, Computer-Assisted Design (CAD) and Geographic Information Systems (GIS) labs/classrooms, and dining venues.

In Fall 2006 the Ambler Learning Center opened; the center is a state-of-the-art facility incorporating smart classrooms, wireless technology, computer labs/classrooms, a technology breakout room, study lounges, video-conferencing room, and a 300-seat auditorium. There is also a writing-mathematics-science resource center as well as a drawing/drafting studio.

The Ambler Campus offers hundreds of undergraduate courses during the day, evening, and weekends, taught by the university's distinguished faculty. Students may begin almost every undergraduate program at Ambler. Depending on the major, students may take all their courses at Ambler. Popular majors that can be completed at Ambler include: Adult and Organizational Development, Business, Community Development, Criminal Justice, Early Childhood Education (PreK to 4), History, Horticulture, Landscape Architecture, and Psychology. Also, degree- and non-degree-seeking students may enroll in credit certificate programs.

Undergraduate courses include offerings from Temple's General Education curriculum (GenEd) and basic courses in Biology, Chemistry, and Earth and Environmental Science. These enable pre-Health Information Management students to complete the required first two years of prerequisite coursework. Pre-Medical, Pre-Dental, Pre-Pharmacy, Pre-Podiatry, Pre-Physical Therapy, or Pre-Occupational Therapy students may take courses at Ambler required for admission to a professional school. Pre-Law students may remain at Ambler for four years, pursuing degrees in Business, Community Development, or the Social Sciences. (See the Degree Program Chart for a listing of the programs that can be completed entirely at the Ambler Campus.)

The campus is home to Temple's School of Environmental Design, which houses the Department of Landscape Architecture and Horticulture (A.S. and B.S. in Horticulture programs; B.S. and M.L.Arch. in Landscape Architecture programs; plus undergraduate minors and certificates), the Department of Community and Regional Planning (B.S. in Community Development and M.S. in Community and Regional Planning programs; undergraduate minors and certificates; plus graduate certificates), and the Center for Sustainable Communities at Temple University Ambler. (See the School of Environmental Design section of this Bulletin for more details.)

The beautiful landscaped grounds, also known as the Ambler Arboretum of Temple University, feature formal gardens, a sustainable wetland garden, a green roof garden, an herb garden, a winter garden, wooded areas, a native plant propagation center, and much more.

For a change of pace and scenery, Ambler students can also take courses at Main Campus, Temple University Center City, or the Health Sciences Center. (See Bus Service below.)

After graduating, many Temple students continue their graduate work at the Ambler Campus or at Temple University Fort Washington Graduate and Professional Center. See the Off-Site Class Locations/Fort Washington section below.

For more information about Ambler programs, please call 267-468-8000 or visit the Temple University Ambler web site at www.ambler.temple.edu.

## Academic Awards and Standards and Honor Societies at Ambler

See www.temple.edu/ambler/ac_services/scholarships.htm for additional details and application procedures.

- Elizabeth Clarke Award for Conservation Education: presented to a graduating senior intending to study, teach, or work in the discipline of conservation education; based on the student's positive attitude and financial need.
- Criminal Justice Scholar's Award: given to an Ambler graduating senior in Criminal Justice who exhibits a passion for learning and outstanding academic achievement.
- Gold Key Awards for Academic Excellence: given to Ambler students in the sophomore, junior, and senior classes who have taken the greatest number of credits at the Ambler Campus and have achieved the highest grade point average.
- James W. Hilty Adult Student Award: established in 2008 by campus administration, an award to a current degree-seeking graduate or undergraduate student 25 years of age or older (taking more than half of his/her classes at Ambler/Fort Washington) who has demonstrated academic excellence. Applicants must provide a two-paragraph personal statement outlining financial need, personal background, educational path from high school through college, and educational goals.
- Norman J. Kaner Memorial Award: established by the Temple University History Department and supported by family, faculty, and former students in honor of Norman J. Kaner, a member of the History Department from 1968 to 1993. This award is given to an Ambler graduating senior in history with the highest grade point average who best exemplifies the values of critical thought, social curiosity, and intellectual vigor that characterized Professor Kaner's teaching and scholarship.
- Patricia A. Woods Memorial Fund Award: given to an undergraduate in the pre-health professions, who expresses the desire for advanced undergraduate study in allied health or post-graduate study in the health professions, with a cumulative grade point average of 3.5 or higher and a demonstrated commitment to the health professions through experience or service. The name of the recipient is added to the plaque hanging in West Hall.

Dean's List: Letters are received by students from the dean of the school or college in which they are enrolled in accordance with the academic criteria for scholastic distinction established by their college or school. See Academic Policies and Regulations.

Academic Standards: Students may receive an academic warning, be placed on probation, or be dismissed from the university based on university standards. See Academic Policies and Regulations.

Honor Society: Alpha Sigma Lambda, Nu Omicron Xi Chapter, is an honor society for adult students who have completed at least 24 semester hours at Temple and achieved an excellent grade point average. The Temple University Ambler students who are invited to join this society are inducted at a ceremony held each spring.

## Support Services

Ambler Campus is a full-service campus with an array of offices and services to assist students in achieving educational success. The services described below are tailored to the needs of Ambler Campus students. For further information about support services provided at Ambler, please visit the campus web site (www.temple.edu/ambler/ac_services) and/or the corresponding sections in this Bulletin describing these services.

## Academic Support Services

## Academic Advising

Dedicated professional and faculty advisors at the Ambler Campus help students choose a program of study that is suited to their educational and career goals. While the students are ultimately responsible for knowing their academic status and requirements for their degree programs, advisors assist with information about program requirements and university policies and procedures. For transfer students, advisors can answer questions about transfer credit evaluations and determine whether these credits meet Temple program requirements.

- Office of Academic Advising and Career Development

West Hall 109
267-468-8200
tuaadvis@temple.edu
www.temple.edu/ambler/advising
This office coordinates academic advising at the Ambler Campus.

- Center for Undergraduate Advising-Ambler, Fox School of Business and Management West Hall 112

267-468-8350
www.temple.edu/ambler/advising/fox.htm
Virtual advising also is available to all Fox students.
Visit www.fox.temple.edu/cms academics/dept/advising

## Career Development Services

West Hall 109
267-468-8200
www.temple.edu/ambler/careerdev
Deciding on a major or profession can be a challenge. This office provides resources and expertise to assist students. These include: coaching/advising, career materials, résumé critique, and workshops. Externships, internships, and cooperative work experiences provide students with valuable hands-on learning that can take them one step closer to their future careers. At Ambler, information about externships, department sponsored internships, and other career opportunities are available through the Career Development Services office. Also visit www.temple.edu/careercenter to access Focus 2, a self assessment career tool, as well as the Owlnetwork, an online resource for applying for jobs and internships.

## Center for Student Professional Development

West Hall 115
267-468-8354 or 215-204-2371
foxcspd@temple.edu
www.fox.temple.edu/cspd/
The Center for Student Professional Development (CSPD), part of the Fox School of Business and Management, coordinates all activities that support the ultimate goal of business students choosing a meaningful and rewarding career. This annex is linked with the CSPD located in Alter Hall 134, at Main Campus. The CSPD strongly urges students to become active members of student professional organizations.

## Computer Centers

Ambler Campus Technology (ACT) Center
Learning Center 106
www.temple.edu/ambler/ac_services/technology.htm
Help Desk: 267-468-8323

## Computer Labs and Classrooms - Ambler Campus

267-468-8323

- Ambler Campus Technology (ACT) Center "Open" Lab, including PC, Macintosh, and videoediting equipment (Learning Center 106)
- PC Computer Classrooms (Learning Center 205, 206, 210, 305, 307, 308)
- Macintosh Computer Classroom (Learning Center 201)
- Landscape Architecture and Horticulture Bachelor of Landscape Architecture (B.S.) Studios (Library 21, 25, 29; Dixon 208)
- Landscape Architecture and Horticulture Master in Landscape Architecture (M.L.Arch.) Studios (Dixon Hall 101, 104, 108)
- Landscape Architecture and Horticulture Media Output Center (Library 15)
- Student Meeting/Technology "Breakout" Rooms (Bright Hall 106, Learning Center 115)
- Smart Classrooms (Widener Hall, all classrooms; Bright Hall 206; Dixon Hall 202; Cottage Hall 5; and Learning Center 101-Auditorium, 103, 202, 203, 207, 208, 209, 301, 302, 303, 306, 309, 310)
- Video-conferencing room (Learning Center 301)
- Wireless Technology (Bright Hall, Cottage Hall 10 and 11, Dining Center, Dixon Hall, Haines House, Learning Center, Library, Widener Hall)


## Computer Labs and Classrooms - Temple University Fort Washington (425 Commerce Drive) <br> 267-468-8507

- "Open" Lab (Room 5)
- Video-conferencing (Rooms 1, 3, 4, 6, 13, 19)
- Smart Classrooms with Wireless Technology (WiFi) and Media Technology (Room 7, 8, 9, 10, 21)


## Disability Resources and Services

West Hall 109
267-468-8200
www.temple.edu/ambler/ac_services/disability.htm
The Office of Academic Advising and Career Development, in conjunction with Disability Resources and Services (Division of Student Affairs), provides accommodations for students with disabilities at Temple University's Ambler and Fort Washington campuses.

## Library

Library Building
267-468-8643 or 267-468-8648
www.temple.edu/ambler/ac_services/library.htm
The Ambler Library supports the students and faculty with a collection of more than 100,000 books, current periodicals, microfilm, maps, and a growing collection of DVDs. The library is part of the Temple University Libraries and through Diamond, the online catalog, and daily deliveries of materials requested via intra-library loan, the Ambler academic community is provided with convenient access to the discipline-based collections of all of Temple's libraries. The Ambler Library is part of the network that provides online access via the home page, library.temple.edu, to the Diamond Online Catalog. This online catalog leads to collections of printed materials and a rich collection of electronic materials, including databases for research, other internet resources, electronic journals, and e-books.

Mathematics-Science Center (See Writing-Math-Science Center below)

## Re-enrollment/Reinstatement

West Hall 102
267-468-8248
Degree students who have not attended Temple for one semester or more must contact this office for re-enrollment/reinstatement procedures prior to registering.

## Writing-Math-Science Center

Learning Center 102
267-468-8386
www.temple.edu/ambler/ac_services/tutoring.htm
Math-Science: Main Campus: 215-204-8466
www.temple.edu/msrc/
Writing: Main Campus Hotline: 215-204-0700
www.temple.edu/writingctr
The Writing-Math-Science Center (with computer lab) helps with questions about all aspects of writing, mathematics, and the sciences. It assists with brainstorming and planning papers, reports, and projects, and offers tutoring. This free service is open to all students. Please refer to the web sites listed above for hours of operation each semester and for online tutoring options.

## Other Services

## Admissions

West Hall
267-468-8100
ambler@temple.edu
www.temple.edu/ambler/admissions

## Bookstore

## Bright Hall

267-468-8460
www.temple.edu/ambler/about/facilities.htm\#bookstore
The bookstore provides textbooks and course materials required for classes. The Temple University Bookstore is an affiliate of Barnes \& Noble College Bookstores, offering the services and conveniences of a great bookstore chain. The bookstore also carries stationery items, Temple apparel, health and beauty aids, and other useful items.

## Bursar (Student Financial Services)

West Hall 101
267-468-8250
www.temple.edu/ambler/ac_services/financial_aid.htm
The Bursar's Office is available for students to process tuition payments, resolve billing questions, and purchase parking hangtags.

## Bus Service

Bright Hall 101
267-468-8425
www.temple.edu/facilities (go to "Shuttles")
Temple University provides a free bus shuttle service on a regular schedule between the SEPTA Regional Rail station in Ambler and the Ambler Campus during the fall and spring semesters. There is also a fall and spring shuttle bus service between Ambler, Health Science, and Main
campuses for students. Copies of the schedule and bus regulations are available in the Office of Student Life. (Note: There is no bus service in the summer from the Ambler Campus.)

## Financial Aid (Student Financial Services)

West Hall 103
267-468-8443
www.temple.edu/ambler/ac_services/financial_aid.htm

## General Information

Administration Building
267-468-8000
www.ambler.temple.edu

## Health Services

West Hall
267-468-8490
www.temple.edu/ambler/ac_services/student.htm
The Ambler Health Services office, open Monday through Thursday, allows students to drop in as needed to discuss health concerns with the RNs, who are certified in college health, and with physicians. Brochures are available on a wide range of health topics. Services provided at Temple University Ambler include: General Medical Clinic; Allergy Clinic; Self-care Center; women's health/family planning; immunizations, physical examinations and travel assessments; referrals to outside specialist and facilities; dispensary; and confidential HIV testing. The psychological counselor is available by appointment; see Psychological Services below. Health services are available to all currently enrolled students with a valid University I.D. Many services are free; some have discount charges for medication and treatment.

## Off-Campus Housing

Bright Hall 101
267-468-8425
www.temple.edu/ambler/student life/housing.htm
Each semester, the Office of Student Life provides an online listing of apartments and houses to rent or share for students seeking off-campus housing Also, local apartment complex brochures are available.

## Parking

West Hall 101
267-468-8250
www.temple.edu/ambler/about/parking.htm
Temple students must purchase a hangtag/decal from the Bursar's Office for any vehicle they wish to park on campus lots. There is no daily charge to park at Ambler. Special accommodations are available for students with disabilities. (See the Bursar's Office above.)

## Psychological Services

West Hall
267-468-8200
www.temple.edu/ambler/ac_services/student.htm
Main Campus: 215-204-7276 for appointments
www.temple.edu/studenthealth
Free and confidential psychological services are available at Ambler by appointment
only. Emergencies and/or "walk-ins" and psychiatric services are managed on the Main Campus at Tuttleman Counseling Services located at 1810 Liacouras Walk, 5th floor.

## Registration/ID Cards

West Hall 102
267-468-8248
amblereg@temple.edu
www.temple.edu/ambler/ac_services/registration.htm
This office provides information and assistance regarding registration procedures, enrollment verifications, and photo identification cards. Information and requests for transcripts and applications for Pennsylvania residency qualification are available online at www.temple.edu/registrar

## Student Financial Services (See Bursar and Financial Aid above.)

## Veteran Affairs

West Hall Lower Level 10
267-468-8102 or 215-204-6130
tuvets@temple.edu
www.temple.edu/veterans
Making the transition from military to college life can be challenging. To assist with this transition, Temple University Veteran Affairs works with the various university departments to plan and implement educational and social programs to help veteran students succeed at Temple University. The Ambler Campus has a Veteran Suite in Bright Hall for students to have a place to meet and study. For questions regarding the certification process and veterans benefits, contact the Temple University Certifying Officer in the Office of the University Registrar at 215-2047378.

## Special Facilities and Programs

## Ambler Arboretum of Temple University

Jenny Rose Carey, Director
Anne Brennan, Horticulture and Ambler Arboretum Supervisor
Pauline Hurley-Kurtz, R.L.A., A.S.L.A. M.L.A. Academic Director
267-468-8400
www.temple.edu/ambler/arboretum/index.htm
The Temple University Ambler Campus has a long history and rich tradition of horticulture and landscape design. Established as the Pennsylvania School of Horticulture for Women in 1911, the 187-acre campus represents a unique mix of natural and designed landscapes. The gardens and campus serve as excellent outdoor teaching laboratories for numerous classes and as a source of inspiration for students, faculty, and visitors.

The Ambler Campus was officially designated an arboretum in March 2000. This historic, public garden, now known as the Ambler Arboretum of Temple University, continues to develop as a living laboratory. As the home of Temple University's Department of Landscape Architecture and Horticulture, the Ambler Campus has a myriad of learning gardens, including a ground cover garden, native plant garden, formal gardens, green roof garden, rock wall, woodland garden, sustainable wetland garden, trial garden, the Viola Anders Herb Garden, the Philip A. and Barbara F. Albright Winter Garden, the Ernesta Ballard Healing Garden with labyrinth, the Colibraro Conifer Garden, and large perennial borders. The arboretum's three areas of focus are sustainability, the health benefits of gardens, and the history of women in horticulture, agriculture, and design.

## Athletic Facilities

www.temple.edu/ambler/campus_life/athletics.htm
Temple University Ambler is the full-time home for Temple's baseball, softball, and men's and women's soccer teams. The NCAA Division I teams practice and play all home games on fields located on the tract bound by Meetinghouse Road, Butler Pike, and Woods Drive. All games and practices take place during the day. Admission is free to all home games. The Intercollegiate Athletics Field House, located near the fields, has "green roof" structures, developed by Temple University with the help of a $\$ 50,000$ grant from PECO Energy. A green roof is a living biological community of plants that provides an environmentally-sound alternative to a traditional roof system. The green roof garden allows for educational and research opportunities for students and faculty.

## Auditorium

www.temple.edu/ambler/about/learningcenter.htm
The 300-seat Learning Center Auditorium, with smart technology and performance space, provides opportunities to offer cultural, educational, and entertaining events for our students and the surrounding community. In this venue, Ambler Campus, once home to the Temple University Music Festival and Institute, again can host music and dance performances as well as lectures.

## Center for Sustainable Communities (CSC) at Temple University Ambler

Jeffrey Featherstone, Ph.D., Director
Susan E. Spinella Sacks, M.S., Assistant Director
Md. Mahbubur Meenar, M.U.P., Assistant Director, Geographic Information Systems Operations and Research
West Hall, Second Floor
www.csc.temple.edu
The Center for Sustainable Communities develops and promotes new approaches for protecting and preserving quality of life through sustainable development, balancing the relationship between environmental integrity, economic prosperity, and social equity. It was designed to build on Temple University Ambler's strengths in horticulture, landscape architecture, and planning and to draw upon the expertise of all Temple University faculty. A working resource for government agencies, community organizations, and developers, the center provides objective information and services to improve decision-making relative to land use and water resources planning, in addition to conducting interdisciplinary research and offering educational and community outreach programs.

## Criminal Justice Training Programs (CJTP)

Haines House
267-468-8600
www.temple.edu/ambler/about/facilities.htm\#special
Criminal Justice Training Programs, a division of the Department of Criminal Justice, is an interdisciplinary unit that has conducted training for a variety of criminal justice agencies and occupations since 1968. Each year, more than 3,000 criminal justice professionals attend programs offered by CJTP, including police officers, deputy sheriffs, state constables, legislative security officers, school security officers, and magisterial district court staff. Other activities include criminal justice continuing education programs for agencies allied to the criminal justice system, including public safety, citizen, and community groups. CJTP also is responsible for the development of training curricula for various occupations including distance-learning. Most recently, CJTP has been involved in the development of "ProRanger Philadelphia," an academic and technical skills training and paid internship program that is cooperatively administered by the National Park Service and Temple University. The program was established to recruit, train, and employ law enforcement park rangers for the National Park Service. Upon graduation from Temple University and successfully completing the ProRanger program, which includes a law enforcement training component, participants are placed in a permanent career tenure law enforcement park ranger position with the National Park Service. Current students in any major who are interested in federal law enforcement are encouraged to find out about the ProRanger Philadelphia program, and students completing their degree programs are eligible to attend the Police Academy in preparation for a career in law enforcement.

## EarthFest

Susan E. Spinella Sacks, Coordinator; Assistant Director, Center for Sustainable Communities James Duffy, Co-Coordinator; Public Relations and Web site Coordinator Rachel Berger, Co-Coordinator; Marketing and Special Events Coordinator 267-468-8108
duffyj@temple.edu
www.ambler.temple.edu/earthfest
Hosted by the Center for Sustainable Communities in the School of Environmental Design, EarthFest is an outdoor educational celebration of Earth Day held each year at Temple University Ambler. The mission of EarthFest is to promote environmental awareness using sustainable concepts, methods, and practices to protect and preserve our
environment. Organizations, businesses, colleges, high schools, middle schools, elementary schools, and individuals demonstrate sustainable concepts and technologies. Thousands of students from all over the region come together and spend time learning about the world in which we live and the interconnected systems on which the lives of people and animals depend. This event is central to Ambler's values of student-centered learning, respect for the environment, and community engagement.

## Greenhouse

Anne Brennan, Horticulture and Ambler Arboretum Supervisor
267-468-8191
www.temple.edu/ambler/about/facilities.htm\#special
The Greenhouse at Temple University Ambler provides students with a first-class facility to
study plant and soil science. The energy-efficient greenhouse includes computerized climate controls and thermal blankets to protect the plants in the winter and shade them in the summer. Modern fertilizer injection systems water and fertilize plants simultaneously. In addition to being used for coursework, the greenhouse provides faculty and students with a facility to conduct horticulture research that is at the forefront of the industry.

## Infant Study Lab

Kathy Hirsh-Pasek, Ph.D., Co-Director
Nora Newcombe, Ph.D., Co-Director
Haines House
267-468-8610
infntlab@temple.edu
www.temple.edu/ambler/about/facilities.htm\#special
The Temple University Ambler Infant Lab invites parents and their children to shape the future by participating in research at the frontiers of science. The lab is directed by nationallyrecognized child development authorities and professors Dr. Kathy Hirsh-Pasek and Dr. Nora Newcombe. Faculty and staff provide fun-filled activities for infants and toddlers who become part of cutting-edge scientific discoveries. Parents learn more about their children's first words and ability to create mental maps. At the lab, infants and toddlers teach scientists new ways to optimize education and advance learning.

## Learning Center

www.temple.edu/ambler/about/learningcenter.htm
The 72,000-square-foot Learning Center opened in Fall 2006. With its smart classrooms, wireless technology, computer classrooms, and auditorium, the Learning Center is the focal point for student learning at Ambler.
Features:

- 300-seat auditorium with smart technology and performance space
- Café a la Carte, cyber café, and wireless lounges
- 90-seat Ambler Campus Technology Center with Help Desk
- Twelve (12) Smart Classrooms with interactive multimedia
- Seven (7) computer classrooms with PC and Mac technology and software for all Temple programs
- Studio for drawing/drafting
- Student lounges on every floor
- Video-conferencing room
- Writing-Math-Science Center with computer lab


## School of Environmental Design

www.ambler.temple.edu
The Ambler Campus is the home of the School of Environmental Design which includes the Department of Community and Regional Planning, the Department of Landscape Architecture and Horticulture, and the Center for Sustainable Communities. Ambler Campus has been connected to sustainable concepts and environmental stewardship for over a century. The School of Environmental Design upholds the environmental traditions established by the Pennsylvania School of Horticulture for Women founded in 1911 and carried forward by its founding

Department of Landscape Architecture and Horticulture. See the School of Environmental Design section of this Bulletin.

## Student Life

## Leadership Awards at Ambler Campus

For more information on leadership awards, contact the Office of Student Life. (See below.)
The following awards are presented annually in April:

- Ambler Campus Leadership Award: presented to graduating seniors. Recipients must have made outstanding contributions to the Ambler Campus community during their years at Temple, possess a minimum cumulative grade point average of 2.5 , and demonstrate leadership qualities through academic, co-curricular, and/or other services.
- Alpha Chi Rho, Phi Kappa Chi chapter, Jamie Dickson Memorial Scholarship: awarded by the Phi Kappa Chi chapter of the Alpha Chi Rho fraternity to a full-time student at the Ambler Campus who embodies compassion and determination. The recipient must be a sophomore, junior, or graduate student (with at least one semester remaining); must possess a minimum cumulative grade point average of 2.5 ; and must display involvement in extracurricular activities at Ambler, focusing on campus and community service. Preference is given to students majoring in Education. This non-renewable scholarship must be used in the semester immediately following receipt.
- Alpha Kappa Alpha Sorority, Phi Beta Omega Chapter, Book Award: presented to sophomore, junior, or senior African American students with a minimum cumulative grade point average of 2.5 who have demonstrated involvement in extracurricular activities, focusing on campus and community service. This award must be used in the semester immediately following receipt.
- Bob Sundermeier Award: presented to an undergraduate student, with a cumulative grade point average of at least 2.5 , who, through participation in extracurricular activities involving leadership roles and campus service, demonstrates the characteristics of the friendliness, ingenuity, and dedication of the late Bob Sundermeier, a member of the Ambler Facilities Management staff for many years. This award must be used in the semester immediately following receipt.
- Community Service Award: presented, when warranted, to the student organization or individual that completed a unique and/or different service project that made a significant impact on the local community.
- Criminal Justice Leadership Award: presented to a graduating Criminal Justice major who has demonstrated academic excellence and an affinity for service to the Criminal Justice Department and the community.
- Mary Wald Banking and Finance Award: given to a Temple University student who has a minimum grade point average of 2.75 and has made an outstanding contribution in the current school year to one of the Ambler Campus Fox School of Business and Management student organizations. This award must be used in the semester immediately following receipt.
- Outstanding Freshman Award: presented, when warranted, to a student who demonstrates leadership potential during the freshman year.
- Outstanding Student Leader of the Year Award: presented to the outstanding student leader of the current academic year.
- Outstanding Student Organization of the Year Award: presented to the one student organization that has been a "shining example" to other organizations during the academic year by sponsoring quality programs that showed innovation and hard work.
- Russell Conwell Award: sponsored by the Office of Student Life, this award is presented, when warranted, to a student or a student organization that has stepped outside their comfort zone to be involved in campus life.
- Samuel Kenneth Grow Scholarship: presented to a sophomore, junior, or senior with a minimum cumulative grade point average of 2.5. Preference given to students majoring in Education, Computer Science, Business, and/or a student employed by the Computer Services Department.
- Special Achievement Award: presented to the student or organization for a specific program or service that has had an impact on the quality of life at Ambler Campus in this academic year.
- Sustainability Leadership Award: honors an undergraduate or graduate student from Temple University Ambler who has demonstrated outstanding leadership by engaging in a sustainability project or by promoting campus sustainability.


## Office of Student Life

Bright Hall 101
267-468-8425
www.temple.edu/ambler/student_life
The Office of Student Life coordinates the New Student Orientation program, offering orientation sessions for incoming freshmen and an online orientation for new transfer students. As part of this orientation, academic advisors assist students with academic planning and registration.

For current students, this office supports and complements the university's academic mission by promoting social, cultural, educational, and developmental programs for the students at Ambler. The office provides opportunities through campus-wide programming and student organizations for students to develop special skills and interests, to interact regularly with other students, to plan and manage events, to participate in leadership training and self-governance, and to become involved in community-service projects.

## Student Activities Office

Bright Hall Lounge
267-468-8427
www.temple.edu/ambler/student_life/facilities.htm
Students may obtain information about student activities including the campus activities calendar, ticket sales for athletic and entertainment events, bus schedules, off-campus housing, and general campus information.

## Student Organizations

## Bright Hall 101

267-468-8425
www.temple.edu/ambler/student_life/studentorganizations.htm
There are about 30 student organizations on campus, including: Alpha Sigma Lambda Honor Society, Ambler Accounting Professional Society, Ambler Health Organization, Ambler Owlreach, Ambler Program Board, Ambler Student Media Bureau, American Marketing

Association, Aquaponics, Beta Alpha Psi (accounting honor society), Brothers and Sisters United (B.S.U.), Communications Society, Criminal Justice Society, Hillel, Indian American

Association, International Business Society, International Club, Jubilee Religious Organization, Landscape Architecture and Horticulture Association, Latinos Unidos at Ambler, Learning to Include Numerous Cultures (L.I.N.C.), Night O.W.L.S.(Organizing Work, Life, and School), Owl Ambassadors, The Parable literary and arts journal, Pi Alpha Xi Horticulture honor society, Psychology Society, Sigma Lambda Alpha Landscape Architecture honor society, Society for Ecological Restoration (S.E.R.), Society for Emerging Educators (S.E.E.), Society for Human Resources Management (S.H.R.M.), Sports and Recreation Organization, Student Government Association, Temple Column newspaper, Temple Ambler College Republicans, Temple Planning Student Organization (T.P.S.O.), Temple University Ambler College Democrats, Transfer Student Organization (T.S.O.), Veterans Student Organization, and WRFT-AM Radio 1610.

For information about student organizations in the Fox School of Business and Management, please refer to that section of the Bulletin.

## Student Government Association

Bright Hall, 1st Floor
267-468-8429
www.temple.edu/ambler/student_life/studentorganizations.htm
The Ambler Student Government Association (A.S.G.A.) enables Ambler students to seek solutions to their concerns pertaining to all aspects of the campus by serving as a liaison between the student body and university administration.

## Campus Recreation

Gymnasium
267-468-8151
Pool
267-468-8152
www.temple.edu/ambler/campus_life/recreation.htm
Recreational sports opportunities include intramurals, open recreation, aquatic programs, aerobics, and special events. A wide variety of activities are offered, ranging from structured, competitive leagues to self-directed fitness avenues. Facilities include an outdoor pool, a fitness room with both cardiovascular and free weight equipment, and basketball, tennis, and volleyball courts. Students may also participate in Main Campus recreational activities.

## Student Media

Bright Hall, 1st Floor
Newspaper
267-468-8430
Radio Station
267-468-8416
www.temple.edu/ambler/student life/studentorganizations.htm
The Temple Column (newspaper) and WRFT-AM 1610 AM (radio station) are managed and operated entirely by students as part of the Ambler Student Media Bureau. These organizations provide communications students with challenging opportunities to become involved in various
aspects of mass media production such as marketing, advertising, and management for the Temple Column, WRFT, and TUTV, Temple University's cable television channel. Students in all majors are welcomed and encouraged to participate.

## Off-Site Class Location

## Temple University Fort Washington (TUFW)

425 Commerce Drive
Fort Washington, PA 19034
267-468-8500
www.temple.edu/ambler/tufw
The Temple University Fort Washington Graduate and Professional Education Center is the teaching site for some of Temple University Ambler’s graduate programs. Located in the Fort Washington Office Park, the center has about 350 attending students and features corporate-style classrooms, five (5) smart classrooms with wireless infrastructure, video-conference rooms, and a large 30 -seat computer classroom. Students may complete master's degrees in various graduate-level program areas. (See the Degree Program Chart for a listing of the programs that can be completed entirely at the Fort Washington Campus.)

The Office of Non-Credit and Continuing Education, located at Ambler campus, provides hundreds of non-credit courses throughout the year and offers them at the Fort Washington, Ambler, and Center City campuses of Temple. From certificates in meeting planning and digital photography to summer education camps for young learners, the non-credit courses are designed to enhance professional skills and enrich personal interests. Workshops are also available to prepare for the SAT.

Temple University Fort Washington's LifeLong Learning Society is comprised of a series of courses offered in the daytime during the fall and spring semesters for adults ages 50 and up with an interest in furthering their education. These personal enrichment courses range from explorations of classical music to discussions of current events.

## Administration

For contact information or updates, go to www.temple.edu/ambler/about/directories.htm
(See the School of Environmental Design section of this Bulletin for a listing of faculty and administrators in the Departments of Community and Regional Planning and Landscape Architecture and Horticulture.)

William E. Parshall, Executive Director of Ambler and Center City Campuses, M.P.A., Princeton University

Crisbel Baez, Manager of Administration, M.L.A., Temple University
Jenny Rose Carey, Director, Ambler Arboretum of Temple University, B.Sc., Southampton University, England

Marylou Delizia, Director, The Office of Non-Credit and Continuing Education, M.Ed., Temple University

Bonnie Frumer, Assistant Dean for Curriculum, M.A., Temple University
Rhonda E. Geyer, Director, Non-Credit Programs, B.A., Mansfield University
Susan Hyer, Director, Computer Services, M.Ed., Beaver College (Arcadia University)
Saul Katzman, Director of Finance and Operations, B.B.A., Temple University
Kathleen Kelly, Assistant Director-Academic Services and Administration
Wanda Lewis-Campbell, Assistant Dean for Student Life, Ed.D., Temple University
Linda M. Lowe, Director of Development and Alumni Affairs, B.A., Duquesne University
Susan McCaffrey, Director-Academic Advising; Disability Resources and Services Coordinator, M.S., Western Maryland College

Laura S. Reddick, Associate Director for Adult and Veteran Student Recruitment, M.A., Antioch University

Sandra Thompson, Head, Ambler Campus Library, M.L.S., Drexel University
James Van Blunk, Senior Associate Director of Admissions, M.S.Ed., Saint Joseph's University
Staff
(See the School of Environmental Design section of this Bulletin for a listing of staff in the Departments of Community and Regional Planning and Landscape Architecture and Horticulture.)

Michael Bavas, Senior Technical Support Specialist, Computer Services, M.I.S., Kennedy Western University

Don Baldino, Evening Librarian, M.S.L.S., Drexel University
Rachel Berger, Coordinator, Marketing and Special Events, M.S., Temple University
Anne Brennan, Horticulture and Arboretum Supervisor, ISA Certified Arborist, B.S., The Pennsylvania State University

Dorothy Busillo, Administrative Assistant and Meeting Coordinator, Temple University Fort Washington, B.S., Millersville University

James Duffy, Public Relations and Web Site Coordinator, M.S.Ed., Temple University
Andrea Goldstein, Librarian, M.S.L.S., Drexel University

Barbara Kirsch, Coordinator of Financial Services, A.A.S., Montgomery County Community College
Brian McDonnell, Manager, Barnes and Noble Bookstore, B.A., Saint Joseph's University
Sonia Medina, Office Manager, Academic Advising
Paul Myers, Recreation Specialist, M.Ed., East Carolina University
Larry O'Reilly, Senior Technical Support Specialist, Computer Services, Temple University Fort Washington, B.B.A., Temple University

Reid Overturf, Manager of Technical Support, Computer Services
Debra Powell-Wright, Administrative Coordinator, Admissions, B.A., Antioch University
Karen Pyle, Media Coordinator of Classroom Technology Support, B.A., Virginia Polytechnic Institute and State University

Kathleen Rickards, Assistant Director of Enrollment Management, Fox School of Business and Management, B.B.A., Temple University

Gray Rogers, Director of Food Services for Sodexo
Neal Russell, Financial Aid Counselor I, Student Financial Services, M.Ed., Temple University

Lorraine Warner, Administrative Coordinator, Fox School of Business and Management
Michelle Whiting, Administrative Specialist, Finance and Operations

## Program Coordinators/Advisors

(See the School of Environmental Design section of this Bulletin for a listing of faculty and advisors in the Departments of Community and Regional Planning and Landscape Architecture and Horticulture.)

Cynthia Belliveau, Coordinator of Adult and Organizational Development, Ph.D., Temple University
Robert Deegan, Acting Director, Temple University Police Academy, A.S., Yuba Community College

Lucille D'Emilio-Wilkinson, Academic Advisor II/ Career Coordinator, M.A., La Salle University
Jeffrey Featherstone, Director, Center for Sustainable Communities, Ph.D., Temple University
Lisa Fell, Academic Advisor II, M.S.S.W., University of Wisconsin-Madison; M.A, University of Michigan, Ann Arbor

Kathryn Hirsh-Pasek, Co-Director, Infant Lab, Ph.D., University of Pennsylvania

Deborah Howe, F.A.I.C.P., Chair and Professor, Department of Community and Regional Planning, Ph.D., University of Michigan

Pauline Hurley-Kurtz, R.L.A., A.S.L.A., Chair and Associate Professor, Department of Landscape Architecture and Horticulture, M.L.A., University of Pennsylvania

Cheryl Irons, Coordinator of Criminal Justice, J.D., Ph.D., Temple University

Wendy Lebing, Assistant Dean, QA/RA Program, M.A.L.D., Tufts University; M.S., Temple University

Cheryl Leeser, Academic Advisor II, M.A., Immaculata College

Mia K. Luehrmann-Cowan, Assistant Dean, College of Science and Technology, Ph.D., University of Illinois, Urbana
Md. Mahbubur Meenar, Assistant Director, Geographic Information Systems Operations and Research, Center for Sustainable Communities, M.U.P., State University of New York at Buffalo

Nora Newcombe, Co-Director, Infant Lab, Ph.D., Harvard University

Kenneth G. Schaefer, Ambler CITE Liaison, Ph.D., Columbia University
John Sorrentino, Coordinator of Economics, Associate Professor, Ph.D., Purdue University

Susan E. Spinella Sacks, Assistant Director, Center for Sustainable Communities, M.S., Temple University

Janine C. Warnas, Senior Academic Advisor, M.S., Gwynedd-Mercy College

Christie Willard, Coordinator, Deputy Sheriffs' Training Program, M.S., West Chester University

## Temple University Center City

1515 Market Street
215-204-TUCC
www.temple.edu/tucc/

Located just across the street from City Hall and surrounded by the home offices of major national corporations, Temple University Center City (TUCC) offers an outstanding selection of undergraduate and graduate courses and full degree programs in the evening, as well as stimulating non-credit workshops and seminars during the day, in the evening, and on weekends.

## Administration

William E. Parshall, M.P.A., Executive Director, Ambler and Center City Campuses
William H. Schreiber, M.A., Associate Director

## Credit Programs

Most of Temple University's schools and colleges offer courses at TUCC. It is possible to complete the following undergraduate degree programs at TUCC in the evening:

- Accounting
- Economics
- English


## Student Services

## Hours of Operation

During the semester the TUCC administration office (suite 215) is open 8:30 a.m. to 8:00 p.m., Monday through Thursday, and 8:30 a.m. to 5:00 p.m. on Friday. When Temple University is not in session, please call 215-204-TUCC for hours.

## Academic Advising and Registration

TUCC's Advising Coordinator can give you the information and support you need to succeed. Office hours are scheduled into the evening so that you can make an appointment during your lunch hour or after work. You can also discuss transfer options and career-related topics. Call 215-204-4358 for information or an appointment. If you are admitted to a degree program, you must be advised by a representative of your school or college. If you are a student in the College of Liberal Arts, send an e-mail message to prob@temple.edu and specify that you want an appointment at TUCC. If you are a student in the Fox School of Business \& Management (FSBM), use the FSBM Online Appointment System, accessed through the FSBM Center for Undergraduate Advising web site. Specify that you want an appointment at TUCC.

## The Bookstore

The Bookstore is located on the third floor. In addition to textbooks, it offers magazines, school supplies, light snacks, soft drinks, and Temple merchandise. Call 215-204-1514 for more information about specific items or store hours.

## Career Advising

TUCC's Advising Coordinator can help you with career-related information. You can obtain information regarding your options and help to get you going in the direction that is right for you. Call 215-204-4358 for an appointment.

## Cash Operations

A Cash Operations representative is available on the ground floor to process payments for tuition and fees. It is possible to pay by cash, check, or money order. MasterCard, Discover, and American Express credit cards are accepted only over the web. A convenience fee will be charged when paying with a credit card. Call 215-204-1175 for hours of operation or more information.

## Computer and Media Services Center

Using a computer or accessing library information is as easy as a trip to the Computer and Media Services Center located on the fourth floor. The staff will assist you in using personal computers or in conducting library research. It is also possible to establish an e-mail account, obtain language tapes, and reserve audio-visual materials through the center. Faculty can place books and articles on semester reserve. Call 215-204-1521 for more information about available resources or hours of operation.

## Student Photo ID Cards

Students registering for the first time can have a photo ID card made in the TUCC administration office (suite 215). Call 215-204-TUCC for more information or hours of operation. Students who have lost their photo ID card can obtain a replacement card for a $\$ 20$ fee.

## Parking

As a service to our students, TUCC has negotiated parking discounts with participating garages at the listed locations. TUCC has no business relationship with these garages and does not play any role in making their policies. In order to receive the discount, students must have their parking ticket validated and show their Temple ID card. The validation and list of participating garages are available at the security desk in the ground floor lobby area. A list of participating garages is also available on the TUCC web site in the "Services" section.

## Facilities

The TUCC campus occupies six floors at 1515 Market Street. All together there are over 60 classrooms, conference rooms, and computer classrooms.

## Meeting and Training Space

The next time your organization needs meeting or training space, consider Temple University Center City. We offer classrooms, conference rooms, and computer labs in a wide range of capacities and a variety of configurations. Every room is equipped with spacious white boards and a ceiling-mounted LCD projector, and a good selection of media equipment is available to enhance your event. All rooms have large windows that provide lots of natural light and beautiful views. Our clients value our convenient center city location and the professional
quality of the space. Affordable rates make it an attractive option to non-profit organizations and government agencies, and you are free to choose your own caterer. Rooms can be rented for half or full days. Call 215-204-4357 for additional information or to meet with a representative and see the space.

## Copy Machine

A copy machine for student use is available in the café area on the fourth floor. It accepts both Diamond Dollars and cash. Call 215-204-7271 if there is a problem with the machine.

## Information Kiosks

An information kiosk, located in Suite 215, allows you to obtain information from Temple web sites. Currently enrolled degree seeking students can use the Self Service Banner (SSB) site to access records and process registration and payment transactions.

## Lounges and Café areas

Lounges and café areas are located on all floors and provide a good place to relax or study.

## Coffee and Refreshments

A snack bar in the lounge area on the sixth floor offers fresh-brewed coffee, soft drinks, sandwiches, salads, and a variety of light foods and snacks. There is also a coffee vending machine in the fifth floor café area.

## TTY

A TTY (text telephone) machine (215-204-1900) is available on the second floor for staff and student use.

## Vending Machines

Vending machines are located in the lounge areas on the second floor, and in the café areas on the third, fourth, and fifth floors. Call 215-204-7271 if there is a problem with the machines.

## Internet Access

Wireless Internet access is available throughout the TUCC campus. In addition, Ethernet connections and power outlets are located around the perimeter of all lounge and café areas. Please note that you must first register the machine address code (MAC) of your laptop with Computer and Media Services before you can take advantage of this service. For more information, contact Computer and Media Services, 215-204-1521.

## Non-Credit Programs

The following constitute non-credit programs at TUCC. For detailed information on these programs, see the Special Programs section of this Bulletin.

## Real Estate Institute

Non-credit real estate programs for professionals and consumers. Call 215-204-1530 for more information.

## Music Prep

Dynamic non-credit music and dance programs for infants through adults. Call 215-204-1512 for more information.

## Osher Lifelong Learning Institute at Temple University (OLLI)

OLLI is a membership organization that offers non-credit learning and enrichment programs for retirees. Call 215-204-1505 for more information.

## Temple University Harrisburg

## Link Martin, M.S.W.

Director
Temple University Harrisburg
234 Strawberry Square
Harrisburg, PA 17101
717-232-6400
www.temple.edu/harrisburg
Lynn Notestine, M.S.W.
Associate Director
Temple University Harrisburg
234 Strawberry Square
Harrisburg, PA 17101
717-232-6400

At Temple Harrisburg, you will find an active community of adult learners interested in improving their professional knowledge and skills. Temple Harrisburg is engaged in improving the central Pennsylvania community through academic degrees, certificate programs, and professional development programs.

The mission of Temple University Harrisburg (TUH) is to serve as the leading academic and professional development center in the areas of social work, public education, public policy and public service in central Pennsylvania.

The campus location in the capital region allows the opportunity to share Temple's commitment to social justice, innovative research and community service with legislative, governmental decision makers and the public. TUH strives to support the university's role in the public discourse on social and policy issues through the provision of excellent graduate programs, professional development opportunities, public policy discussion and innovative research.

For further information regarding the programs highlighted below, please see the TUH web site at the following address: www.temple.edu/harrisburg

## Graduate Degree Programs

Master of Science in Community and Regional Planning (CRP)
Master of Public Health (MPH)
Master of Social Work (MSW)

## Certificate Programs

CRP-Sustainable Community Planning \& Transportation Planning MSW-Post Graduate Certificate in Play Therapy
Certificate in Urban Education
Certificate in Teaching in Higher Education

## Non-Credit Programs/Professional Development

Credential for Strengths-based Family Workers (formerly FDC)
Nonprofit Evaluation Services and Training (NEST) Program
Non Profit Management Training program \& Enhancing Communities Lunch Series
Institute on Protective Services
Teacher Professional Development
Personal Care Home Administrator Training

## Undergraduate Programs

Capital Semester
The Institute for Public Affairs sponsors an internship semester each fall in association with TUH. Students have the opportunity to explore government affairs, policymaking and implementation first-hand at the State Capital.

## The Freshman Year at Temple Harrisburg

The Freshman Year at Temple University Harrisburg (FYTH) is designed to offer Temple General Education courses to full-time admitted students at the Harrisburg campus. The purpose
of the program is to allow students from the Central Pennsylvania area the opportunity to live and work near home while completing their initial year as full time Temple students. The first year will prepare students with skills necessary to be successful at the undergraduate level. Staying small in Harrisburg will allow students to establish relationships and connections with other students and main campus staff prior to arriving. The program is designed to give students a 4 day weekend and a 3 day intensive class schedule. The program will also incorporate various social and co-curricular activities that would allow students to experience the main campus and ease their transition.

## Facilities

The Temple University Strawberry Square facility is 35,650 square feet located across from the capitol in an office/shopping complex and offers a wide range of classrooms, conference rooms and computer labs equipped with the latest technology for meeting, video conferencing and presentation needs.

## Health Sciences Center

3307 N. Broad Street
Philadelphia, PA 19140-5101
Phone: 215-707-4800
Fax: 215-707-7819
e-mail: chp@temple.edu
Programs and services of the School of Medicine, the Maurice H. Kornberg School of Dentistry, the School of Pharmacy, the College of Health Professions, and Temple University Hospital are at the Health Sciences Center. Buildings and facilities, covering some 20 acres, extend to either side of North Broad Street from Allegheny Avenue to above Tioga Street. Public transportation to the campus includes SEPTA bus routes 4 and 16 on Broad Street, the Broad Street subway (Allegheny stop to the south, Erie stop to the north); the North Broad and the North Philadelphia stations of the Regional High-Speed transit lines are between the Health Sciences Center and Main Campus.

The Maurice H. Kornberg School of Dentistry is located at 3223 North Broad Street. The College of Health Professions' lecture rooms and laboratory and the School of Pharmacy are located at 3307 N. Broad Street. The College of Health Professions' Office of the Dean and department offices are located in Jones Hall.

Many of the facilities of the School of Medicine, including the Medical School Library and Temple University Hospital, are located on North Broad Street between Ontario and Tioga Streets. The Student Faculty Conference Center, on the southwest corner of Broad and Ontario Streets, provides a wide range of facilities, services, and educational programs. The Office of Student Activities provides educational, recreational, and auxiliary services, coordinates lounges and study areas, recreation classes, ping pong, pinball machines, basketball and volleyball
intramurals, tennis, popular films, a cafeteria, art gallery, and seminars. The lower basement contains racquetball courts, weight rooms, and complete locker room facilities with saunas. The fourth floor houses a full continuing education and conference center. For more information, call 215-707-4017.

The School of Podiatric Medicine, part of the Health Sciences Center, is located at 8th and Race Streets.

Each of the schools and colleges located at the Health Sciences Center offers student and academic services. For a specific program or service of the undergraduate schools, refer to the appropriate section of this Bulletin, or inquire at the Office of the Dean. For information about the schools of Medicine and Dentistry, contact their respective dean's offices.

## Housing and Dining Options

Residential housing is provided on the Main Campus and is accessible by a Temple University shuttle bus or convenient public transportation. Dining options are available at the Student Faculty Conference Center, the hospital cafeteria, and the Main Campus dining centers.

## Contact information

Temple University College of Health Professions and Social Work 3307 North Broad Street<br>Philadelphia, PA 19140<br>Catherine Coyle, PhD, CTRS, Interim Dean<br>215-707-4800<br>http://chpsw.temple.edu/<br>Maurice H. Kornberg School of Dentistry<br>3223 North Broad Street<br>Philadelphia, PA 19140<br>Amid I. Ismail, BDS, MPH, MBA, DrPH, diplomate ABDPH, Dean<br>215-707-2803<br>www.temple.edu/dentistry<br>Temple University School of Medicine<br>3420 North Broad Street<br>Philadelphia, PA 19140<br>Larry R. Kaiser, MD, FACS, Dean<br>215-707-7000<br>www.temple.edu/medicine<br>Temple University School of Podiatric Medicine<br>8th and Race Streets<br>Philadelphia, PA 19107<br>John Mattiacci, DPM, Dean<br>215-629-0300<br>800-220-FEET<br>http://podiatry.temple.edu<br>Temple University School of Pharmacy<br>3307 North Broad Street<br>Philadelphia, PA 19140<br>Peter H. Doukas, PhD, Dean

Temple University Hospital 3401 North Broad Street
Philadelphia, PA 19140
http://tuh.templehealth.org/content/

# General Admissions Information 

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

The Office of Undergraduate Admissions processes all undergraduate applications for admission to all campuses of Temple University. Freshman applicants can opt to apply Early Action through our application or the Common Application and must have a completed application on file before November 1st to receive a decision by December 20th. All other applicants (freshman or transfer) are reviewed on a rolling basis, and candidates are usually notified of decisions four to six weeks after receipt of a completed application.

The web site to apply is admissions.temple.edu/apply.
Students must submit all application materials to the Office of Undergraduate Admissions by the stated deadlines on the undergraduate application web site. Applications received after these dates will be considered on a space-available basis. The admissions application fee is $\$ 55.00$. The renewal paper application fee is $\$ 20.00$.

## Special Requirements for Admission

The following programs have additional requirements for admission: the College of Health Professions and Social Work (Nursing, freshmen and transfers, and Health Information Management, transfers only), Dance, Music, and the Tyler School of Art. Refer to the individual program description for the details on these special requirements. Adult applicants, those who are 22 years and older and have not attempted 15 or more college-level credits at an accredited institution, are not required to submit standardized test scores.

## Tuition \& Residence Hall Deposits

All students admitted to the university must pay a non-refundable tuition deposit of $\$ 200$ in order to reserve a place in the incoming class. In addition, students who wish to live in the residence halls must pay a housing deposit of \$250.

## Applying for Re-enrollment

For further information, see Academic Policy 02.10.16 at http://policies.temple.edu/getdoc.asp?policy no=02.10.16.

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

## Freshmen

## Diploma \& Required High School Credits

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

| Subject field | Units |
| :--- | :---: |
| English | 4 |
| Mathematics, college preparatory | 4 |
| Foreign language (same language/culture) | 2 |
| History/Social Studies | 3 |
| Science (2 years lab) | 3 |
| The Arts | 1 |
| Other college preparatory courses | 3 |
| Total | $\mathbf{2 0}$ |

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

## College Entrance Examinations

Temple requires one of the following tests for college entrance:

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

Temple suggests that students take either test in the spring of their junior year, as well as in the fall of their senior year. Results should be forwarded directly to the Office of Undergraduate Admissions. SAT or ACT scores are recommended but not required of applicants 22 years of age or older.

## Entering with Academic Credit: Advanced Placement, International Baccalaureate, \& Dual Enrollment

Temple awards college credits to students who in high school participated in the Advanced Placement program (AP), the International Baccalaureate program (IB) or a Dual Enrollment program. Students should have taken the AP or IB exams in high school and should have their scores sent directly to the Office of Undergraduate Admissions. All students must request that their official test scores be sent to the Office of Undergraduate Admissions, even if they have requested them for a previously-attended college.

Limitations on credit earned through Advanced Placement, International Baccalaureate and other forms of Credit for Prior Learning are as follows: (1) the credit must be useful in a student's program of study; (2) duplicate credit in the same course is not awarded in any case; (3) credit is only awarded in academic subjects with a corresponding Temple department.

Credit for Prior Learning will not be awarded for a course in which a student is currently enrolled and/or has previously received a letter grade for the course (including, but not limited to, an F, W, AU, or I).

See the AP and IB sections under Credit for Prior Learning in the Academic Policies and Regulations section of the Bulletin for further information regarding course equivalencies and corresponding scores needed for credit.

Advanced Placement and International Baccalaureate equivalencies will be reviewed periodically and are subject to change. Students will receive the equivalency that is in effect at Temple at the time of their matriculation. If credit is awarded, a student's university record will carry notation of credit, but no grade will be recorded. Credit awarded will not affect a student's grade point average at Temple University.

College credits may be earned through Dual Enrollment courses completed while in high school. Students should have an official transcript sent from the credit granting institution directly to the Office of Undergraduate Admissions. Dual Enrollment credits are accepted and evaluated according to the guidelines established for Transfer Credits. For further information see Admissions: Transfer Credit.

## Placement Testing

Most newly-admitted students are required to take placement tests upon admission to Temple. These tests are designed to help assess mastery of certain basic skills, to point out particular strengths and weaknesses, and to assist in designing a program of study for the student. Placement tests are offered in English, Mathematics, and Foreign Languages.

- All students are required to take the English Placement Test unless they transfer a course that has been evaluated as a direct equivalent of Temple's English 0802 or 0812*.
- All students within School of Environmental Design (formerly Ambler College), Boyer College of Music and Dance, College of Health Professions and Social Work, College of Liberal Arts, School of Communications and Theater, School of Tourism and Hospitality Management, or Tyler School of Art are required to take the Mathematics Placement Test unless they transfer a creditbearing, college-level Mathematics course; however, students considering, or required to complete, Mathematics 1021 or higher or a Science course with a prerequisite of Mathematics 1021 or higher are required to take the Mathematics Placement Test, regardless of transfer credits.
- All students within the Division of University Studies (DUS) or any student within a major in the Colleges of Science and Technology, Engineering, Education or Fox School of Business and Management are required to take the Mathematics Placement Test, regardless of transfer credits.
- All students who previously studied a foreign language are required to take the Foreign Language Placement Test if they a) are in a B.A. program in the College of Liberal Arts, College of Science and Technology, or Tyler School of Art; are a Communication Sciences major within the College of Health Professions and Social Work; or are an International Business Administration major within the Fox School of Business and Management; OR, b) are interested in taking a foreign language at Temple.
*Transfer students who completed an English placement test at their previous institution and tested out of their previous institution's English Composition or comparable requirement can be waived from the English 0802 requirement if they have documentation of their placement and have successfully completed a higherlevel English/Writing course. Acceptable documentation includes an official letter from the university's registrar, advising unit, a faculty member, or other appropriate university official. In these instances, students will need to meet with an advisor for official approval. Once approval is granted, advisors will complete a DARS exception.

Incoming students take Online Placement Tests. New students receive an e-mail with the link to the Online Placement Testing web site where they can read descriptions of the tests and information as to the specific tests the student must take. The New Student Orientation (www.temple.edu/orientation) and Measurement and Research Center (MARC) (www.temple.edu/marc) web sites also contain descriptions of the tests, helpful hints for the test day, and sample items.

New Student Questionnaire (NSQ). The NSQ is a personal data collection survey that must be completed by all students. Temple uses the results of this questionnaire to develop programs and procedures to serve the needs and interests of its students. All information is kept confidential.

English Placement Examination (60 minutes). All students are required to take the English Placement Examination unless they transfer a direct equivalent of Temple's English 0802 or 0812. For the English Placement Examination, students write an essay and their essay score is combined with the students's SAT verbal score and high school percentile to determine the appropriate English course placement.

Mathematics Placement Examination (75 minutes). All freshmen and transfer students who are not transferring a credit-bearing QA, QB, or GQ designated Mathematics course are required to take the multiple choice Mathematics Placement Examination. Additionally, the following students (regardless of transfer credits) are required to take the Mathematics Placement Examination:

- all students within the Division of University Studies (DUS);
- all students in a major within the Colleges of Science and Technology, Engineering, Education, or the Fox School of Business and Management;
- all students considering or required to take Mathematics 1021 or higher;
- all students considering or required to take a Science course with a Mathematics 1021 or higher prerequisite.

Students can consult with their advisor concerning conditions under which they may retest.
Foreign Language Placement Examination (60 minutes). Freshmen and transfer students who previously studied a foreign language and are not transferring a credit-bearing, college-level foreign language course are required to take the Foreign Language Placement Test if they:

- are in a B.A. program in the College of Liberal Arts, College of Science and Technology, or Tyler School of Art;
- are a Communication Sciences major within the College of Health Professions and Social Work;
- are an International Business Administration major within the Fox School of Business and Management;

OR

- are interested in taking a foreign language course at Temple.

Online Placement Tests are offered in French, German, Italian, and Spanish; a paper-and-pencil Modern Greek Test is also available. Each is a multiple choice test and consists of approximately 90 items. If a student has previously studied another foreign language (other than French, German, Modern Greek, Italian, or Spanish) and wishes to be tested in that language, it may be possible to arrange testing. The Senior Vice Provost for Undergraduate Studies web site (www.temple.edu/vpus/forms/index.htm) has a Foreign Language Waiver Form and Procedures for Applying for a Foreign Language Waiver (Group 2 or Group 3 Languages).

For more information about placement testing, sample questions, and news about changes in placement tests, visit the placement testing page on the Measurement and Research Center web site (www.temple.edu/marc/placements.html).

## Orientation for New Students

Following admission to the university and payment of the tuition deposit, students will receive information regarding their orientation requirements. See the Office of Orientation web site at www.temple.edu/orientation/ for further information.

## Immunizations

See Student Health and Wellness under Student Services for required immunizations.

## Transfer Students

## Transfer Admissions

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

Applicants must submit official transcripts from high schools and each college previously attended. The university defines "official transcript" as that which is sent directly from a high school or college to Temple's Office of Undergraduate Admissions. Ordinarily, SAT or ACT scores are not required unless specifically requested by the Admissions Office.

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

## Transfer Credit

Generally, Temple accepts academic, college-level courses beyond the developmental level completed with a grade C- or better, from schools with regional accreditation (Middle States, Northwest, North Central, Southern, Western, and the Commission on Institutions of Higher Education of the New England Association of Schools and Colleges). Temple does not award credit for courses from institutions accredited by the Commission on Technical and Career Institutions of the New England Association or from any university, college, school, institute, or program accredited only by a national, professional, or specialized accrediting body.

Credit is only awarded in academic subjects with a corresponding Temple department. Duplicate credit in the same course is not awarded in any case. Whenever possible, credit is allowed for courses completed more than 10 years before the date of admission. Courses evaluated for transfer from colleges and universities with different credit systems (e.g. quarter hours, units,
etc.) are converted to semester hours (i.e., 2 quarter hour credits are equivalent to 1.5 semester hour credits; 3 quarter hour credits are equivalent to 2.0 semester hour credits; 4 quarter hour credits are equivalent to 2.5 semester hour credits).

Evaluation of transfer credits is based on a student's major. The student's school/college at Temple makes the final determination of which transfer credits are applicable to the student's degree program. Transfer evaluations may change for students who change majors or if additional transcripts or score reports are received. There is an expectation that final transcripts from previously attended institutions be received prior to the start of the student's second semester.

Initial evaluation of transfer credits is made in the Office of Undergraduate Admissions. Reevaluation of credits will be done first by Undergraduate Admissions and when appropriate by academic advisors, in consultation with the Office of the Senior Vice Provost for Undergraduate Studies, according to standard Temple policies and procedures. For more information about the evaluation of transfer credits and appeals for re-evaluation of credits go to www.temple.edu/vpus/transfer/index.htm\#EVALUATION.

To earn a degree from Temple, students must complete at least 30 hours of the last 45 semester hours as a matriculated student at Temple, fulfill all university requirements, and fulfill all of the degree requirements of the Temple school or college in which they are enrolled, as approved by the dean of that school/college. See Academic Residency in the Academic Policies and Regulations section of the Bulletin.

To graduate from Temple with Honors, students must complete at least 60 hours toward their degrees in residence as matriculated students at Temple University. See Honors for Academic Achievement in the Academic Policies and Regulations section of the Bulletin.

Credit for Prior Learning, including Advanced Placement, International Baccalaureate, College Level Examination Program (CLEP) credits, and courses taken as a non-matriculated student at Temple, are posted on a student's record as transfer credit, but do not always count as transfer credits for determining a student's eligibility for the 45+ Transfer GenEd. See 45+ Transfer GenEd in the Academic Programs section of the Bulletin.

The number of credits that students can transfer from another institution (two- and four-year) depends on their declared Temple major.

## Credit for Prior Learning

Temple University awards limited academic credit and course placement to students based on previous academic, employment, military and/or other learning experiences not earned in a traditional classroom setting. Credit for Prior Learning and non-traditional credits are not applied to the minimum number of credits (60) required to earn Latin Honors at graduation. Credit for Prior Learning and non-traditional credits are not counted toward Academic Residency. See Credit for Prior Learning in the Academic Policies and Regulations section of the Bulletin for further information.

## Dual Admissions

To better encourage and facilitate transfer admission from other colleges to Temple University, Temple and these colleges have established articulation agreements.

Dual Admissions agreements conditionally admit students to Temple at the same time they are admitted to a community college, and provide merit scholarships towards Temple tuition for eligible students. Students at ten Pennsylvania-area community colleges (Bucks County Community College, Delaware County Community College, Lehigh Carbon Community College, Luzerne County Community College, Montgomery County Community College, Community College of Philadelphia, Northampton Community College, Reading Area Community College, Harrisburg Area Community College, and Valley Forge Military College) may enroll in the Dual Admissions program before completing 30 credits, including any colleges previously attended. Students are then admitted to Temple upon attaining their associate's degrees at the community college. Go to www.temple.edu/vpus/transfer/agreements.htm for any updates to the list of dual admission agreements.

Additionally, Temple maintains a Guaranteed Admissions agreement with Burlington County College in New Jersey with similar guidelines and provisions as our Dual Admissions agreement

## GenEd-to-GenEd and Core-to-GenEd

GenEd-to-GenEd and Core-to-GenEd Transfer agreements accept -- upon Temple evaluation and approval -- the general education requirements of approved associate degrees in lieu of most of Temple's GenEd requirements. Go to www.temple.edu/vpus/transfer/agreements.htm for the list of these agreements.

## Program Articulation Agreements

These agreements between Temple schools and/or academic departments and other two-year institutions provide accurate curricular information for prospective transfer students and their academic advisors by lining up associate degree requirements and baccalaureate degree requirements. They indicate which courses students should take during their associate program in order to be prepared for the Temple baccalaureate program into which they wish to transfer. Go to www.temple.edu/vpus/transfer/agreements.htm for lists of agreements currently in effect.

## Transfer Students and the University General Education Curriculum

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

Students entering Temple with fewer than 45 transfer credits complete the full General Education Curriculum (see General Education Curriculum under the Academic Programs section of the Bulletin).

Students with 45 or more transferable credits satisfy the 45+ GenEd Curriculum. (See GenEd Transfer Programs under General Education Curriculum in the Academic Programs section of the Bulletin.)

Students who have earned the International Baccalaureate (IB) Diploma and meet minimum eligibility requirements complete the International Baccalaureate General Education Program (IB GenEd Program). Students accepted into the program will still complete the required number of credits needed for their selected baccalaureate degree - usually between 120-124 credits and will need to complete up to 18-19 credits of the full GenEd Program (35-36 credits). For more information go to www.temple.edu/vpus/transfer/TransferGenEd.htm.

Students with an associate degree approved for GenEd-to-GenEd or Core-to-GenEd Transfer meet most GenEd requirements with the general education courses taken for the associate degree. Associate degrees are approved for GenEd-to-GenEd and Core-to-GenEd by a university-wide faculty committee. See GenEd Transfer Programs for information on the policy and a list of approved community college associate degrees.

## International Students

An individual is considered an international student if he/she meets either of the conditions described below:

- applicants who hold or will hold a student visa, exchange visa, or any other type of nonimmigrant visa
- applicants who are permanent residents, naturalized citizens, or have refugee status in the United States and have not studied in the United States at the secondary or college level

International students who require a visa must complete the International Student Application available online, paper application, or common application. Questions can be directed to International Admissions. International students are also required to complete a Financial Support Statement as part of the international student application.

Effective April 2002, U.S. federal regulations prohibit individuals in Visitor for Business/Pleasure (B-1/B-2) status from pursuing full-time academic studies at a university or college in the United States and from applying for a change of status from B-1/B-2 to Nonimmigrant Student (F-1) status while they remain in the United States. These individuals must seek Nonimmigrant Student (F-1 or J-1) status through a U.S. consulate outside of the United States.

## Orientation and Immunizations

For requirements see International Student Services under Student Services.

# Special Admissions Programs 

## Dual Admissions Programs

See Transfer Students.

Pre-Professional Admissions Programs

Pre-Medical Health Scholar Program and
Accelerated Option Programs: Dentistry, Pharmacy, Podiatry, Physical Therapy
1810 Liacouras Walk, Suite 100
215-204-2513
healthadvising@temple.edu
www.temple.edu/healthadvising/scholars.htm

## Pre-Med Health Scholar Program

The Pre-Med Health Scholar Program is offered to highly talented High School Seniors interested in pursuing a career as a physician. it is designed to recruit exceptional students to Temple University by offering a Linkage Agreement with Temple University School of Medicine. Students entering Temple University as Pre-Med Health Scholars may consider an Accelerated BA/MD (3+4) Degree option.

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

Accelerated Programs allow Pre: Dentistry, Pharmacy, and Podiatry (3+4 Tracks) as well as Physical Therapy ( $3+3$ Track) students the option of earning both their Bachelor of Arts and Graduate Degrees in a shorter period of time after successfully passing all courses in the first year of professional school.

Applications for Accelerated Programs for Pre: Dentistry, Pharmacy, Podiatry and Physical Therapy tracks become available to interested students during their first semester at Temple University. The Accelerated Programs are designed for high-achieving students who have distinguished themselves with impressive high school academic records and a demonstrated interest in their respective field. Applications are available in the office of Pre-Professional Health Studies, 1810 Liacouras Walk, Suite 100. For further information, please visit the health advising web site noted above.

Temple Law Scholars Program<br>www.temple.edu/vpus/opportunities/LawScholars.htm

Paul Crowe, Director
Philosophy Department
College of Liberal Arts
215-204-8591
pcrowe@temple.edu

James M. Lammendola
Legal Studies in Business Department
Fox School of Business and Management
215-204-1629
james.lammendola@temple.edu
The Temple Law Scholars program provides an opportunity for outstanding students in the College of Liberal Arts and the Fox School of Business and Management to gain provisional admission to Temple University School of Law at the same time they are accepted into an undergraduate program. As Temple Law Scholars, students are expected to complete the University Honors Certificate Program in conjunction with their undergraduate degree, after which they enroll in the Temple University School of Law, leading to the degree of Juris Doctor. While most Law Scholars complete their undergraduate degree before entering Beasley School of Law, Law Scholars can choose the Accelerated Option and enter Beasley School of Law after their third year of undergraduate study. This $3+3$ option is currently available only to students in the College of Liberal Arts and the Fox School of Business and Management. A Law Scholar who chooses the Accelerated Option applies the first year of law school coursework toward undergraduate degree requirements and receives a Bachelor's Degree in his or her chosen major(s) after the first year of Law School. Law Scholars interested in pursuing the $3+3$ option must indicate their interest in doing so during the first semester of their first year of undergraduate study. For more information or an application, please visit the web site listed above.

## University Honors Program

The Honors Program is designed primarily to enhance the student's experience in the university's General Education courses. Qualified students who apply to any of the schools or colleges at Temple will be offered admission to the University Honors Certificate program. Typical admitted Honors first-year students will achieve a combined SAT score around 1300 and a high school GPA of around 3.80. For first-year students, no special application is required since all admitted students are screened for Honors. Current Temple students or transfer students may apply for late admission on the Honors web site.

For more information on the Honors Program, please visit the web site:
http://honors.temple.edu/.
Also see University Honors Program under Academic Opportunities.

## Russell Conwell Learning Center

## Recipient of the National "2011 Lee Noel - Randi Levitz Retention Excellence Award"

Working through the Office of Admissions, the Russell Conwell Center (RCC) is a Learning Center that provides university admission for students who have a strong academic record in
high school, but may not have "aced" the SAT/ACT. Once selected by the Office of Admissions as a university student, students are enrolled in the RCC, which serves as their freshmen academic advising unit and academic support community through graduation. The RCC offers a wide range of services to help students achieve their academic and educational goals, including:

- Academic assessment and advisement
- Tutorial services (Individual, Group and Team approaches)
- Learning assessment and instruction
- Academic/Educational workshop series
- Financial and budget management instruction
- Supplemental Instruction in Chemistry, Anatomy, Physics and more
- Career assessment and major exploration and match
- Academic Coaching by trained Undergraduate Scholars
- Professional Development Program (workforce and professional training for student employees)
- Certificate Series Program (proficiency training in Public Speaking, PowerPoint, Web page design, etc.)
- Cultural and social activities
- Leadership development and service opportunities
- Standardized test taking preparation (SAT and GRE)
- Student Employment Program
- And more!

Contact the Office of Admissions at 215-204-7200 for further information. See the Academic Support section of this Bulletin for more descriptive information about the services provided at the RCC, view the web site at www.temple.edu/rcc or call the RCC at 215-204-1252.

## Continuing Studies

See Special Programs.

## Special Programs General Information

The programs listed in this section are available for all students intending to study at Temple University without having to be enrolled in a degree program.

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

Temple University provides a broad administrative framework to present and support a wide range of university offerings not falling within the province of typical undergraduate and graduate degree work on Temple campuses. Registration for credit-bearing courses is
administered through the Office of Continuing Studies on the various campuses. Registration for non-credit courses is handled through Temple University Fort Washington (TUFW). Students taking non-credit courses at Temple University Ambler, TUFW and Temple University Center City (TUCC) may register and pay online for non-credit courses through the Temple University Fort Washington web site. The online system links non-credit course payments into the TUPay system, already in use for credit course payment. The non-credit course registration and payment system may be accessed by going to www.temple.edu/ambler/tufw/.

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

The form of programming includes credit certificates, non-credit professional certificates, and non-credit personal enrichment courses. The courses are offered at the following Temple sites: Temple University Ambler, Temple University Fort Washington, Temple University Center City, Temple University Harrisburg, and a variety of public and private off-campus sites through the auspices of Extension Services.

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

Services include:

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

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

For more information on non-degree students, see the Academic Policies section of this Bulletin.
Ambler/Fort Washington: Temple University's Ambler and Fort Washington campuses offer extensive undergraduate, graduate, and non-credit courses and programs that are available during days, evenings, and weekends. The listing of all offerings is available at www.ambler.temple.edu. Students interested in credit courses or programs should contact the Office of Academic and Career Advising at Ambler Campus by phone (267-468-8200), or go to the web site at www.ambler.temple.edu/advising. That office coordinates the services for students, as described under Main Campus above. For more information on non-credit offerings and registration, see the Non-Credit Programs/Temple University Fort Washington section below or go to www.temple.edu/ambler/tufw/.

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

Health Sciences Center (HSC): The School of Medicine (www.temple.edu/medicine), the Maurice H. Kornberg School of Dentistry (http://dentistry.temple.edu/), the School of Pharmacy (www.temple.edu/pharmacy/), and the College of Health Professions (http://chpsw.temple.edu/) sponsor continuing education activities for their graduates as well as for graduates of other institutions. Many programs meet the requirements of professional accrediting agencies to take refresher courses or seminars in order to keep abreast of changes in the field.

## Off-Campus/Corporate Programs

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

The staff of Extension Services serves as the liaison between the university faculty/trainers and its external customers. They have developed strong affiliations with businesses, school districts, units of government, and non-profit associations. Extension Services delivers, on site, the most effective credit programs in the Delaware Valley. Extension Services develops and customizes
training programs designed to be taught on site at the client's workplace while assuring the utmost quality in instruction and customer service. For more information, view the Extension Services web site or e-mail extserv@temple.edu.

## Credit-Bearing Certificate Programs

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

| Certificates of Completion | Department | School |
| :---: | :---: | :---: |
| Arabic | Critical Languages | CLA |
| Arts in Community | Art Education \& Community Arts Practices | Tyler |
| Asian Business and Society | Asian Studies | CLA |
| Business Basics (restricted to nondegree students) | Business Management | FSBM |
| Business Plus (restricted to nondegree students) | Business Management | FSBM |
| Career and Technical Education | Career and Technical Education | Education |
| Child and Family Services | Social Work | CHPSW |
| Chinese | Critical Languages | CLA |
| Construction Safety Management | Public Health | CHPSW |
| Cooperative Education | Career and Technical Education | Education |
| E-Business Certificate in Tourism, Hospitality, Sport and Recreation | Sport and Recreation Management / Tourism and Hospitality Management | STHM |
| Emergency Management with Special Populations | Public Health | CHPSW |
| English as a Second Language | Curriculum Instruction \& Technology | Education |
| Entrepreneurship |  | FSBM |
| Environmental Sustainability | Landscape Architecture / Horticulture / Community \& Regional Planning | Environmental Design |
| French | French, German, Italian and Slavic | CLA |
| Geography of Sports, Recreation and Tourism Planning | Geography and Urban Studies | CLA |
| Geography of Tourism | Geography and Urban Studies | CLA |


| Certificates of Completion | Department | School |
| :--- | :--- | :--- |
| German | French, German, Italian and Slavic | CLA |
| Gerontology | Institute on Aging | CHPSW |
| Health Research | Sociology | CLA |
| Horticultural Therapy | Horticulture | Design |
| Italian | French, German, Italian and Slavic | CLA |
| Japanese | Critical Languages | CLA |
| Jewish Secular Studies | Jewish Studies | CLA |
| Landscape Plants | Horticulture | Environmental |
| Design |  |  |
| Latin American Studies Semester | Spanish and Portuguese | CLA |
| Leadership | Human Resource Management | FSBM |
| Management Careers | Economics | CLA |
| Management Information Systems | Management Information Systems | FSBM |
| Multilingual Business and | Spanish and Portuguese | CLA |
| Government Studies |  | College |
| National Park Service Management |  | Environmental |
| Native Perennial Garden Design | Horticulture | CLA |
| Political Economy | Political Science and Economics | CLA |
| Sociology Health Research | Sociology | CLA |
| Spanish | Spanish and Portuguese | CLA |
| Spanish and Latin American Studies <br> for Business | Spanish and Portuguese |  |
| Spanish and Latino Studies for the | Spanish and Portuguese | CLA |
| Health and Human Services |  | Environmental |
| Professions | Design |  |
| Sustainable Food Systems | Landscape Architecture / Horticulture / |  |
| Sustainability | Eommunity \& Regional Planning |  |
| Travel and Tourism | English |  |
| Women's Studies |  | CLA |
| Writing |  |  |
|  | Women's Studies |  |

## Programs with Academic Credit

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

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

Students may use the Visiting Student Registration Form available on the Temple University Summer web site at www.temple.edu/summer. This form must be faxed or sent via postal mail to the Temple University campus you are planning to attend. The full listing of the campus contact information and registration information for all campuses is available by visiting the Summer Programs Registration page at www.temple.edu/summer/register/visiting-students.html.

Credit Transfer to Your Home Institution: In order to facilitate the transfer of credits, students should request that an academic transcript be sent from Temple to their home institution. The transcript request form is available by visiting Temple's Office of the University Registrar web site. It will not be sent out automatically. For further information, please contact the Office of the University Registrar at 215-204-1131 or visit in person on the second floor, Conwell Hall, Broad Street and Montgomery Avenue, on the Main Campus. You may also visit the registration office at your campus of choice or go to their web site at www.temple.edu/registrar for more information.

Undergraduate Non-Degree Students: Students who are not currently enrolled at another institution may be permitted to register for some courses as non-degree students. To enroll in undergraduate courses they must have earned a high school diploma or a G.E.D. certificate. Students who have attended another college or university must provide a transcript of their previous academic work and must have earned at least a 2.00 cumulative GPA. With some exceptions, these students are required to take the university placement test before they can register. However, meeting these minimum requirements does not guarantee enrollment as a nondegree student. For more information, and to speak with an academic advisor, please contact the Main Campus Office of Continuing Studies or the office of the campus you wish to attend.

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

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

Institute on Aging: Gerontology is the study of aging and the issues that surround the aging process. The Institute on Aging offers a Certificate in Gerontology program in cooperation with schools and colleges throughout the university. Therefore, the certificate program is designed to
provide the student with an interdisciplinary education along with practical experience in the field of aging.

Certificates in Gerontology are offered at the undergraduate and graduate level. The 18-credithour program may be completed in conjunction with a degree program or as a separate emphasis program for persons not currently enrolled in a degree program. All students must register and complete 15 credit hours and a field placement or action research project. Students are expected to finish the program within a five-year time span. No more than two gerontology electives may be taken prior to admission into the program.

## Non-Credit Programs

For further information on the following non-credit programs, you can visit the web sites of Temple University Ambler (www.ambler.temple.edu), Temple University Center City (www.temple.edu/tucc/), Temple University Alumni and Friends (www.alumni.temple.edu/) and Russell Conwell Center (www.temple.edu/rcc).

Non-Credit Programs at Temple University Ambler (TUA), Fort Washington (TUFW), and Center City (TUCC): The Office of Non-Credit and Continuing Education, located at the TUA campus, provides training and seminars in professional development and personal enrichment topics, as well as computer applications. Courses and programs are offered at the TUA, TUFW and TUCC campuses. Non-credit certificates can be completed in Accounting, Project Management, Leadership and Management, Editing, Interior Design, Meeting Planning, Wedding Planning, Database Management and Web Site Design. Personal enrichment courses are offered in digital photography, writing, arts and literature, language, exercise, food and entertainment, horticulture and wellness. Workshops are also available to help prepare students for the SAT. For more information about courses and programs, or to receive catalogs or general information, call the Office of Non-Credit and Continuing Education at 267-468-8500. Or, send an e-mail to ncregistrar@temple.edu. To view the non-credit course listing, visit us on the web at www.ambler.temple.edu and click on "Non-Credit Programs."

LifeLong Learning Society at Temple University Fort Washington: The Lifelong Learning program provides stimulating classes with great teachers, topics, and students. Classes are designed for learners 50 and up, but adult learners of all ages are welcome. After paying an annual fee, or semi-annual fee (fall or spring), students may enroll in as many of the LifeLong Learning Society courses as they like. Call 267-468-8500 for details or go to the LifeLong Learning Society section on the Fort Washington web site (www.temple.edu/ambler/tufw/) for a listing of courses.

Real Estate Institute: The Real Estate Institute is the largest professional consumer education program in the tri-state area offering pre-licensure or basic real estate courses as well as a broad spectrum of elective courses, all taught by state-certified real estate instructors. The Real Estate Institute's courses are fully-accredited by the Pennsylvania Real Estate Commission and are intended for those seeking state licensure and/or professional advancement but not an academic degree. The courses allow you to qualify for the Pennsylvania Salesperson Licensing
examination and, together with a three-year apprenticeship and additional courses, for the Pennsylvania Real Estate Brokers examination. All students who successfully complete each course of study are awarded Real Estate educational credits and a Temple Real Estate Institute transcript. For more information, call 215-204-1530 and/or visit the web site at www.temple.edu/tucc/prodev/REI/.

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

Osher Lifelong Learning Institute at Temple University (OLLI): OLLI is an educational program for people who are retired, near retirement, or adults with discretionary time to take daytime classes. There are no age limitations. The organization brings a lively, no-pressure atmosphere and offers a variety of courses.

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

Russell Conwell Center Non-Credit Programs: The Russell Conwell Center (RCC) offers a series of certificate programs designed to increase student's proficiency in various skill areas. While the certificate programs change each semester, sample certificate programs have included: Public Speaking, Creating Professional Presentations with PowerPoint, Utilizing Access, Becoming Proficient with Excel, and Financial Management, Budgeting and Investing. To obtain more information about the courses that are offered or to request a specific series, contact the RCC at 215-204-1252 or visit the RCC web site at www.temple.edu/rcc.

## Registration

Office of the University Registrar
200 Conwell Hall
1801 North Broad Street
Philadelphia, PA 19122
215-204-1131
215-204-6626 (fax)
registrar@temple.edu
www.temple.edu/registrar

## General Information

Students planning to register for classes should visit the Office of the University Registrar's web site, www.temple.edu/registrar, and click on the "Registration Information" link for information about, and links to, advising, registration, courses offered, and more.

Detailed information regarding courses offered (day, time, location, instructor) is on the Class Schedule web site.

Advising is required for students registering at Temple for the first time and is strongly recommended for all students before registering through Self-Service Banner (SSB) at http://tuportal.temple.edu. Students should contact their school, college, or department advisors for appointments or information. Generally, advisors and students review options and requirements, select courses, and complete and sign a registration form when necessary. For further information on academic advising, please see Advising under the Student Support and Services section of the Bulletin.

## Registration Policies

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

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

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

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

Students who drop classes by the end of the drop period (the end of the second week of classes) of a semester or summer session will have their courses dropped. This will relieve them of academic responsibility and of their financial responsibility associated with the course.

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

## Continuing Student Registration

Continuing (or priority) student registration is the period in which all currently enrolled, degreeseeking students can register. Each semester, currently enrolled students are sent an e-mail containing the registration schedule. This schedule is also available on the web site of the University Registrar (www.temple.edu/registrar) under Registration Information.

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

Please note the following important information with respect to continuing registration for degree-seeking students (graduates and undergraduates) enrolled in the current semester:

- For fall semester, held mid-March, with initial fall semester E-bills sent beginning in late July and due mid-August.
- For spring semester, held mid-October, with initial spring semester E-bills sent beginning in December and due in January.
- Continuing, degree-seeking students (graduates and undergraduates) may continue to register beyond these dates but must register for their next semester by stated deadlines or risk a late registration penalty. Generally, they must be registered by the first day of the term. Visit the Office of the University Registrar web site for specific registration dates and deadlines.

Open registration is available:

- For new students, readmitted students, and continuing students who could not register during continuing student registration
- For fall semester, held April to late August
- For spring semester, held November to mid-January

An installment tuition payment plan is available for most students who register during this period. See Tuition and Fees for payment information and registration dates.

## Late Registration

Temple conducts late registration at the beginning of each semester or summer session. Registration appointments may be required.

All students will be assessed a $\$ 100.00$ late registration fee beginning the first day of the term.

## Schedule Revision (Drop/Add)

Students may revise their schedules at any time after they have registered, through the add and drop deadlines. Students who cannot register online but wish to make changes in their course schedules must do so with the assistance of their academic advisor. Approvals required vary according to the time the transaction is completed. Visit the Office of the University Registrar web site for more information.

Students may not add courses after the first week of fall and spring semesters and second day of the summer sessions. Course sections may be dropped through the second week of the fall and spring semesters and summer sessions. Dropping from a course within the first two weeks of the fall and spring semesters or the summer session results in the deletion of the class from the student's roster. It also relieves the student of the financial liability associated with the deleted course. If a refund is due, the provisions of the refund policy will apply.

## Student Identification Cards

OWL Cards (student IDs) are produced on the Main Campus by the Office of Orientation during New Student Orientation. At other times throughout the semester, ID cards are produced by the Diamond Dollars Office at 1910 Liacouras Walk. The cost of a replacement ID card is $\$ 20.00$.

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

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

## Additional Registration Information

## Veterans

Veterans may enroll as full-time or part-time students; however, benefits are based on enrollment status. The Veterans Coordinator in the Office of the University Registrar is available to answer questions concerning V.A. benefits at 215-204-7358 or vastudentbenefits@temple.edu.

## International Students

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

## Continuing Studies Students

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

There is no formal application to enroll as a Continuing Studies student; however, first-time
enrollers are asked to provide documentation of education completed (high school transcript, GED certificate, college transcripts [minimum 2.00 GPA required], or college diploma). Firstyear, non-degree-seeking students may register for a maximum of 11 credits per semester. Second-year, non-degree-seeking student registrations are based upon academic progress. However, undergraduate non-degree-seeking students are prohibited from registering via SelfService Banner and must register through their Continuing Studies office. Continuing Studies students must apply for admission by the completion of 30 s.h. Preadmission counseling, academic advising, registration, and other support services are provided for non-degree-seeking students. Also see the Continuing Studies web site for more information.

## Tuition and Fees

## Payment of Tuition

David Glezerman, Assistant Vice President and Bursar
115 Carnell Hall
215-204-7269
david.glezerman@temple.edu
www.temple.edu/bursar
Registration for courses is not optional, and students must not attend courses for which they are not registered. Once a student registers for a course--or is registered by an advisor at the student's request--the student remains financially obligated for the course unless and until he or she drops the course by the prescribed deadlines for dropping and adding courses. Prior to registering for the first time each semester, students are required to accept Temple University's Financial Responsibility Agreement, which outlines the financial terms and conditions associated with course registration.

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

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

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

Students who drop classes by the end of the drop/add period (the end of the second week of classes) of a semester or summer session will have their courses dropped. This will relieve them of academic responsibility and in most instances financial responsibility associated with the course.

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

Students who do not withdraw by the published deadline are responsible for payment of all tuition and fee and/or collection costs. Temple University will first apply all payments received to the oldest outstanding balance, if applicable, then to the current semester charges.

Temple University notifies students via their TUmail account to view their electronic bills in TUpay. Students are required to pay at least the minimum amount due on their bills on or before the due date on their bill.

Acceptable forms of payment include: tuition remission forms, checks (paper and electronic), cash, credit cards, and money orders. Checks or money orders should be made payable to Temple University. Credit cards accepted for online payment only through TUpay include: MasterCard, American Express, Discover and Visa. Please note that credit card payments are subject to a $2.75 \%$ convenience fee by the university's processor.

Payment must be received by the billing due date to assure proper crediting and to remain in good financial standing.

## Payment Plans

Students are encouraged to pay the total account balance by the bill due date. In doing so, students avoid any payment plan fees and late payment fees. However, if students are unable to do so, Temple University offers two payment plans to assist students and their families.

Please note that payment plans are offered for the fall and spring semesters only. Payment plans are not offered in the summer semesters.

For the first bill of the fall and spring semester, students are billed with a minimum amount due that represents $50 \%$ of current term charges. Students who elect this payment option and do not pay the total account balance will be automatically enrolled in the University's Deferred Payment Plan and assessed a $\$ 25$ non-refundable payment plan fee.

For the second bill of the fall and spring semester, students are billed for the remaining balance. Students who do not pay the total account balance in full by the due date are indicating that they wish to remain in the University's Deferred Payment Plan and will be assessed a $\$ 20$ nonrefundable payment plan fee.

The University also offers the Temple Installment Payment Plan (TIPP) for those students who need an extended payment option. The plan allows students to make up to ten regularly scheduled monthly payments starting in May towards their future charges (five payments for fall and five payments for spring). The application fee for this payment plan is $\$ 50$ for the year. For more information about this plan, offered through Higher Education Services (HES), go to www.temple.edu/bursar.

## Financial Counseling

Students who need assistance in financing their education should see a Financial Counselor in the Department of Student Financial Services (Ground Floor, Conwell/Carnell Hall) or call 215-204-2244 for an appointment. For more information on financing your education, visit the MONEY MATTERS web site at: www.temple.edu/bursar/financialliteracy

## Student Loan Counseling

All students who receive federal student loans are required by federal regulations to receive loan counseling when first receiving a loan and prior to leaving the university.

The Credit and Collections unit in the Bursar's Office is responsible for completing loan counseling for all students who are receiving federal student loans for the first time (entrance interviews). In addition, this staff can assist students with related financial planning that would help them in completing their education at Temple. Students can go to www.fc.campusoncall.com/cgi-bin/home.pl?FromAdmin=1\&campus=temple to complete the entrance interview or call 215-204-5549 for additional information.

Students who are graduating must complete an exit interview online at www.fc.campusoncall.com/cgi-bin/home.pl?FromAdmin=1\&campus=temple or contact the Credit and Collections unit in the Bursar's Office, Second Floor, Carnell Hall, at 215-204-5549.

## Assessing Tuition Charges

Tuition assessment at Temple University is based on full-time or part-time status; student college; student level status (undergraduate, graduate, or professional); student class level for undergraduates; and in-state/out-of-state residency status. The level of the courses is not a factor in how students are assessed.

All students are placed into one of the University's schools or colleges, based on their major or program.

## Full-time Status

Undergraduate students are considered full-time students when carrying between 12-17 semester hours (s.h.). Credits in excess of 17 s.h. are additionally assessed at the per semester credit hour tuition rate.

International students, holders of non-immigrant visas, are required to pay out-of-state tuition fees and register as full-time students.

There is no distinction between full-time and part-time graduate tuition rates. All graduate students are assessed at a credit hour rate, regardless of the number of credit hours they are taking.

## Part-time Status

Undergraduates are considered part-time students when taking fewer than 12 s.h. per semester. Tuition is charged by the semester credit hour for part-time undergraduates.

## In-State/Out-of-State Residency Status

A student is classified as a Pennsylvania resident for tuition purposes if his or her permanent, legal residence is in Pennsylvania. In-state residency is generally established within the context of the following overall guidelines:

An individual who has not lived in Pennsylvania for a continuous 12-month period immediately prior to registration as a student at a Pennsylvania college or university is presumed not be to a Pennsylvania resident. A student may rebut this presumption with convincing evidence.

A student under 22 years of age is presumed to have the residency of his or her parents or legal guardians. A student may rebut this presumption by presenting convincing evidence of emancipation and independent domicile.

A student who receives financial aid based on residence in a state other than Pennsylvania will not be considered a resident of Pennsylvania.

A student who is not a United States citizen or does not have an immigrant visa is presumed not to be a resident of Pennsylvania for tuition purposes; however, a student may rebut this presumption with clear and convincing evidence.

For more information and a copy of the Resident Tuition Eligibility Guidelines, visit www.temple.edu/registrar. Specific questions pertaining to Pennsylvania residency status should be directed to the Office of the University Registrar at 215-204-1131 or resident.tuition@temple.edu.

## Tuition Schedule

To see a copy of the latest tuition schedule, go to www.temple.edu/bursar/about/tuitionrates.htm.


| School of Media and Communication |  |  |
| :---: | :---: | :---: |
| Undergraduate: |  |  |
| Lower Division: |  |  |
| Full-time Undergraduate | \$ 14,006 | \$ 24,032 |
| Full-time Undergraduate including University services fee | \$ 14,696 | \$ 24,722 |
| Part-time Undergraduate (per credit hour) ** | \$ 541 | \$ 858 |
| Upper Division:* |  |  |
| Full-time Undergraduate | \$ 14,606 | \$ 24,632 |
| Full-time Undergraduate including University services fee | \$ 15,296 | \$ 25,322 |
| Part-time Undergraduate (per credit hour) ** | \$ 562 | \$ 879 |
| Graduate: |  |  |
| Graduate (per credit hour) ** | \$ 785 | \$ 1,083 |
| Center for the Arts |  |  |
| (Tyler School of Art, Boyer College of Music and Dance and Division of Film, Media Arts, and Theater) |  |  |
| Tyler School of Art |  |  |
| Fine Arts |  |  |
| Undergraduate: |  |  |
| Lower Division: |  |  |
| Full-time Undergraduate | \$ 18,176 | \$ 29,716 |
| Full-time Undergraduate including University services fee | \$ 18,866 | \$ 30,406 |
| Part-time Undergraduate (per credit hour) ** | \$ 583 | \$ 898 |
| Upper Division:* |  |  |
| Full-time Undergraduate | \$ 18,776 | \$ 30,316 |
| Full-time Undergraduate including University services fee | \$ 19,466 | \$ 31,006 |
| Part-time Undergraduate (per credit hour) ** | \$ 604 | \$ 919 |
| Graduate: |  |  |
| Graduate (per credit hour) ** | \$ 861 | \$ 1,177 |
| Architecture |  |  |
| Undergraduate: |  |  |
| Lower Division: |  |  |
| Full-time Undergraduate | \$ 15,432 | \$ 25,914 |
| Full-time Undergraduate including University services fee | \$ 16,122 | \$ 26,604 |
| Part-time Undergraduate (per credit hour) ** | \$ 567 | \$ 884 |


|  |  |  |
| :---: | :---: | :---: |
| Upper Division:* |  |  |
| Full-time Undergraduate | \$ 16,032 | \$ 26,514 |
| Full-time Undergraduate including University services fee | \$ 16,722 | \$ 27,204 |
| Part-time Undergraduate (per credit hour) ** | \$ 588 | \$ 905 |
|  |  |  |
| Graduate: |  |  |
| Graduate (per credit hour) ** | \$ 817 | \$ 1,115 |
|  |  |  |
| Art History and Art / Art Education |  |  |
|  |  |  |
| Undergraduate: |  |  |
| Lower Division: |  |  |
| Full-time Undergraduate | \$ 13,406 | \$ 23,432 |
| Full-time Undergraduate including University services fee | \$ 14,096 | \$ 24,122 |
| Part-time Undergraduate (per credit hour) ** | \$ 517 | \$ 834 |
|  |  |  |
| Upper Division:* |  |  |
| Full-time Undergraduate | \$ 14,006 | \$ 24,032 |
| Full-time Undergraduate including University services fee | \$ 16,696 | \$ 24,722 |
| Part-time Undergraduate (per credit hour) ** | \$ 538 | \$ 855 |
|  |  |  |
| Graduate: |  |  |
| Graduate (per credit hour) ** | \$ 745 | \$ 1,043 |
|  |  |  |
| Boyer College of Music and Dance |  |  |
| Undergraduate: |  |  |
| Lower Division: |  |  |
| Full-time Undergraduate | \$ 15,252 | \$ 26,088 |
| Full-time Undergraduate including University services fee | \$ 15,942 | \$ 26,778 |
| Part-time Undergraduate (per credit hour) ** | \$ 579 | \$ 894 |
|  |  |  |
| Upper Division:* |  |  |
| Full-time Undergraduate | \$ 15,852 | \$ 26,688 |
| Full-time Undergraduate including University services fee | \$ 16,542 | \$ 27,378 |
| Part-time Undergraduate (per credit hour) ** | \$ 600 | \$ 915 |
|  |  |  |
| Graduate: |  |  |
| Graduate (per credit hour) ** | \$ 831 | \$ 1,128 |
|  |  |  |
| Division of Theater, Film and Media Arts |  |  |
| Undergraduate: |  |  |


| Lower Division: |  |  |
| :---: | :---: | :---: |
| Full-time Undergraduate | \$ 14,006 | \$ 24,032 |
| Full-time Undergraduate including University services fee | \$ 14,696 | \$ 24,722 |
| Part-time Undergraduate (per credit hour) ** | \$ 541 | \$ 858 |
| Upper Division:* |  |  |
| Full-time Undergraduate |  |  |
| Full-time Undergraduate including University services fee | \$ 14,606 | \$ 24,632 |
| Part-time Undergraduate (per credit hour) ** | \$ 15,296 | \$ 25,322 |
|  | \$ 562 | \$ 879 |
| Graduate: |  |  |
| Graduate (per credit hour) ** | \$ 785 | \$ 1,083 |
| Fox School of Business and Management |  |  |
| Undergraduate: |  |  |
| Lower Division: |  |  |
| Full-time Undergraduate | \$ 17,484 | \$ 30,712 |
| Full-time Undergraduate including University services fee | \$ 18,174 | \$ 31,402 |
| Part-time Undergraduate (per credit hour) ** | \$ 674 | \$ 1,091 |
| Upper Division:* |  |  |
| Full-time Undergraduate | \$ 18,084 | \$ 31,312 |
| Full-time Undergraduate including University services fee | \$ 18,774 | \$ 32,002 |
| Part-time Undergraduate (per credit hour) ** | \$ 695 | \$ 1,112 |
| Master of Business Administration |  |  |
| Graduate (per credit hour) students are assessed a Program fee of \$750 | \$ 1,017 | \$ 1,451 |
| Master of Science and PhD Program |  |  |
| Graduate (per credit hour) students are assessed a Program fee of \$750 | \$ 1,017 | \$ 1,451 |
| Master of Accountancy |  |  |
| Graduate (per credit hour) students are assessed a Program fee of \$750 | \$ 1,000 | \$ 1,000 |
| Online MBA |  |  |
| Graduate (per credit hour) | \$ 1,296 | \$ 1,296 |
| Executive Master of Business Administration |  |  |
| Class of 2014 | \$ 41,750 | \$ 41,750 |
| Class of 2015 (per credit hour) | \$ 1,772 | \$ 1,772 |
| International Master of Business Administration |  |  |


| Total Cost of Program | \$ 57,500 | \$ 57,500 |
| :---: | :---: | :---: |
| There are additional costs for housing and airfare related to the program |  |  |
|  |  |  |
|  |  |  |
| International Master of Business Administration-Master of Science |  |  |
| Total Cost of Program | \$ 72,385 | \$ 72,385 |
| There are additional costs for housing and airfare related to the program |  |  |
|  |  |  |
|  |  |  |
| IT Auditing and Cyber Security |  |  |
| Graduate (per credit hour) | \$ 1,000 | \$ 1,000 |
|  |  |  |
| Online BBA |  |  |
| Undergraduate (per credit hour) | \$ 690 | \$ 690 |
|  |  |  |
| Professional Finance Masters Suite |  |  |
| Graduate (per credit hour) | \$ 1,050 | \$ 1,050 |
|  |  |  |
| Business Certificate in Health |  |  |
| Graduate (per credit hour) | \$ 687 | \$ 961 |
|  |  |  |
| Master of Risk Management and Insurance |  |  |
| Graduate (per credit hour) | \$ 1,050 | \$ 1,050 |
|  |  |  |
| Executive Doctor of Business Administration Program |  |  |
| Graduate (per credit hour) | \$ 2,315 | \$ 2,315 |
|  |  |  |
| College of Engineering |  |  |
| Undergraduate: |  |  |
| Lower Division: |  |  |
| Full-time Undergraduate | \$ 15,588 | \$ 25,560 |
| Full-time Undergraduate including University services fee | \$ 16,278 | \$ 26,250 |
| Part-time Undergraduate (per credit hour) ** | \$ 589 | \$ 902 |
|  |  |  |
| Upper Division:* |  |  |
| Full-time Undergraduate | \$ 16,188 | \$ 26,160 |
| Full-time Undergraduate including University services fee | \$ 16,878 | \$ 26,850 |
| Part-time Undergraduate (per credit hour) ** | \$ 610 | \$ 923 |
|  |  |  |
| Graduate: |  |  |
| Graduate (per credit hour) ** | \$ 853 | \$ 1,150 |
|  |  |  |


| College of Health Professions and Social Work |  |  |
| :---: | :---: | :---: |
| Undergraduate: |  |  |
| Lower Division: |  |  |
| Full-time Undergraduate | \$ 16,110 | \$ 27,462 |
| Full-time Undergraduate including University services fee | \$ 16,800 | \$ 28,152 |
| Part-time Undergraduate (per credit hour) ** | \$ 602 | \$ 953 |
|  |  |  |
| Upper Division:* |  |  |
| Full-time Undergraduate | \$ 16,710 | \$ 28,062 |
| Full-time Undergraduate including University services fee | \$ 17,400 | \$ 28,752 |
| Part-time Undergraduate (per credit hour) ** | \$ 623 | \$ 974 |
|  |  |  |
| Graduate: |  |  |
| Graduate (per credit hour) ** | \$ 771 | \$ 1,083 |
|  |  |  |
| Occupational Therapy |  |  |
| Full-time | \$ 25,926 | \$ 34,484 |
| Full-time including University services fee | \$ 26,616 | \$ 35,174 |
| Graduate (per credit hour) ** | \$ 771 | \$ 1,083 |
|  |  |  |
| Physical Therapy |  |  |
| Graduate (per credit hour)** | \$ 771 | \$ 1,033 |
|  |  |  |
| Social Work |  |  |
| Undergraduate: |  |  |
| Lower Division: |  |  |
| Full-time Undergraduate | \$ 13,406 | \$ 23,432 |
| Full-time Undergraduate including University services fee | \$ 14,096 | \$ 24,122 |
| Part-time Undergraduate (per credit hour) ** | \$ 517 | \$ 834 |
|  |  |  |
| Upper Division:* |  |  |
| Full-time Undergraduate | \$ 14,006 | \$ 24,032 |
| Full-time Undergraduate including University services fee | \$ 14,696 | \$ 24,722 |
| Part-time Undergraduate (per credit hour) ** | \$ 538 | \$ 855 |
|  |  |  |
| Graduate: |  |  |
| Graduate (per credit hour) ** | \$ 745 | \$ 1,043 |
|  |  |  |
|  |  |  |
| College of Science \& Technology |  |  |
| Undergraduate: |  |  |
| Lower Division: |  |  |


| Full-time Undergraduate | \$ 15,046 | \$ 25,054 |
| :---: | :---: | :---: |
| Full-time Undergraduate including University services fee | \$ 15,736 | \$ 25,744 |
| Part-time Undergraduate (per credit hour) ** | \$ 579 | \$ 894 |
| Upper Division:* |  |  |
| Full-time Undergraduate | \$ 15,646 | \$ 25,654 |
| Full-time Undergraduate including University services fee | \$ 16,336 | \$ 26,344 |
| Part-time Undergraduate (per credit hour) ** | \$ 600 | \$ 915 |
| Graduate: |  |  |
| Graduate (per credit hour) ** | \$ 831 | \$ 1,128 |
| School of Tourism \& Hospitality Management |  |  |
| Undergraduate: |  |  |
| Lower Division: |  |  |
| Full-time Undergraduate | \$ 17,484 | \$ 30,712 |
| Full-time Undergraduate including University services fee | \$ 18,174 | \$ 31,402 |
| Part-time Undergraduate (per credit hour) ** | \$ 674 | \$ 1,091 |
| Upper Division:* |  |  |
| Full-time Undergraduate | \$ 18,084 | \$ 31,312 |
| Full-time Undergraduate including University services fee | \$ 18,774 | \$ 32,002 |
| Part-time Undergraduate (per credit hour) ** | \$ 695 | \$ 1,112 |
| Graduate: |  |  |
| Graduate (per credit hour) ** | \$ 1,017 | \$ 1,451 |
| University Studies |  |  |
| Undergraduate: |  |  |
| Lower Division: |  |  |
| Full-time Undergraduate | \$ 13,406 | \$ 23,432 |
| Full-time Undergraduate including University services fee | \$ 14,096 | \$ 24,122 |
| Part-time Undergraduate (per credit hour) ** | \$ 517 | \$ 834 |
| Upper Division:* |  |  |
| Full-time Undergraduate | \$ 14,006 | \$ 24,032 |
| Full-time Undergraduate including University services fee | \$ 14,696 | \$ 24,722 |
| Part-time Undergraduate (per credit hour) ** | \$ 538 | \$ 855 |
| Non-Matriculated Students (Continuing Studies) |  |  |
| Undergraduate: |  |  |
| Lower Division: |  |  |


| Full-time Undergraduate | \$ 13,406 | \$ 23,432 |
| :---: | :---: | :---: |
| Full-time Undergraduate including University services fee | \$ 14,096 | \$ 24,122 |
| Part-time Undergraduate (per credit hour) ** | \$ 517 | \$ 834 |
| Upper Division:* |  |  |
| Full-time Undergraduate | \$ 14,006 | \$ 24,032 |
| Full-time Undergraduate including University services fee | \$ 14,696 | \$ 24,722 |
| Part-time Undergraduate (per credit hour) ** | \$ 538 | \$ 855 |
| Graduate: |  |  |
| Graduate (per credit hour) ** | \$ 745 | \$ 1,043 |
| PROFESSIONAL: |  |  |
|  |  |  |
| School of Dentistry |  |  |
| Full-time | \$ 47,386 | \$ 55,350 |
| Full-time including University services fee | \$ 48,076 | \$ 56,040 |
| Graduate (per credit hour) ** | \$ 693 | \$ 958 |
| Advanced DMD Program |  |  |
| Full-time | \$ 60,000 | \$ 60,000 |
| Full-time including University services fee | \$ 60,690 | \$ 60,690 |
| Advanced Standing Doctor of the Medicine of Dentistry Program for Faculty who are Graduates of Non-US/Canadian Dental Schools |  |  |
| Per semester/per credit hour | \$ 899 | \$ 899 |
| Beasley School of Law |  |  |
| Full-time - Day Juris Doctor | \$ 19,722 | \$ 33,040 |
| Full-time - Day Juris Doctor including University services fee | \$ 20,412 | \$ 33,730 |
| Full-time - Evening Juris Doctor ** | \$ 15,778 | \$ 26,438 |
| Part-Time Juris Doctor - per credit hour ** | \$ 763 | \$ 1,350 |
| In addition to any University wide fees, Juris Doctor students, full- and parttime, are assessed a Student Bar Association fee of \$50 |  |  |
|  |  |  |
| S.J.D. Program |  |  |
| Part-Time - per credit hour ** | \$ 741 | \$ 1,311 |
|  |  |  |
| International Masters of Law ( LL.M ) |  |  |
| Full-time | \$ 24,828 | \$ 24,828 |
| Full-time including University services fee | \$ 25,518 | \$ 25,518 |
| Part-time - per credit hour | \$ 1,158 | \$ 1,158 |


|  |  |  |
| :---: | :---: | :---: |
| Master of Law in Trial Advocacy ( LL.M) |  |  |
| Full-time | \$ 20,858 | \$ 20,858 |
|  |  |  |
| Graduate Tax Program |  |  |
| Part-time - per credit hour ** | \$ 748 | \$ 964 |
|  |  |  |
| Summer Abroad: Rome |  |  |
| Tuition | \$ 3,350 | \$ 3,350 |
| Including an assessed \$300 Program fee | \$ 3,650 | \$ 3,650 |
|  |  |  |
| Law: Temple Summer Professional Experience Curriculum (T-Spec) |  |  |
| Tuition | \$ 2,825 | \$ 2,825 |
| Including an assessed \$300 Program fee | \$ 3,125 | \$ 3,125 |
|  |  |  |
| Law Summer Washington DC |  |  |
| Tuition | \$ 3,450 | \$ 3,450 |
| Including an assessed \$300 Program fee | \$ 3,750 | \$ 3,750 |
|  |  |  |
| Temple - China (15 months tuition) | \$ 22,880 | \$ 22,880 |
|  |  |  |
| School of Pharmacy |  |  |
| Doctor of Pharmacy |  |  |
| Full-time | \$ 29,106 | \$ 34,444 |
| Full-time including University services fee | \$ 29,796 | \$ 35,134 |
| Part-time - per credit hour ** | \$ 791 | \$ 996 |
|  |  |  |
| All Pharmacy Graduate (including M.S. in Quality Assurance) |  |  |
| Per Credit Hour ** | \$ 1,001 | \$ 1,267 |
|  |  |  |
| School of Podiatric Medicine |  |  |
| Full-time | \$ 34,528 | \$ 36,074 |
| Full-time including University services fee | \$ 35,218 | \$ 36,764 |
|  |  |  |
| School of Medicine |  |  |
| Full-time | \$ 43,654 | \$ 53,468 |
| Full-time including University services fee | \$ 44,344 | \$ 54,158 |
| Graduate (per credit hour) ** | \$ 625 | \$ 912 |
|  |  |  |
| Saint Luke's Regional Campus |  |  |
| Full-time | \$ 43,654 | \$ 53,468 |
| Full-time including University services fee | \$ 44,344 | \$ 54,158 |


|  |  |  |
| :--- | :--- | :--- |
|  |  |  |
| *Upper division is defined as undergraduate students with a minimum of 60 |  |  |
| earned credits, regardless of how obtained. |  |  |
| ** See below for the credit hour assessment of the University Services Fee |  |  |

## University-Wide Fees

To see a copy of the latest fee schedule, click here:
www.temple.edu/bursar/about/tuitionrates.htm.
Please note that Tuition and Fees are subject to change by action of the university's Board of Trustees.

## Description of Special Charges and Fees

Students may be required to pay some or all of the following (subject to change):

## Application Fee

$\$ 50.00$ for online or paper application for admission, $\$ 20.00$ for students applying for readmission.

## Matriculation Fee

A one-time charge is assessed of all first-year students who are degree-seeking candidates in their initial semester after admittance. This fee includes the student orientation program. The rate for undergraduate students is $\$ 160.00$ and the rate for graduate students is $\$ 55.00$. Professional students should check with their respective college as the rates vary per school.

## University Services Fee

The University Services Fee is a single, comprehensive fee that helps fund a number of university services, including:

- Funding for state-of-the art computer equipment and technologies to provide support for the students' academic experiences, including e-mail access and modern lab facilities;
- Access to all student activities, events and recreational facilities;
- Expansion and maintenance of recreational and academic facilities to enhance and improve student life;
- Availability of basic student health and treatment services provided by nurses and physicians on campus.

All students are required to pay the University Services Fee. The fee structure for the fall and spring semesters is:

- Enrolled for 9 or more credits - $\$ 345.00$
- Enrolled for 5 to 8 credits - $\$ 249.00$
- Enrolled for 1 to 4 credits - $\$ 122.00$

The structure for each summer semester is:

- Enrolled for 9 or more credits - $\$ 173.00$
- Enrolled for 5 to 8 credits - $\$ 132.00$
- Enrolled for 1 to 4 credits - $\$ 77.00$

Please direct all questions about the University Services Fee to the Office of Student Financial Services at 215-204-2244 or sfs@temple.edu.

## Course Fees

Certain courses charge additional fees such as lab fees, etc. The charge is assessed at the time of registration for that particular course.

## Late Registration Fee Policy

All students will be assessed a $\$ 100.00$ late registration fee for initial registrations beginning the first day of the term. No new registrations or registration revisions will be processed after the end of the twelfth week of classes during the fall and spring semesters and after the end of the fourth week of summer sessions.

## Late Payment Fee

Tuition payments not received by the final semester due date will be subject to a $\$ 60.00$ late payment fee. Students who fail to pay their initial semester bills by the due date will automatically be enrolled in the University's Deferred Payment Plan and assessed the appropriate payment plan fees as noted above in the "Payment Plans" section.

## Returned Check Penalty

If a paper or electronic check payment is returned by the bank because of insufficient funds, a closed account, an invalid account number or other reasons, a $\$ 25.00$ returned check fee will be assessed. If an account indicates a history of returned checks, the University reserves the right to suspend a student's check payment privileges. Returned checks that remain unpaid and/or cases where there are multiple returned checks may be referred to the University Disciplinary Committee and/or Temple University Campus Safety Services for further action.

## Transcript Fee

The cost per transcript is $\$ 8.25$ ( $\$ 6.00$ transcript fee plus $\$ 2.25$ National Student Clearinghouse processing fee). Consult the Office of the University Registrar's web site for ordering instructions.

## Health Insurance

Group medical insurance to defray certain medical expenses at hospitals is offered to full-time students during a limited period of time at the start of each semester. Students should consult the Human Resources Benefits Department's web site (www.temple.edu/hr/students/index.html) or call Velda Fletcher-Jones at 215-926-2270 for details concerning costs and application procedures. International students are required to buy medical insurance or show proof of comparable coverage to the Human Resources Benefits Department.

## Tuition and Fees Policy

## I. Policy

A. Tuition charges and fees are based upon the student's enrollment status in the respective schools or colleges. Refunds are made in accordance with the student's academic records.
B. Students will be charged $100 \%$ of their semester bill unless a course drop form is processed by a registration office of the university or the student successfully drops courses through Self Service Banner by the Drop/Add deadline date. See www.temple.edu/registrar/documents/calendars/ for add/drop and withdrawal deadlines for each semester and summer session, typically at the end of the second week of the semester. Students who process their course drops by the deadline date will be issued a $100 \%$ refund.
C. No complete financial credit will be made if a student does not process course drops for all registered classes.
D. Students who are still registered for classes after the Drop/Add deadline date are responsible for paying all related tuition and fees.

## II. Exceptions

A. Failure to Process Withdrawal Form by Deadline

Under extreme, extenuating circumstances, an appeal may be made to the Office of the University Registrar and the Tuition Review Committee if the drop transaction is not completed by the deadline, and the student did not attend classes after the deadline date. All appeals must be accompanied by the following information:

1. A letter explaining the extenuating circumstances of the appeal.
2. A properly-signed schedule revision or official withdrawal form available from the Dean's Office.
3. Supporting documentation that will establish that the student never attended the semester in question or that he/she did not attend beyond the official refund period.
4. Appeals for retroactive course deletions must be filed within one (1) year from the end date of the semester for refunds to be considered. If the above conditions are met, the Office of the University Registrar will direct the removal of the semester's records from
the academic history. This automatically results in a $100 \%$ refund of tuition and fee charges for the semester.
B. Death of a Student

In the event of death during a semester, the student's account will be credited with a $100 \%$ refund of tuition and fee charges for the semester.
C. Serious Illness Which Prevents a Student from Attending All Classes

In the event of a serious personal or family member's illness, the following steps can be taken:

1. The student should provide the Department of Student Financial Services with:
a. A letter from the student listing the reason(s) for their refund request (i.e., personal or family illness, etc.).
b. Certification from a licensed physician verifying that the student or family member was ill. In the case of the student's illness, the certification should indicate that the illness prevented the student from attending all classes, and
c. Letter(s) from the student's instructor(s) or department chairperson(s) that, based on the actual or anticipated length of the student's leave, the course work cannot be completed within the current term and the last day of attendance.
d. The student must withdraw from all registered courses. NOTE: For purposes of this policy, a family member is defined as the student's parents, spouse, child(ren), or any other family member noted under the federal Family Leave Act.
2. When the above criteria in C. 1 are met, the student's bill will reflect an adjusted tuition charge in accordance with the attached schedule. A credit will be issued on a pro-rated basis after:
a. Confirming that the student has no other outstanding balances, and
b. Having the Department of Student Financial Services adjust any financial aid awards, where applicable, in accordance with state and federal regulations. NOTE: Student refunds will be issued as a credit towards tuition and fees for future registrations up to one (1) year after the end of the semester in which the withdrawal took place. Unused credits will be forfeited after that time.
3. The effective date for all medical credits will be based on the earlier of either:
a. The official date of withdrawal, as established by the Tuition Review Committee and the Office of the University Registrar, or
b. The physician's date of certification, if the student is physically unable to complete a withdrawal by the end of the semester.
4. Refunds or credits resulting from the death or serious illness of the student will not require the deletion of courses from the student's academic records. The student's record will reflect excused withdrawals ('WE').
D. Employment Change/Relocation
5. If a student must withdraw from classes because of a job change or shift in work hours that prevents the student from attending classes, the student may request a pro-rata credit, based on
the actual withdrawal date and in accordance with the Fee Schedule of Adjusted Tuition Charges, if documentation from the employer is provided showing that the individual is no longer able to take classes because of a change in job scheduling or relocation.
6. This provision applies solely for the student and only after the student has totally withdrawn from all registered courses.

## III. Authority

A. The Office of the University Registrar will have authority for determining the student's academic records.
B. The Director of Student Financial Services will have authority for approving financial exceptions to the policy.
C. Appeals of any decision outlined under this policy will be made to the University's Tuition Review Committee, whose decision is final.

Tuition and Fees Refund Policy

| Fee Schedule of Adjusted Tuition Charges in the Event of an Exception to the General Policy |  |
| :--- | :---: |
|  |  |
| Date of Official Withdrawal | Adjusted Tuition <br> Charges You Pay |
| Fall and Spring Semesters |  |
| 1st through 7th calendar day after the end of the Drop/Add deadline date | $30 \%$ |
| 8th through 14th calendar day after the end of the Drop/Add deadline date | $40 \%$ |
| 15th through 21st calendar day after the end of the Drop/Add deadline date | $50 \%$ |
| 22nd through 28th calendar day after the end of the Drop/Add deadline date | $60 \%$ |
| 29th through 35th calendar day after the end of the Drop/Add deadline date | $70 \%$ |
| 36th through 42nd calendar day after the end of the Drop/Add deadline date | $80 \%$ |
| 43rd through 49th calendar day after the end of the Drop/Add deadline date | $90 \%$ |
| Thereafter | $100 \%$ |
|  |  |
| Date of Official Withdrawal | Adjusted Tuition |
| Charges You Pay |  |
| 1st through 3rd calendar day after the end of the Drop/Add deadline date | $30 \%$ |
| 4th through 7th calendar day after the end of the Drop/Add deadline date | $40 \%$ |
| 8th through 10th calendar day after the end of the Drop/Add deadline date | $50 \%$ |
| 11th through 14th calendar day after the end of the Drop/Add deadline date | $60 \%$ |
| 15th through 17th calendar day after the end of the Drop/Add deadline date | $70 \%$ |
| 18th through 21st calendar day after the end of the Drop/Add deadline date | $80 \%$ |
| 22nd through 24th calendar day after the end of the Drop/Add deadline date | $90 \%$ |
| Thereafter | $100 \%$ |

# Student Financial Aid 

Student Financial Services<br>Craig Fennell, Director, Student Services<br>Conwell Hall, Ground Floor<br>215-204-8760<br>http://sfs.temple.edu/<br>sfs@temple.edu

## Application Procedures

## Documents Needed to Apply

The only document required is the Free Application for Federal Student Aid (FAFSA). A FAFSA must be filed each year a student expects to receive financial aid. Applications are available at all Student Financial Services (SFS) locations and also may be filed online at www.fafsa.ed.gov/. The federal code for Temple University, Main Campus is 003371. Locations and phone numbers for Temple University's SFS offices are listed at http://sfs.temple.edu/.

## Application Deadline

## March 1st

Priority consideration is given to new and renewal applications received by the federal processor by this date. Late applicants will be considered, but all funding sources may not be available.

## Verification

Federal regulations require that the Office of Student Financial Services reviews all student financial aid applications (FAFSA information) to make sure it is accurate. The Office of Student Financial Services is required to resolve any conflicting information, inconsistencies or errors made on FAFSA applications to ensure the integrity of federal student financial aid programs. You may be selected for verification if:

- Your Social Security number, veteran status, or citizenship status reported on the FAFSA does not match the federal government's data.
- You completed the FAFSA using estimated income information or income information is inconsistent (i.e., your reported adjusted gross income is less than taxes paid). You may be asked to supply copies of federal tax returns.

Temple University operates as a Quality Assurance School in association with the U.S. Department of Education. As a result, please do not submit verification documents unless the University's Office of Student Financial Services contacts you.

If verification documents are requested, you will be required to submit all of them within thirty days. If all documents are not received by the deadline, all federal and university need-based aid will be removed from the award.

Your financial package will be outlined in an award letter mailed to your home (freshman and transfer students only). Continuing students will receive an e-mail notification to view the award letter online on the Financial Aid Channel located on Temple's TUportal.

## International Students

The Office of International Services, 215-204-7229, offers limited financial assistance to persons holding non-immigrant visas. Federal regulations limit most financial aid to U.S. citizens or eligible non-citizens
(http://studentaid.ed.gov/PORTALSWebApp/students/english/Glossary.jsp).
Please contact the Office of International Student and Scholars Services for more information (www.temple.edu/isss/).

## Academic Requirements

Applicants for Federal, State, and University financial aid programs administered by Temple University must be accepted for admission or currently enrolled as a matriculated student in a degree program.

A student may apply for a Direct Subsidized/Unsubsidized Loan (or a parent may apply for a PLUS Loan on behalf of a dependent student for coursework that is documented as a prerequisite for admission into a degree-seeking program. If enrolled at least half time in these prerequisite courses, the student is eligible for loans for one consecutive 12 month period.

## Satisfactory Academic Progress

Financial aid funds are restricted to students who make satisfactory academic progress. The qualitative standard is defined as being in good academic standing as defined by the school or college in which the student is enrolled. The quantitative component of the satisfactory academic progress standard requires students to successfully complete $67 \%$ of all attempted credits. For more information, see http://sfs.temple.edu/apply/eligibility-determination/academic-progressstandards.

## Enrollment Status

Some financial aid programs are restricted to full-time students. Other aid programs are available to both full-time and part-time students. (NOTE: High school students accepted under the Early Admissions Program are not eligible for financial aid until they receive their high school diploma.)

Students should be aware that dropping and adding courses can affect financial aid eligibility, and they must notify the Office of Student Financial Services of any change in enrollment status.

## Academic Dismissal/Reinstatement

Eligibility for financial aid, including federal work-study, ends if a student is academically dismissed or ceases to be enrolled.

## Financial Aid Eligibility -- Need Analysis

Financial aid is offered to students based on financial need. Need is determined by the following formula:
(Estimated cost of attendance) minus (Expected Family Contribution*) minus (Expected Financial Aid) equals Need
*The Expected Family Contribution (EFC) is determined by a federal formula based on information reported on the student's FAFSA application. The EFC is the number that's used to determine a student's eligibility for federal student financial aid. This number results from the financial information a student and/or parent provided in the FAFSA application. The student's EFC is reported to the student on the Student Aid Report (SAR).

The result of a need determination is met by a combination of awards called a financial aid package.

Other sources exist that may be available to students for educational assistance. Some of these are private scholarship programs, Cooperative Education programs, Veterans Administration benefits, public assistance, and Social Security benefits. If outside assistance is received, financial aid awarded by the university may be adjusted.

## Independent Student Definition

2013-14 Financial Aid Applicants: Federal regulations define an independent student if he/she meets one of the following criteria:

1. You were born before January 1, 1990.
2. You will be enrolled in a master's or doctoral program for the 2013-14 academic year.
3. You are married.
4. You have children and/or dependents who receive more than half of their support from you.
5. You are a ward of the court, or both your parents are deceased.
6. You are currently serving on active duty in the U.S. Armed Forces, or you are a veteran of the U.S. Armed Forces.

Federal regulations require that a student not meeting the definition of independent apply as a dependent. These students must provide income, asset, and household information for themselves and their parent(s), (including stepparent[s]).

## Educational Budget

Financing a college education takes planning and budgeting. Students should try to plan ahead, anticipating costs and resources, and should request aid for the entire academic year. The basic budget for a year at Temple should include tuition and fees, books and supplies, living expenses, and transportation. Tuition shown in the following example is for undergraduates attending Main Campus. Financial aid awards will be adjusted accordingly for programs having different tuition rates. The figures in the table are based on estimates from the U.S. Bureau of Labor Statistics. The economy and one's style of living may make actual costs higher or lower.

| Sample Budgets for 2013-2014 Academic Year |  |  |
| :--- | :--- | :--- |
|  | In-state | Out-of-state |
| Tuition and Fees | $\$ 14,340$ | $\$ 24,710$ |
| Room and Board | $\$ 11,410$ | $\$ 11,410$ |
| Books/Supplies (Estimated) | $\$ 1,000$ | $\$ 1,000$ |
| Living Expenses/Transportation/Personal/Miscellaneous (Estimated) | $\$ 4,240$ | $\$ 5,210$ |
| Totals | $\$ 30,990$ | $\$ 42,330$ |
|  |  |  |
| NOTE: Actual rates may vary depending on college, school, program, housing location and meal |  |  |
| plan selected. Tuition rate is an estimate at time of publishing. |  |  |

## Financial Aid Notification and Refund Policy

Applicants are notified of aid eligibility by letter or electronic letter after applications have been reviewed. Financial aid may consist of a combination of grant, loan, and/or work assistance.

Recipients receiving aid in excess of institution charges will receive a refund. Checks are issued according to the university's established schedule, starting just prior to the first week of classes each semester. Students are encouraged to sign up for direct deposit to expedite the receipt of refund payment. This can be done online via the TUportal.

## Student Employment

## Academic Year

The Federal Work Study (FWS) program at Temple promotes part-time employment of college students with demonstrated financial need. FWS is awarded as part of the student's financial aid package, but the award is not credited to the student's tuition account.

Employment may be within the university or at other public and private non-profit organizations. All university work-study job openings are posted on StudentJobs@Temple. Students can reach StudentJobs@Temple via the TUPortal.

FWS jobs which are available from Off Campus employers are listed on the Work Study Job Bank of the Student Financial Services (SFS) web site at http://sfs.temple.edu/.

## Summer Sessions

Summer Federal Work-Study Program awards need-based funds to full-time students currently enrolled in degree or certificate programs who have a current FAFSA on file. Summer positions are posted in the same manner as the regular academic year. University employers list openings on StudentJobs@temple.edu. Off campus openings are posted on the "Work Study Job Bank" link on the SFS web site: http://sfs.temple.edu/. You must arrange your own employment. You must complete a separate Temple Summer Financial Aid application. Summer Financial Aid applications are available by selecting the "Forms" link from the SFS home page.

## Grants, Scholarships and Loans

The following grants and scholarships have individual eligibility requirements and procedures. Be sure to read the requirements for each carefully.

## Temple University Grants

Temple University Grants are institutional funds available to students as a way of supplementing other aid sources. These funds are awarded based on need, as determined by the Free Application for Federal Student Aid (FAFSA), with priority given to applicants whose FAFSA is received by the federal processor by March 1.

## Temple University Scholarships

Entering freshmen with excellent high school grades and test scores are offered four-year academic merit scholarships. The award is made by the Office of Undergraduate Admissions at the time of acceptance based on the admission application.

New transfer students with strong grades earned at their transfer institutions are offered threeyear academic merit scholarships. The award is made by the Office of Undergraduate Admissions at the time of acceptance based on the admission application.

Additional details are provided on the Undergraduate Admissions web site at http://admissions.temple.edu/cost-and-aid.

## Athletic Scholarships

Athletic scholarships are available in all varsity sports. The number of scholarships, requirements, standards, and awards are controlled by Temple University and by the National Collegiate Athletic Association (NCAA). For further information, contact the Department of Intercollegiate Athletics, 215-204-2571.

## ROTC Scholarships and Grants

See Military Science under the Academic Opportunities section of the Bulletin.

## State and Federal Grant Programs

To be eligible for the following grants, students must complete the Free Application for Federal Student Aid (FAFSA).

## Pennsylvania State Grant (PHEAA)

The Commonwealth of Pennsylvania funds a grant program for undergraduate Pennsylvania residents who will be matriculated students enrolled full-time (12 or more credit hours per semester) and part-time ( $6-11$ credits) during the academic year. This program is administered by the Pennsylvania Higher Education Assistance Agency (PHEAA). Please see more information at www.pheaa.org/funding-opportunities/state-grant-program/index.shtml.

Non-Pennsylvania residents should check with their respective state agency for state grant information. The U.S. Department of Education provides a full list of higher education agencies by state at the Education Resource Organizations Directory web site at http://wdcrobcolp01.ed.gov/Programs/EROD/org_list_by_territory.cfm.

Students residing in states other than Pennsylvania can contact their state education department directly to inquire about scholarship and grant opportunities. A directory of state educational grant agencies can also be found online through the U.S. Department of Education's Education Resource Organizations Directory.

Not all state grant programs are transferable if a student is attending a school outside of their home state.

## Federal Pell Grants

To be eligible for a Pell Grant, one must be a matriculated student enrolled in an undergraduate degree program who has not earned a bachelor's or professional degree. Notification of awards will be made in the student's award letter.

## Federal Supplemental Educational Opportunity Grant (FSEOG)

FSEOG is a federal grant program administered by the university. Awards are based on exceptional need and availability of funds.

## Student Loans

## Federal Perkins Loans

Perkins Loans are made by the university from funds provided by the Federal government. These loans are included as part of the financial aid package. The amount of the loan is based on the student's need and availability of funds.

## Federal Direct Student Loans

Direct Loans are available to undergraduate students enrolled for at least six (6) credits per semester.

Annual Subsidized Limits

- 1st Year Undergraduates $=\$ 3,500$
- 2nd Year Undergraduates $=\$ 4,500$
- Remaining Undergraduate Years = \$5,500
- Preparatory Coursework Needed to Enroll as Undergraduate = $\mathbf{\$ 2 , 6 2 5}$

Annual Unsubsidized Limits

- Dependent undergraduates whose parents can borrow PLUS $=\$ 2,000$
- 1st and 2nd year undergraduate dependent students whose parents cannot borrow PLUS and independent students $=\$ 6,000$
- Remaining undergraduate years for dependent students whose parents cannot borrow PLUS and independent students $=\$ 7,000$


## Direct Parent Loans for Undergraduate Students (PLUS)

PLUS loans are available to the parents of undergraduate students. A credit check is required for eligibility for the Parent PLUS loan. Parents may borrow amounts not to exceed the cost of attendance.

## Nursing Student Loans (NSL)

NSL are made by the university from funds provided by the federal government. These loans are included as part of the financial aid package. The amount of the loan is based on the student's need and availability of funds. Students may borrow up to $\$ 2,500$ per academic year.

## Pharmacy Health Profession Loans

Pharmacy Health Profession Loans are made by the university based on demonstrated financial need. Funds are provided by the federal government. Pharmacy students may borrow a maximum of $\$ 2,500$ plus the cost of tuition.

## Alternative Educational Loans

Student loans are available from private lenders. The majority of the lenders of these loans require the student borrower to have a credit worthy cosigner, and the interest rate is variable and determined by the credit score of the borrower and cosigner. These loans also require school certification, and the student must be enrolled at least half time and making satisfactory academic progress. Consult with the lender for specific eligibility requirements.

## Entrance/Exit Interviews

Federal law requires that every student borrowing from the programs listed above complete entrance counseling online at www.studentloans.gov for first time borrowers at Temple University. An exit interview will be required just prior to graduation or if a student attends less than half time or takes a leave of absence.

Direct loan funds will not be released without the entrance counseling requirement. Any student withdrawing from the university before graduation must complete an exit interview.

More information is available on the Bursar's Office web site at http://bursar.temple.edu/loan-services/loan-counseling.

## Other Programs

A number of Temple's schools and colleges have privately-sponsored scholarships available for students in their programs. Details may be found in the individual school or college descriptions.

In addition to the scholarships available through Temple University, a wide range of scholarships, fellowships, and internships are available on a competitive basis to students during and immediately after their undergraduate careers. The Office of the Senior Vice Provost for Undergraduate Studies provides information about these opportunities and support for students interested in preparing applications. For more information, go to www.temple.edu/vpus/opportunities/index.htm\#scholarships.

## Student Responsibilities

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

## Academic Honesty

Temple University believes strongly in academic honesty and integrity. Plagiarism and academic cheating are, therefore, prohibited. Essential to intellectual growth is the development of independent thought and a respect for the thoughts of others. The prohibition against plagiarism and cheating is intended to foster this independence and respect.

Plagiarism is the unacknowledged use of another person's labor, another person's ideas, another person's words, another person's assistance. Normally, all work done for courses -- papers, examinations, homework exercises, laboratory reports, oral presentations -- is expected to be the individual effort of the student presenting the work. Any assistance must be reported to the instructor. If the work has entailed consulting other resources -- journals, books, or other media -- these resources must be cited in a manner appropriate to the course. It is the instructor's responsibility to indicate the appropriate manner of citation. Everything used from other sources -- suggestions for organization of ideas, ideas themselves, or actual language -- must be cited. Failure to cite borrowed material constitutes plagiarism. Undocumented use of materials from the World Wide Web is plagiarism.

Academic cheating is, generally, the thwarting or breaking of the general rules of academic work or the specific rules of the individual courses. It includes falsifying data; submitting, without the instructor's approval, work in one course which was done for another; helping others to plagiarize or cheat from one's own or another's work; or actually doing the work of another person.

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

Students who believe that they have been unfairly accused may appeal through the school or college's academic grievance procedure. See Grievances under Student Rights in this section.

## Attendance

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

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

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

## Clearing Holds

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

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

## Code of Conduct

The Temple University Student Code of Conduct can be viewed at http://policies.temple.edu/getdoc.asp?policy_no=03.70.12. Printed copies are available at the Office of the Dean of Students.

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

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

## Financial Obligation to the University

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

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

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

For current tuition rates and fees, see Tuition and Fees in this Bulletin and the Bursar's Office web site at http://bursar.temple.edu/. For information and instructions concerning the electronic bill, online tuition payments and answers to frequently asked billing questions, please visit the Bursar's web site.

For information about Financial Aid, Financial Aid requirements for satisfactory academic progress, and the impact of registration changes on your eligibility for aid, see Student Financial Aid in this Bulletin and the Student Financial Services web site at http://sfs.temple.edu/.

For information on campus housing and meal plans, see Student Support and Services in this Bulletin, and the Office of University Housing and Residential Life web site at www.temple.edu/studentaffairs/housing/.

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

## Health and Safety Issues

## Alcohol Policy

In accordance with Pennsylvania law, no individual under the age of 21 may possess or consume alcohol on university property. Student organizations may not serve alcohol at campus events. The use of alcohol in the residence halls and university-owned housing is covered in the Proprietary Policies developed by the Office of University Housing and in the Student Code of Conduct. Please also see the university's Student Drug and Alcohol Policy (http://policies.temple.edu/getdoc.asp?policy_no=03.70.01), Student Code of Conduct (http://policies.temple.edu/getdoc.asp?policy_no=03.70.12) and the Rights, Responsibilities and Resource Guide (www.temple.edu/studentaffairs/housing/).

## Drug Policy

The unlawful manufacture, distribution, dispensation, possession or use of controlled substances in any facility or work site of Temple University is strictly prohibited. Please see the university’s Student Drug and Alcohol Policy (http://policies.temple.edu/getdoc.asp?policy_no=03.70.01).

## Immunizations

Under Pennsylvania state law, all students living in university-owned or -operated housing are required to submit proof of a one-time meningococcal vaccination, or submit a signed waiver. In addition, entering students are strongly advised to submit to Student Health Services proof of two measles immunizations (usually given as MMR), or serologic proof of measles immunity. Other immunizations that are routinely recommended for college students are rubella, mumps, diphtheria-tetanus, varicella (chickenpox) for those who have not had the disease, and Hepatitis B. Some students may also need Hepatitis A, IPV (polio booster), pneumococcal, or influenza vaccines; check with your doctor.

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

## Medical Fees and Insurance

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

## International Students

Temple University requires all new and continuing international students in Nonimmigrant Student (both F-1 and J-1) status to carry health insurance that meets certain minimum standards determined by the United States Department of State. For detailed information, please see www.temple.edu/hr/students/healthinsurance/international.htm.

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

Eligibility for employment for individuals in Nonimmigrant Student (F-1 and J-1) status is based on regulations of the USCIS and the DOS. For detailed information, please see www.temple.edu/isss/employment/index.html.

Major medical health insurance is required for all international students in Nonimmigrant Student (F-1 and J-1) status. International students are required to submit to the university's Benefits Office evidence of coverage by a health insurance policy that meets the minimum coverage required by Temple University (consistent with standards established by the United States Department of State): maximum deductible of $\$ 500$ per accident or illness; payment of at least $75 \%$ of covered medical expenses; maximum benefit of $\$ 50,000$ per accident or illness; repatriation benefits of no less than $\$ 7,500$; and medical evacuation benefits of no less than $\$ 10,000$. Students may also purchase such health insurance upon arrival at Temple University. For further information, please contact the university's Benefits Office at 215-9262270 or e-mail StudentInsurance@temple.edu. For detailed information please see www.temple.edu/hr/students/index.html.

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

A mandatory orientation session is held for new international students at the beginning of each academic term. For more information, please see the International Student and Scholar Services web site at www.temple.edu/isss/future-students/orientation-international.html and the Office of Orientation web site at www.temple.edu/studentaffairs/orientation/.

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

## Registration

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

## Temple E-mail Accounts

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

## Student Rights

## Academic Rights and Responsibilities

Temple University students who believe that instructors are introducing extraneous material into class discussions or that their grades are being affected by their opinions or views that are unrelated to a course's subject matter can file a complaint under the university's policy on academic rights and responsibilities. The full policy can be found at http://policies.temple.edu/getdoc.asp?policy_no=03.70.02.

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

## Course Syllabus

Instructors are required to supply a detailed syllabus explaining course rules and expectations for courses in which you are enrolled. The content requirements for course syllabi are enumerated on the Temple Policies \& Procedures web site at http://policies.temple.edu/getdoc.asp?policy_no=02.78.13.

## Student Feedback Form (SFF)

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

## FERPA/Privacy Guidelines

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

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

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

The procedures for exercising the above rights are explained in "Temple University's Policy Regarding Confidentiality of Student Records," copies of which are available in the Office of the Dean of Students and on Temple's web site at http://policies.temple.edu/ferpa. Included in this policy is a description of the types and locations of educational records maintained by the university.

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

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

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

## Americans with Disabilities Act (ADA)

Under the Americans with Disabilities Act (ADA), Section 504 of The Rehabilitation Act of 1973, and Section 508 of the Rehabilitation Act of 1998, Temple University strives to make programs, activities and services accessible for persons with disabilities. Disability Resources and Services (DRS) is the department that facilitates access for students with disabilities at the university. Please see the Student Services section of the Bulletin for information on Disability Resources and Services.

## Protection from Discrimination and Harassment

Office of Equal Opportunity Compliance

Sandra A. Foehl, Director and Title IX Coordinator
sandra.foehl@temple.edu
215-204-6772

Tracey Hamilton, Assistant Director
tracey.hamilton@temple.edu
215-204-7438

Sullivan Hall, 2nd Floor Mezzanine
Fax: 215-204-8897
www.temple.edu/eoc
Equal Opportunity: Temple University is committed to a policy of equal opportunity for all in every aspect of its operations. The university has pledged not to discriminate on the basis of age, color, disability, marital status, national or ethnic origin, race, religion, sex (including pregnancy), sexual orientation and gender identity, veteran status and genetic information.

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

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

Discrimination: A student or employee who thinks he or she is being discriminated against or harassed because of age, color, disability, marital status, national or ethnic origin, race, religion, sex (including pregnancy), sexual orientation and gender identity, veteran status or genetic information should contact the Office of Equal Opportunity Compliance. It is this office's responsibility to help the student file a complaint through the appropriate grievance procedures and investigate complaints of discrimination and harassment.

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

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

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

Complaint Resolution Procedures: Persons who feel they have been victims of discrimination or harassment may make an informal complaint to any Equal Opportunity (EO) Ombudsperson or to the Office of Equal Opportunity Compliance. For a list of the names of the EO Ombudspersons designated in a specific school or college, contact the Dean's Office or access the online version, which includes photographs of the current EO Ombudspersons: www.temple.edu/eoc/AppDev/ombuds.asp.

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

Procedures for reporting a complaint of sexual assault are set out in the university policy Preventing and Addressing Sexual Assault. This policy and university policies on preventing and addressing discrimination and harassment and sexual harassment can be reviewed at the Equal Opportunity Compliance web site, www.temple.edu/eoc.

## Grievances

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

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

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

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

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

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

## Instructor Office Hours

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

## Non-Smoking Policy

Temple University is committed to providing a smoke-free environment for everyone at Temple. All university facilities are designated as non-smoking. In addition, all indoor Temple University-sponsored activities that take place in facilities not owned or operated by Temple University are smoke-free in those areas under Temple's control. This policy will be enforced according to established university policies and procedures. (Temple Policy 04.62.11)

## Student Services Office Hours

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

## Academic Policies

These academic policies and regulations generally apply to all undergraduate students and provide a framework within which schools and colleges may specify further conditions or variations appropriate to students in their courses or programs. Statements of academic policies
and regulations apply to both degree-seeking and non-degree-seeking students unless explicitly noted otherwise.

The policies and regulations as stated in the Bulletin are announcements only and in no way serve as a contract between the student and Temple University.

The texts of some of these policies are available on the Temple Policies \& Procedures web site at http://policies.temple.edu/.

Students should consult their advisors and dean's offices for any changes in policy that affect them.

## Academic Course Load

The average semester load for full-time students is 15 to 17 semester (or credit) hours. Students must carry at least 12 semester hours to be classified as full time.

Academic overloads during fall and spring semesters (18 or more semester hours for students in the College of Liberal Arts and the College of Science and Technology; 19 or more semester hours in all other schools and colleges) need special approval of the dean or dean's designee of the school or college in which a student is matriculated. Tuition for full-time students covers 12 to 17 hours. Credits over 17 carry additional tuition charges. See Tuition and Fees in the Financial Information section of the Bulletin.

Summer sessions: Undergraduates must get overload approval for 9 credits or more.

## Academic Credit

A credit hour is a measure of the amount of work represented in intended learning outcomes and verified by evidence of student achievement. A credit hour is an institutionally established equivalency that reasonably approximates: (1) not less than one hour of classroom instruction or direct faculty instruction and a minimum of two hours of out of class student work each week for approximately fifteen weeks for one semester of credit or the equivalent amount of work over a different amount of time; or (2) at least an equivalent amount of work for other academic activities such as laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours.

Academic credit may be earned through traditional coursework at Temple University, courses approved for transfer from other institutions, Advanced Placement Tests, International Baccalaureate Exams, the College Level Examination Program (CLEP), DANTES Subject Standardized Tests (DSST), military experience, cooperative work experience, and prior work or life experience. See the Admissions section of the Bulletin and the policy on Credit for Prior Learning (formerly Non-Traditional Credit).

Courses evaluated for transfer from colleges and universities with different credit systems (quarter hours, units) are converted to semester hours (i.e., 2 quarter hour credits are equivalent
to 1.5 semester hour credits; 3 quarter hour credits are equivalent to 2.0 semester hour credits; 4 quarter hour credits are equivalent to 2.5 semester hour credits).

See also Undergraduate Credit for Graduate Level Courses.

## Academic Forgiveness (Undergraduate)

## Scope of Policy \& Rationale

Former undergraduate, baccalaureate degree-seeking students who have not taken any coursework at Temple University for a minimum of four consecutive years are eligible for Academic Forgiveness (policy \# 02.10.17). [Students electing Academic Forgiveness must choose the option before the end of the drop/add period of their first semester following their absence.]

## Definitions

1. Re-enrolled - Students are re-enrolled when they are approved to return to the university after leaving of their own accord.
2. Reinstated - Students are reinstated when they are approved to return to the university following dismissal.
3. Academic Forgiveness - Academic Forgiveness is a status that enables students to return to the university with a renewed cumulative grade point average (GPA).
4. Four Consecutive Years - A total of eight consecutive fall and spring semesters.

## Policy Statement

Undergraduate, baccalaureate degree-seeking students who re-enroll or are reinstated following a four-year consecutive absence from the university may petition to have their cumulative GPA recalculated from the time of re-enrollment/reinstatement to the university.

Upon successful petition:

- Cumulative GPA will be reset to 0.00 .
- All prior courses and grades will remain on the student's academic record and transcript.
- The notation of "Academic Forgiveness" will be recorded on the student's transcript.
- Courses previously earned at Temple University with grades of D+, D, D-, F and NC will not be used for credit. Credit will be considered for courses with grades of $\mathrm{A}, \mathrm{A}-\mathrm{B}+, \mathrm{B}, \mathrm{B}-, \mathrm{C}+, \mathrm{C}, \mathrm{C}-$ and $C R$. The student's department has final approval of credits that will count towards graduation. Schools/Colleges may disallow credits towards graduation for some older courses.

Re-enrolled or reinstated students electing the forgiveness option may repeat a course one additional time if they previously exhausted their repeat options for that course under the policy on Repeating a Course (policy \# 02.10.12).

Once enacted, the reset GPA cannot be reversed.
Students are afforded one opportunity for Academic Forgiveness.

## Notes

## 1. Dates of official enactment and amendments

Adopted by the president on February 8, 2011. Effective August 30, 2011 (Fall 2011).

## 2. History

Supersedes previous policies concerning Withdrawal; Repeat; and Academic Warning, Probation and Dismissal with effective dates prior to May 16, 2011.

## 3. Cross References

Policy \# 02.10.12, Repeating a Course (Undergraduate)
Policy \# 02.10.14, Withdrawal from Classes (Undergraduate and Graduate)
Policy \# 02.10.11, Academic Standing (Undergraduate)
[Note: Academic Forgiveness students wishing to qualify for Latin honors at Graduation must complete a minimum of 60 earned credit hours at Temple following their reinstatement (i.e., excluding their earned credit hours allowed at the time of academic forgiveness)]

## Academic Residency Requirements

Temple University requires that all undergraduate degree candidates complete 30 hours of the last 45 hours of the degree or program as matriculated students at Temple University. If a matriculated student previously took Temple courses on a non-matriculated basis, those courses are counted towards this requirement. See the policy on Transfer Credits.

To graduate with Latin Honors, a student must complete at least 60 semester hours of the program matriculated at Temple. See Honors.

Students should consult their school or college for additional academic residency requirements.

## Academic Rights and Responsibilities

See Academic Rights and Responsibilities in the Student Rights section of the Bulletin.

## Academic Standing (Undergraduate)

Scope of Policy \& Rationale

Undergraduate baccalaureate and associate degree-seeking students are subject to the academic standing rules addressed in this policy ${ }^{1}$ (Policy \# 02.10.11).

## Definitions

1. Academic Good Standing - A student is in Academic Good Standing if enrolled in an associate or baccalaureate degree-seeking program.
2. Academic Warning - The status of Academic Warning is applied when:
a) the most recent semester grade point average is less than a 2.0 or
b) the cumulative grade point average is below 2.0 prior to having earned 30 credit hours (or 20 credit hours for an associate-degree program) or c) the student is an admitted transfer student in the first matriculated semester and is registered for 18 or fewer credits and whose semester grade point average is less than 2.0.
3. Academic Probation - The status of Academic Probation is applied to a student whose cumulative grade point average is below 2.0 after having accumulated 30 or more credit hours (or 20 or more credit hours for an associate degree program). However, transfer students in the first matriculated semester are subject to Academic Warning as specified in 2.c.
4. Academic Dismissal - A dismissed student is not in Academic Good Standing.

The status of Academic Dismissal is applied to a student who:
a) accumulates more than 30 credit hours (or more than 20 credit hours for an associate degree program); and
b) has had the status of Academic Probation in the most recent semester; and
c) has a GPA below the allowable limit (See Appendix 1: Dismissal GPA by Total Institutional GPA Hours + Total Transfer Earned Hours).

Independently from a, b, and c above, the status of Academic Dismissal is applied to a student who:
d) has not successfully completed the following university requirements or equivalents (including Honors, English as a Second Language or other equivalent versions of these courses) after attempts allowable by policy 02.10.12, Repeating a Course (previous and equivalent versions of all courses included in the count):

- English 0701: Introduction to Academic Discourse
- English 0802: Analytical Reading and Writing
- IH 0851: Mosaic: Humanities Seminar I
- IH 0852: Mosaic: Humanities Seminar II
- Math 0701: Elementary Algebra
(See effective date at the end of this policy)

5. Institutional GPA hours include credit hours in all courses graded "A" through "F". Credit hours for repeated courses are calculated according to the course repeat policy.

## Policy Statement

The university assesses academic standing and the statuses of warning, probation and dismissal based on academic performance following the fall and spring semesters. Academic Standing is not assessed as a result of grades earned during summer sessions.

However, those students who make their final attempts to repeat university requirements (as specified in 4.d. above) during the summer and who fail to achieve grades of C - or above will be dismissed during the summer as a result of not having successfully completed university requirements.

A student on Academic Warning or Academic Probation must meet with an advisor to discuss his/her academic standing. An advisor will help in planning a schedule of courses to assist the student in achieving an acceptable cumulative GPA. A student on academic warning will be able to self-register after this meeting; a student on Academic Probation must be registered by his/her advisor.

## Reinstatement

A dismissed student may apply for reinstatement four years from the date of last enrollment at Temple University. At the time of application, all credit hours will be evaluated. Final determination of the acceptability of such courses is the responsibility of the academic unit.

A student may also apply for Academic Forgiveness (policy $\underline{02.10 .17 \text { ) at this time. }}$

## Notes

## Dates of official enactment and amendments:

Amended by the President August 1, 2011. Effective May 16, 2011 (Summer Session I). Beginning May 10, 2012 (End of Spring Semester 2012), students will be dismissed when they fail to complete English 0701, English 0802, IH 0851, IH 0852, and Math 0701 or other equivalent versions of these courses in the requisite number of times per Policy 02.10.12, Repeating a Course.
Amended by the President on May 18, 2012. Beginning the end of Spring Semester 2012 and applying retroactively to the end of Fall 2011 semester, admitted transfer students in the first matriculated semester and who are registered for 18 or fewer credits and whose semester grade point average is less than 2.0 will be given the status of academic warning.
${ }^{1}$ Academic Standing is determined by calculating Total Earned Transfer Hours plus Total Institutional GPA Hours. For Academic Forgiveness Students: Calculation includes Forgiveness Institutional Earned Hours (grades A through C- preceded by an asterisk) + Total Institutional GPA Hours + Total Transfer Earned Hours. Not included in Total Institutional GPA Hours: AU, CR, NC, HC, I, IC, IP, MG, NR, P, PI, R, S, W, WE, WF, WS. See your academic advisor for assistance.

Appendix 1 - Dismissal GPA by Total Institutional GPA Hours + Total Transfer Earned Hours

| Total Institutional GPA Hours + Total Transfer Earned Hours | Dismissal GPA (equal to or less than) | Total Institutional GPA Hours + Total Transfer Earned Hours | Dismissal GPA (equal to or less than) | Total Institutional GPA Hours + Total Transfer Earned Hours | Dismissal GPA (equal to or less than) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1-30 | No Dismissal | 61 | 1.83 | 92 | 1.94 |
| 31 | 1.51 | 62 | 1.83 | 93 | 1.94 |
| 32 | 1.53 | 63 | 1.84 | 94 | 1.94 |
| 33 | 1.55 | 64 | 1.84 | 95 | 1.95 |
| 34 | 1.56 | 65 | 1.85 | 96 | 1.95 |
| 35 | 1.58 | 66 | 1.85 | 97 | 1.95 |
| 36 | 1.60 | 67 | 1.86 | 98 | 1.95 |
| 37 | 1.61 | 68 | 1.86 | 99 | 1.95 |
| 38 | 1.63 | 69 | 1.87 | 100 | 1.96 |
| 39 | 1.64 | 70 | 1.87 | 101 | 1.96 |
| 40 | 1.65 | 71 | 1.87 | 102 | 1.96 |
| 41 | 1.67 | 72 | 1.88 | 103 | 1.96 |
| 42 | 1.68 | 73 | 1.88 | 104 | 1.96 |
| 43 | 1.69 | 74 | 1.89 | 105 | 1.97 |
| 44 | 1.70 | 75 | 1.89 | 106 | 1.97 |
| 45 | 1.71 | 76 | 1.89 | 107 | 1.97 |
| 46 | 1.72 | 77 | 1.90 | 108 | 1.97 |
| 47 | 1.73 | 78 | 1.90 | 109 | 1.97 |
| 48 | 1.74 | 79 | 1.90 | 110 | 1.97 |
| 49 | 1.75 | 80 | 1.91 | 111 | 1.98 |
| 50 | 1.75 | 81 | 1.91 | 112 | 1.98 |
| 51 | 1.76 | 82 | 1.91 | 113 | 1.98 |
| 52 | 1.77 | 83 | 1.91 | 114 | 1.98 |
| 53 | 1.78 | 84 | 1.92 | 115 | 1.98 |
| 54 | 1.78 | 85 | 1.92 | 116 | 1.98 |
| 55 | 1.79 | 86 | 1.92 | 117 | 1.99 |
| 56 | 1.80 | 87 | 1.93 | 118 | 1.99 |
| 57 | 1.80 | 88 | 1.93 | 119 | 1.99 |
| 58 | 1.81 | 89 | 1.93 | 120 | 1.99 |
| 59 | 1.82 | 90 | 1.93 |  |  |
| 60 | 1.82 | 91 | 1.94 |  |  |

## Assessment of Student Learning

Temple University is committed to providing superior educational opportunities to its students. To help us maintain quality academic offerings, the University and its programs regularly examine the effectiveness of the curricula, teaching, services, and programs the University provides. As Temple University sees appropriate, it may retain representative examples or copies of student work. This might include papers, exams, creative works, or portfolios developed and submitted in courses or to satisfy the requirements for degree program(s).

In addition to regularly collecting and reviewing student work, Temple University may summarize the results of this review, and use the information to improve programs and enhance student learning. Some of this assessment may also be necessary for Temple University or its programs to demonstrate it meets the standards of external review or accrediting bodies.

Typically, results will be reported in a general, summary format and students' names will not appear on the collected examples. Cohorts may be tracked for specific educational purposes, but the expectation is that assessment will be anonymous. Identifiers will only be used when there is a compelling reason and educational value.

Questions about the assessment of student learning at Temple University may be directed to the Office of the Deputy Provost, 215-204-8873 or assessment@temple.edu.

## Athletic Policies

## Academic Eligibility

Initial and continuing academic eligibility requirements for student-athletes relative to NCAA guidelines are stated below. Student-athletes participating in the sports of baseball and/or football may have additional academic requirements regarding eligibility for competition. Please direct questions regarding academic/athletic eligibility to the Athletics Certifying Officer at 215-204-2507.

1. Temple University is a member of the NCAA Division I-A level of competition. This division of the NCAA requires all student-athletes first entering college to enroll and be certified by the NCAA Eligibility Center.
2. Student-athletes must be registered and attending a minimum of 12 semester hours. They may not withdraw from courses that would put them below 12 semester hours without prior approval from the Athletic Academic Advisor or Athletics Certifying Officer.
3. Student-athletes must pass 6 credits each semester, 18 credits each academic year, accumulate 24 credit hours, and maintain a 1.8 cumulative grade point average after their first two full-time semesters of attendance.
4. Student-athletes must officially declare a major prior to the beginning of their fifth semester of full-time enrollment of college. In addition, the student-athlete must have completed at least 40\%
of the declared major and maintain a 1.9 cumulative grade point average before the first date of competition.
5. Student-athletes are required to complete $60 \%$ of their declared major and maintain a 2.0 cumulative grade point average before the first date of competition of their seventh semester. Student-athletes entering their ninth semester of full-time enrollment will need to meet $80 \%$ of a declared major and maintain a 2.0 cumulative grade point average.
6. Student-athletes must remain in "Good Standing" each semester as determined by Temple University.
7. Transfer student-athletes from two-year institutions may need to graduate with an Associate's degree before entering Temple University for immediate consideration for practice/"try-out" opportunity.
8. Initial and Transfer student-athletes are also bound by a 5-year clock that begins at the time of first full-time enrollment at any institution of higher education.

## Athletic Eligibility

The Department of Intercollegiate Athletics is committed to practices, procedures and policies that are designed to assure proper emphasis on educational objectives, to promote competitive equity among institutions and to prevent the exploitation of student-athletes.

Eligibility to represent Temple University in intercollegiate competition as a varsity athlete is a privilege and not a right. Additionally, Division I athletic eligibility standards are more rigorous than other divisions. Factors which constitute athletic eligibility include, but may not be limited to:

- Amateurism
- Medical Certification
- Behavior and Conduct


## Attendance

See Attendance in the Student Responsibilities section of the Bulletin.

## Audit

There may be circumstances under which a student will wish to audit a course, i.e., participate in the class without earning academic credit, credit hours, or grades.

The student must have written permission of the instructor and of the dean of the college on a special approval form. Full tuition is charged, and standard payment procedures apply.

Change of registration from credit to audit, or from audit to credit, may be processed only during the following periods:

- before the end of the second week of the fall or spring semesters.
- before the end of the third day of classes during summer sessions.


## Code of Conduct

The Temple University Student Code of Conduct can be viewed at http://policies.temple.edu/getdoc.asp?policy_no=03.70.12. Printed copies are available at the Dean of Students' Office. Other information about the Student Code of Conduct may also be found in the Responsibilities and Rights section of this Bulletin.

## Course Numbering System

All courses have full four-digit numbers. The first digit of a course identifies its level.

- Courses numbered A000 - U000 are reserved for transferred elective and generic credits.
- Courses numbered 0700-0999 are reserved for preparatory courses, General Education courses and Honors General Education courses.
- Courses numbered 1000-1999 are appropriate for undergraduate students in their first year of study.

Courses numbered 2000-5999 are considered "upper level" for undergraduates.

- Courses numbered 2000-2999 are appropriate for undergraduate students in their second year of study.
- Courses numbered 3000-3999 are appropriate for undergraduate students in their third year of study.
- Courses numbered 4000-4999 are appropriate for undergraduate students in their fourth year of study.
- Courses numbered 5000-5999 are primarily for graduate students, but undergraduate students in their third or fourth year may enroll with permission of their instructors and the dean's designee.
- Courses numbered 8000-9999 are for graduate students.

Other classifications and definitions for undergraduate courses:

- 0700-0799 Preparatory Courses: Courses numbered from 0700-0799 are appropriate for undergraduate, first-year math and writing courses. Students' math and writing placement examination results determine these course-level selections.
- 0800-0899 General Education Courses: Courses numbered from 0800-0899 are appropriate for any undergraduate General Education course requirements.
- 0900-0999 General Education Honors Courses: Courses numbered 0900-0999 are appropriate for any undergraduate General Education Honors course requirements.
- xxx0 Special Topics: Regularly-scheduled courses (not individualized instruction) offered with variable content, and repeatable for credit.
- $\mathbf{x 9 x x}$ Honors Courses: Undergraduate Honors courses will be identified by a 9 as the second digit of the course number and will have "Honors" as the first word of the title. The 9 in the second position will not be used by any non-Honors undergraduate course. General Education Honors courses are designated 09xx.
- xx81 Cooperative Assignment: Increasingly complex, experiential learning with supervision external to the university. Usually these courses include learning experiences over more than one semester - as part of a defined program.
- xx82 Independent Study: Explorative study or research initiated by an undergraduate student with faculty sponsorship and an approved Independent Study contract.
- xx83 Directed Reading/Study: Mentored reading/study between a faculty member and an undergraduate student.
- xx84 Performance: Concert performance, juried art exhibition or other performance taken as a requirement for the degree.
- xx85 Internship/Externship: Pre-professional clinical or experiential traineeships contracted by the student's department, including experiences with a clinical, research, or other special concentration in a specific area. Students must have faculty sponsorship and an approved Internship/Externship contract.
- xx86 Internship/Externship: Reserved for a continuation of an internship/externship experience, following xx85.
- xx87 Practicum: Programs that are traineeships contracted by the student's department to meet the educational, geographic, and specific interests of the student. Settings generally have on-site clinical supervision.
- xx88 Student Teaching: Practical experiences in student teaching designed to support and lead to teacher certification.
- xx89 Field Study: On-site, observational study or data collection and analyses which deepen practical knowledge in the discipline. The purpose of the Field Study is to integrate and apply academic theories to on-site experiences.
- xx91 Directed Research: Mentored research between a faculty mentor and an undergraduate student.
- xx92 Undefined
- xx93 Undefined
- xx94 Undefined
- xx95 Undefined
- xx96 Writing-Intensive Course: Courses fulfilling the requirement of the General Education Program that each undergraduate major designates at least two courses as "writing-intensive." The designated courses shall require students to edit and rewrite papers to achieve a high level of clarity and cogency, use a variety of methods to find appropriate materials to support written work and to make proper attribution of those sources.
- xx97 Writing-Intensive Course
- xx98 Writing-Intensive Course
- xx99 Undergraduate Thesis: Sustained research, performance or artistic project resulting in a substantial, finished written report or other product in a format appropriate to the project. Assumes faculty sponsorship and mentorship.

For more specific policies, consult individual schools, colleges, or programs.

## Courses Inapplicable to Graduation

Semester hours earned in some courses are excluded from the total minimum semester hours or earned credit hours required for graduation from some schools and colleges. While policies vary among schools and colleges, courses inapplicable to graduation requirements generally are ELECT, Mathematics 0015 (formerly Mathematics 0001), Russell Conwell Center courses, and lower-level Military Science (ROTC) courses.

For specific information, see Policies and Regulations: Courses Inapplicable to Graduation in each school and college's section in this Bulletin, or consult academic advisors.

## Courses Over Ten Years Old

In admitting transfer or returning students, the university will, when possible, allow credit for courses taken ten or more years prior to the date of admission or re-enrollment.

However, academic units may choose not to accept courses regardless of age for credit in the major. Courses of a technical nature or courses in a particularly dynamic field may not be accepted for credit.

Final determination of the acceptability of such sources is the responsibility of academic units in the schools and colleges and generally occurs after the student has matriculated or been reenrolled.

## Credit/No Credit Courses

Eligible students may want to take a course in an area in which they are not proficient or about which they are curious, while not risking their grade point average. Such students, with certain provisions, may be graded using the Credit/No Credit (CR/NC) grading option.

Students may select the CR/NC grading option or return to the traditional grading option only during the first two weeks of a fall or spring semester course and during the first three days of a first or second summer session course, with the written authorization of their advisor and dean.

## Eligibility is limited to:

- matriculated, full-time students
- those in academic good standing
- juniors or seniors (60 or more semester hours)


## Courses are restricted to:

- non-required electives
- one CR/NC course per semester
- maximum of four CR/NC courses toward the degree

No grade points are assigned to either the CR or NC grade. CR is equivalent to grades of D- or higher. NC is equivalent to $F$. The semester hours earned are credited toward the total required for graduation. Because CR and NC yield no grade points, they are not included in divisor hours for calculating the grade point average. CR and NC are not included in calculating cumulative credits for determining academic actions specified in the Undergraduate Policy on Academic Standing.

## Credit for Prior learning

Temple University awards limited academic credit and course placement to students based on previous academic, employment, military and/or other learning experiences not earned in a traditional classroom setting.

Credit for Prior Learning (formerly Non-Traditional Credit) may be earned through courses approved for transfer from other institutions, Advanced Placement Tests, International Baccalaureate Exams, the College Level Examination Program (CLEP), DANTES Subject Standardized Tests (DSST), military experience, and prior work or life experience (portfolio).

Limitations on credit earned through Credit for Prior Learning are as follows: (1) the credit must be useful in a student's program of study; (2) duplicate credit in the same course is not awarded in any case; (3) credit is only awarded in academic subjects with a corresponding Temple department.

Credit for Prior Learning will not be awarded for a course in which a student is currently enrolled and/or have previously received a letter grade for the course (including, but not limited to, an F, W, AU, or I).

Official transcripts for courses from other institutions, military transcripts and official score reports should be sent directly to the Office of Undergraduate Admissions. The Undergraduate Admissions office determines which credits will transfer to the University (See Admissions: Transfer Credit), whereas the academic unit to which the student has been admitted determines how credits will be used to fulfill degree requirements in a student's program of study. Evaluation of Credit for Prior Learning is based on a student's major; transfer evaluations may change for students who change majors.

If Credit for Prior Learning is awarded, a student's university record will carry notation of credit, but no grade will be recorded. Credit awarded will not affect a student's grade point average at Temple University. Credits are expressed in semester hours. Courses evaluated for transfer from colleges and universities with different credit systems (quarter hours, units) are converted to semester hours (i.e., 2 quarter hour credits are equivalent to 1.5 semester hour credits; 3 quarter hour credits are equivalent to 2.0 semester hour credits; 4 quarter hour credits are equivalent to 2.5 semester hour credits).

Credit for Prior Learning does not apply to the minimum number of credits (60) required to earn Latin Honors at graduation. Credit for Prior Learning credits are not counted toward Academic Residency.

Credit for Prior Learning can be counted toward eligibility for the 45+ Transfer GenEd. See General Education Curriculum: GenEd Transfer Programs for more information.

A student seeking credit for CLEP or prior work or life experience should discuss options with their academic advising unit in their first year of matriculation at Temple. The student is responsible for any fees related to the assessment and posting of these Prior Learning credits.

Colleges and Schools may have limitations on the type and number of Prior Learning credits that can be applied to a degree. Please see link in each category for additional school and college specific details.

## Advanced Placement Tests

Temple awards college credits to students who in high school participated in the Advanced Placement program sponsored by the College Examination Board as based on the score and the exam subject. For a detailed listing of AP equivalencies, required scores, and School or College specific details, see www.temple.edu/vpus/transfer/CPL.htm\#AP.

Students should have taken these tests in high school and should have their scores sent directly to the Office of Undergraduate Admissions. AP credits will not be taken from college transcripts. Transfer students must request Educational Testing Services to send their official Advanced Placement Test scores to the Office of Undergraduate Admissions.

Advanced Placement equivalencies will be reviewed periodically and are subject to change. Students will receive the equivalency that is in effect at Temple at the time of their matriculation.

## International Baccalaureate

Temple awards college credits to students who in high school participated in the International Baccalaureate Program. Credit is awarded based on the score and the exam subject. For a detailed listing of IB equivalencies, required scores, and School or College specific details, see www.temple.edu/vpus/transfer/CPL.htm\#IB.

Additionally, students who have earned the International Baccalaureate (IB) Diploma and meet minimum eligibility requirements complete the International Baccalaureate General Education Program (IB GenEd Program) in place of the Full GenEd requirements. See www.temple.edu/vpus/transfer/TransferGenEd.htm\#ibgened for details.

Students should have taken these tests in high school and should have their scores sent directly to the Office of Undergraduate Admissions; IB credits will not be taken from college transcripts. Transfer students must request a copy of their official International Baccalaureate exam scores be sent to the Office of Undergraduate Admissions.

## College-Level Examination Program (CLEP)

CLEP provides a mechanism for students to meet the requirements of a class through examination. Temple recognizes students' prior learning by accepting the CLEP tests indicated in the CLEP equivalencies chart. For a detailed listing of CLEP equivalencies, required scores, and School/College and University policies, see www.temple.edu/vpus/transfer/CPL.htm\#CLEP.

All literature, history, and political science examinations require an essay in order to receive credit at Temple. For CLEP credit to be posted for these exams, the student must have both the minimum score on the CLEP exam and a pass on the essay.

Students planning to take CLEP tests while at Temple are urged to do so no later than the semester before they expect to graduate. Information about test dates, fees, and the application process may be obtained from the Measurement and Research Center, 12th Floor, Carnell Hall, Main Campus, 215-204-8611.

Matriculated students must obtain permission from an advisor of the school or college in which they are matriculated through the completion of the Request to Take CLEP Exam for Credit form. Permission will not be given if a student has previously earned a letter grade in the same course at Temple or has previously completed more advanced courses in the same field. Permission will not be given to repeat a CLEP exam.

CLEP credits completed while matriculated at Temple will not count towards a student's General Education requirements or towards the 45+ GenEd designation.

Transfer students can earn credit through prior CLEP exams if their scores meet the Temple credit-granting standards. Since CLEP credit posted on transcripts from other institutions will not be used to update a student's record at Temple, it is the responsibility of the student to request a copy of their scores be sent directly to the Admissions Office. (Office of Undergraduate Admissions, Temple University, 1801 N. Broad Street, Philadelphia, PA 19122.)

## DANTES Subject Standardized Tests (DSST)

DSST exams provide a mechanism for students to meet the requirements of a class through examination. Temple recognizes students' prior learning by accepting the DSST exams completed prior to matriculation according to the ACE (American Council on Education) guide recommendations. For credit to be awarded, the credit must be useful in a student's program of study. Credit is only awarded in the academic subjects with a corresponding Temple department. For school or college specific details, see www.temple.edu/vpus/transfer/CPL.htm\#DANTES.

## Military Experience

Temple awards college credit for documented military experience according to the ACE (American Council on Education) guide recommendations. Examples of acceptable documentation for military experience include, but are not limited to: AARTS (Army/ACE Registry Transcript System), SMART (Sailor/Marine/ACE Registry Transcript), or Community College of the Air Force Transcript. For credit to be awarded, the credit must be useful in a student's program of study. Credit is only awarded in the academic subjects with a corresponding

Temple department. Colleges and schools may have limitations on the type and number of Military Experience credits that can be applied to a degree. For school or college specific details, see www.temple.edu/vpus/transfer/CPL.htm\#MilExp.

## Assessment of Prior Learning Outside of the Academic Classroom

Decisions to assess prior learning experiences outside of the academic classroom are made by the individual schools and colleges. An evaluation of work experience for a specific subject area may be based on the submission of papers, presentation of a portfolio of completed work, and/or a demonstration of acquired skills.

Credit so granted is based on a faculty evaluation of the respective learning experiences in terms of their identified relationship to the knowledge and skills required, either in the pursuit of educational programs in the college or in the performance of tasks related to the substance of study. Semester hours credited toward the minimum number for a degree are always granted relevant to a specific program. If students change their programs of study, semester hours credited toward an earlier program of study may not be recognized in the new program.

Credit for relevant prior learning outside of the academic classroom, if approved, will be posted only after the completion of a minimum of 30 credits of formal coursework at the university.

Approval of relevant prior learning credit must be in writing over the signature of at least one sponsoring faculty member, the appropriate department or committee chairperson, and the dean of the college that is granting the credit.

The total number of semester hours granted through non-traditional means varies according to the individual colleges or programs, and individual colleges or programs may choose not to grant any credit for prior learning outside of the academic classroom. A per-credit fee is charged, regardless of the final outcome.

Grades are not assigned for credits earned through prior learning outside of the academic classroom.

Each college engaged in the assessment of academic and work experiences determines its own procedures for review and testing; students should contact the appropriate advising office for information about the procedures for assessment. For school or college specific details, see www.temple.edu/vpus/transfer/CPL.htm\#PWEx.

## Dean's List

Dean's List eligibility is determined by the semester grade point average (GPA) corresponding to cut-off points that will yield the top $16 \%$ of GPAs based on the five previous fall and spring semesters for each school or college. Students must have 12 graded credits (A to F grades) in order to be eligible for dean's list for the fall or the spring semesters.

Students who begin in the fall as part-time (i.e., registered for fewer than 12 credits) and continue as part-time in the spring will be eligible for dean's list in the spring if they accumulate at least 12 graded credits (A to F grades) over the fall and spring semesters and meet the GPA criteria listed on the chart for the school or college. If a student is enrolled part-time in the fall but full-time in the spring, eligibility for dean's list will be based on spring semester grades.

For fall 2013 and spring 2014, the cut-offs for dean's list eligibility are:

| College | GPA Cut-off |
| :--- | :---: |
| Boyer College of Music \& Dance | 3.91 |
| Center for the Arts (Division of Theater, Film \& Media Arts) | 3.76 |
| College of Education | 3.92 |
| College of Engineering | 3.53 |
| College of Health Professions \& Social Work | 3.71 |
| College of Liberal Arts | 3.80 |
| College of Science \& Technology | 3.60 |
| Fox School of Business \& Management | 3.60 |
| School of Environmental Design | 3.80 |
| School of Media \& Communication | 3.73 |
| School of Social Work | 3.80 |
| School of Tourism \& Hospitality Management | 3.55 |
| Temple University Japan (B.S. in International Business Studies) | 3.59 |
| Tyler School of Art | 3.77 |
| University Studies | 3.60 |

## Declaration of Major

Students admitted to Temple for fall 2002 and after must be enrolled as a major in a degreegranting program in a school or college by the time they have completed 60 credits, including any credits transferred from another institution.

Students admitted to Temple with 60 or more transfer credits will be matriculated directly into a degree-granting program, rather than as "undeclared" in a school or college or the Division of University Studies.

Students declare a major either by completing their school's or college's declaration of major process (see specific school or college section in this Bulletin) or by completing an intrauniversity transfer to another Temple school or college (see the policy on Transfer between Colleges within the University).

Individual schools and colleges may require students to declare a major earlier than 60 credits. Students should consult the policies and regulations of their own school/college for any additional guidelines regarding declaration of major.

## Disciplinary Action

The Office of Student Conduct and Community Standards, located in Room 318 in the Howard Gittis Student Center, is responsible for administering the Student Code of Conduct. Violations of the university's Code of Conduct, including among other things, stealing, cheating, disorderly conduct, plagiarism, and illegal possession/use of alcohol and other drugs, may result in a student being brought before one of the Student Conduct Boards, as outlined in the Student Code of Conduct. Student Conduct and Community Standards facilitates the student conduct process striving to create a campus environment conducive to learning. The process is designed to help students realize their role in maintaining campus civility through educational programming and sanctioning as well as through the participants on the student conduct boards.

The Student Code of Conduct can be found online at the Temple University’s Policies web site: http://policies.temple.edu/getdoc.asp?policy_no=03.70.12.

## Double Major Across Colleges

A student who meets the major requirements of two departments may declare, and have recorded on his or her transcript, a double major. Students who graduate with a double major across two colleges are required to complete all university requirements (General Education) and the requirements of both majors (including two Writing Intensive courses for each major), but only one set of college graduation requirements. The student must obtain prior approval from both schools or colleges. One department must be declared the primary department for the purpose of registration and college graduation requirements. (Students considering a double major across colleges should ask academic advisors in both colleges about college policies related to choosing the primary department.)

## Family Educational Rights \& Privacy Act (FERPA)

For information on the Family Educational Rights and Privacy Act (FERPA) of 1974, see the FERPA text in the Responsibilities \& Rights section in this Bulletin.

## Final Examinations

University policies require that final examinations be given only during the university-approved final examination days as noted on the academic calendar, which is available at www.temple.edu/registrar.

For day classes on Main campus, a detailed examination schedule, by day and time, is available at www.temple.edu/registrar; this information is also circulated at the beginning of each semester.

Final examinations for evening classes on Main and Ambler campuses, TUCC classes, and Health Sciences Center classes are given at the regular class time during final examination week.

For both day and evening Ambler classes, a detailed examination schedule, by day and time, is circulated to the faculty and posted to the Ambler web site at www.temple.edu/ambler/ac_services/registration.htm.

Some courses have common final examination times. (Consult the registrar's final examination schedule for a complete list.)

Instructors are encouraged to make individual accommodations with students who have more than two (2) examinations scheduled on one day.

## Grade Change

No change of final grade for a completed course will be made without the approval of the instructor's dean or designee. Deans will consider the grade change upon receipt of the instructor's written explanation. No grade will be changed after the baccalaureate degree is awarded.

## Grade Point Average (GPA)

Each student's transcript indicates the credit hours completed and passed, grade points, and grade point average (GPA).

The GPA also appears on a student's DARS reports or the academic advising document as well as the Self-Service Banner (SSB) and official transcripts.

A student's GPA may be useful in assessing academic progress, in determining eligibility for specific programs, or in determining eligibility for Honors or other awards.

No change in a student's GPA is made after the baccalaureate degree is awarded.

## To Compute Semester Grade Point Average:

1. Multiply the value of the grade (see the "Grades and Grading" section below) by the course's number of credit hours to get quality points (QPts).
2. Add the total quality points.
3. Divide total number of quality points by the total number of GPA hours completed in courses that yield quality points.

Note: Not included in GPA computations: AU, CR, NC, HC, I, IC, IP, MG, NR, P, PI, R, S, W, WE, WF, WS. Also see policy on Repeating a Course.

## To Compute Cumulative Grade Point Average:

Divide the total number of quality points by the total number of GPA hours completed in courses that yield quality points.

Note: Not included in GPA computations: I, IC, IP, MG, NR, CR, NC, R, P, AU, W, WE, WS, PI. Also see policy on Repeating a Course.

For credit transferred from other institutions, no grade points are allowed. See also Repeating a Course.

## Grades and Grading

## Semester Grades

The work of all undergraduate students is graded and reported at the end of each semester. Students may access their semester grades on Self Service Banner within 48 hours of the end of the examination period for that semester.

Three systems are in use for grading and reporting students' work:

## 1. Letter grades and points

| A | 4.00 Excellent |
| :---: | :--- |
| $\mathrm{A}-$ | 3.67 |
| $\mathrm{~B}+$ | 3.33 |
| B | 3.00 Good |
| $\mathrm{B}-$ | 2.67 |
| $\mathrm{C}+$ | 2.33 |
| C | 2.00 Fair |
| $\mathrm{C}-$ | 1.67 |
| $\mathrm{D}+$ | 1.33 |
| D | 1.00 |
| $\mathrm{D}-$ | .67 Passing |
| F | .00 Failed |

Note: Although D- is a passing grade, a minimum grade of C- is required in General Education courses and, in many programs, courses required by the major.

|  |  |
| :---: | :--- |
| 2. Credit/No Credit |  |
| CR | Equivalent to $\mathrm{A}, \mathrm{A}-, \mathrm{B}+, \mathrm{B}, \mathrm{B}-, \mathrm{C}+, \mathrm{C}, \mathrm{C}-, \mathrm{D}+, \mathrm{D}$ or $\mathrm{D}-$ |
| NC | Equivalent to F |

Note: In the Credit/No Credit system, no grade points are assigned, but a limited number of credits in courses in which students earn the CR designation counts toward the total credit hours completed. See Credit/No Credit Courses.

|  |  |
| :---: | :--- |
| 3. Other transcript notations |  |
| AU | Audit |
| I | Incomplete |


| IC | Incomplete in a Credit/No Credit course |
| :---: | :--- |
| IP | Incomplete pass/fail course |
| MG | Grade temporarily missing |
| NR | Grade not reported |
| P | Passed grade |
| PI | Permanent incomplete |
| W | Withdrawal from course |
| WE | Withdrawal with approved excuse |
| WS | Withdrawal from the semester (historical) |

For more information, see the policies on Audit, Credit/No Credit Courses, Incomplete Coursework, and Withdrawal Policies in this Bulletin.

## Academic Progress in Lower-Division Courses

Students in lower-level courses (numbered below 2000) receive a mid-semester rating report indicating that their work to date is satisfactory or unsatisfactory or that they have not been attending the course. This report is available on Self Service Banner by the end of the sixth week of fall and spring semesters.

## Graduation Procedures

As students approach the end of their undergraduate careers, they must make sure that they are eligible for, and can participate in, graduation ceremonies.

In their junior year, or when 80 semester hours have been completed, students should begin an ongoing graduation check with their academic advisors in order to determine that they are meeting the university, college, departmental, and program requirements for their degree and for graduation.

Early in the semester in which graduation requirements will be completed, students complete an Application for Graduation.

Questions about this process or graduation status should be directed to the student's Advising Office or Academic Dean's Office.

Application deadlines are:

- February 15 for May graduation
- June 1 for August graduation
- October 15 for January graduation

Earlier deadlines may be in effect in some academic units.
The Application for Graduation must be properly completed, particularly the areas relating to the resolution of incompletes and diploma instructions. Information concerning commencement activities (such as time, place, invitations, rental of academic regalia) is available to students once they have submitted their completed Application for Graduation. Students will not have their degree awarded or diploma or transcript released until all university tuition and fees have been paid.

## Grievances

See Grievances in the Student Rights section of the Bulletin.

## Honors for Academic Achievement

Temple University recognizes academic achievement in several ways.

## Dean's Lists

Dean's Lists record the names of those full-time students in each school or college who completed a semester's work with 12 graded credits and meet the GPA criteria as outlined in the Dean's List policy. In addition, part-time students who have accumulated at least 12 graded credits across an academic year (fall and spring semesters) are eligible to be considered for Dean's List recognition in the spring.

For further information, see the Dean's List policy in the Academic Policies section of the Bulletin, check under your school or college listing in the Bulletin, or contact your school or college Advising Center.

## Graduation (Latin) Honors

Latin Honors are awarded based on estimation procedures that are intended to yield 2\% Summa, 5\% Magna, and 9\% Cum Laude awards for baccalaureate recipients from each Temple school and college. Graduates who have completed at least 60 credits at Temple are eligible for the appropriate honor if their cumulative grade point average (CGPA) is equal to or greater than the cut-off value established for the honor. (Students returning to the university following Academic Forgiveness may qualify for Latin Honors if they have a minimum of 60 earned hours in addition to the approved earned hours allowed at the time of Academic Forgiveness.)

Awards for August 2013, January 2014 and May 2014 graduates are based on cutoff scores computed from CGPAs earned by August 2008 through May 2013 graduates. In July of each year, the cut-off values are updated to include the most recent five-year cycle of CGPAs.

The cut-off values for calculating eligibility for Summa, Magna, and Cum Laude Honors for August 2013, January 2014, and May 2014 graduates are listed in the table below along with the schedule for updating the cut-off values.

| Latin Honors Minimum Cumulative Grade Point Averages by College <br> (for August 2013, January 2014 and May 2014 Graduations) |  |  |  |
| :--- | :---: | :---: | :---: |
| Summa Cum Laude | Magna Cum Laude | Cum Laude |  |
| College | GPA <br> (lower threshold) | GPA <br> (lower threshold) | GPA <br> (lower threshold) |
| Boyer College of Music \& Dance | 3.96 | 3.92 | 3.83 |
| Center for the Arts (Division of Theater, Film \& Media Arts) | 3.86 | 3.77 | 3.64 |
| College of Education | 3.96 | 3.87 | 3.75 |
| College of Engineering | 3.86 | 3.72 | 3.50 |
| College of Health Professions \& Social Work | 3.89 | 3.75 | 3.61 |
| College of Liberal Arts | 3.94 | 3.82 | 3.67 |
| College of Science \& Technology | 3.91 | 3.76 | 3.58 |
| Fox School of Business | 3.86 | 3.71 | 3.50 |
| School of Environmental Design | 3.96 | 3.87 | 3.69 |
| School of Media \& Communication | 3.88 | 3.76 | 3.58 |
| School of Social Work | 3.93 | 3.82 | 3.67 |
| School of Tourism \& Hospitality Management | 3.76 | 3.61 | 3.40 |
| Temple University Japan (BSIB program) | 3.91 | 3.78 | 3.63 |
| Tyler School of Art | 3.89 | 3.80 | 3.68 |


| Award and Update Schedule for Latin Honors |  |
| :--- | :--- |
|  |  |
| For Honors awarded in: | Cut-offs based on CGPAs for Graduates: |
| August 2013, January 2014, May 2014 | August 2008 through May 2013 (calculated July 2013) |
| August 2014, January 2015, May 2015 | August 2009 through May 2014 (calculated July 2014) |
| August 2015, January 2016, May 2016 | August 2010 through May 2015 (calculated July 2015) |
| August 2016, January 2017, May 2017 | August 2011 through May 2016 (calculated July 2016) |
| August 2017, January 2018, May 2018 | August 2012 through May 2017 (calculated July 2017) |

## Incomplete Coursework

An instructor will file an "I" (Incomplete) only if the student has completed the majority of the work of the course at a passing level, and only for reasons beyond the student's control.

An instructor may file an "I" when a student has not completed the work of a course by the time grades must be submitted, but has completed the majority of the work at a passing level and has a written agreement with the instructor and the department regarding completion of the work, including the nature of the work to be completed, the means by which the final grade will be determined, and the date by which the work must be completed. The completion date may be no later than one year from the end of the semester in which the student took the course. The agreement shall also specify a default grade to be received if the work is not completed by the date indicated. One copy of the agreement shall be retained by the instructor, one shall be given to the student, and one shall be filed with the department office or, in colleges or schools without departments, the Dean's office.

When reporting the grade of "I" for a student, the instructor shall also file a report of the default grade in the electronic grading system. If the instructor does not change the grade of "I", pursuant to the agreement with the student, by the end of one year from the time the grade of "I"
was awarded, the appropriate University official shall automatically change the grade of "I" to the reported default grade, and the default grade shall appear on the transcript and be used for all other grading purposes as the actual grade received in the course.

Faculty advisors and staff advisors have the option of not permitting a student to register for an "overload" if the student is carrying one or more active incomplete courses, or for a "full load" if the student is carrying two or more active incompletes.
(policy \# 02.10.13)

## Leave of Absence

Students may apply for a Leave of Absence (LOA) through the end of the drop/add period of any given semester. An LOA may be granted for one or two consecutive semesters, excluding summer sessions. Under special circumstances, an extension to an approved LOA may be considered, but some of the privileges listed below may not apply.

Students granted an LOA retain their admitted student status and remain eligible for the following privileges:

- Retain the university requirements in place for their academic programs at the time of their first semester at Temple and the requirements in place for their major, concentration, minor or certificate at the time they declared them.
- Temple e-mail access.
- Priority and self registration for the approved semester of return.
- Library access and borrowing privileges.

Students granted LOA are not considered registered students and as non-enrolled students are not eligible for:

- Financial aid disbursements during the semesters while on LOA. Students on an LOA are reported to lenders and loan service agencies as "not enrolled" and need to contact lenders for information on possible repayment requirements.
- Enrollment verification since they are reported as "not enrolled," which could affect eligibility for health insurance, etc.
- Use of Student Health Services during the semesters while on LOA or any other university services not listed in the previous section.
- Campus Housing during their LOA.

Students may return earlier than the original agreed return date by providing notice to their schools/colleges as soon as possible, keeping in mind applicable deadlines for registration, financial aid, etc.

Students who do not return following the approved term for their LOA, or those students who did not apply for LOA, need to apply for re-enrollment to their schools/colleges if they wish to continue their coursework. Re-enrolled students do not retain their original bulletin year nor
major declaration requirements and must follow the most current requirements for their schools/colleges and majors.

Students taking an approved medical withdrawal (WE) in a current semester are not considered to be on LOA.

To obtain the Undergraduate Leave of Absence Petition form, visit the Senior Vice Provost for Undergraduate Studies web site (www.temple.edu/vpus) and click on "Advising Forms."
(policy \# 02.10.16)

## Lower Division Student Academic Progress

Instructors in lower-division freshman and sophomore courses will provide evaluations of student progress by the end of the fifth week of class. It is the course instructor's responsibility to complete and return an early report indicating satisfactory or unsatisfactory progress for each student. Students will receive mid-semester ratings in Self Service Banner for each lowerdivision course taken.
(policy \# 02.10.15)

## Continuing Degree Seeking (Matriculated) Students

Beginning in academic year 2011-2012, the term "matriculated student" has been replaced by "continuing degree seeking student." Continuing degree seeking students are those who have applied, been accepted, and enrolled in a degree program of the university during the semester for which they were admitted.

Completion of course credits before becoming a continuing degree seeking student does not assure the acceptance of those credits into the program of study.

## Non-Degree Seeking Students

Non-degree seeking students are those who have not been admitted formally to a degree program. For information and academic advising for non-degree seeking students, see Programs with Academic Credit in the Special Programs section of the Bulletin and the Office of Continuing Studies web site.

Non-degree seeking undergraduate students who wish to pursue a degree are required to apply for admission to a degree program before they complete 30 credits in Continuing Studies. To enroll in undergraduate courses, students must have earned a high school diploma or a G.E.D. certificate. Students who have attended another college or university must have earned at least a 2.00 GPA and provide a transcript (official or unofficial) of their previous academic work.

Prior to their enrollment, non-degree seeking students who wish to pursue a degree are required to take one or more University placement tests. (Some transfer students may be exempt from this requirement. To find out if they are exempt or not, transfer students are strongly encouraged to seek guidance from a Continuing Studies academic advisor prior to taking this test.)

Non-degree seeking undergraduate students are not permitted to take more than 11 credits during their first semester.

Non-degree seeking undergraduate students who are accepted into an undergraduate degree program may count their Temple, non-degree credits toward their residency requirements.

## Permission to Complete a Course at another Institution after Matriculation

The university expects that undergraduate students who are earning a Temple degree take all (or almost all) of their courses at Temple. However, once at Temple, students in good academic standing who meet all student and course eligibility criteria are allowed to transfer credit for two summer or special session courses (up to a maximum of 8 credits) taken elsewhere toward their Temple baccalaureate degree. Students will not receive credit for courses taken at another institution while matriculated at Temple, unless prior permission is received from their school or college through their advising center. (For information on the approval process for students studying abroad, go to: www.temple.edu/studyabroad/transfer_approval.html).

To be eligible to complete the Petition to Complete a Course(s) at Another Institution After Matriculation the following criteria must be met:

- The student's cumulative grade point average must be 2.00 or above at the time of this petition.
- At the time of admission or reenrollment the student had fewer than 60 credits in transfer.
- The student has met the prerequisites for the course(s).
- The course cannot be available through Temple's distance learning program.
- The course cannot be a duplicate of a course for which the student has already received credit.
- The course cannot be a duplicate of a course previously attempted (earned a letter grade, failed, withdrawn or incomplete) at Temple.

Students must apply during the semester prior to the one in which they wish to take the course(s) elsewhere.

Students must complete a "Petition to Complete a Course(s) at Another Institution After Matriculation" form obtained either from their advising center or at www.temple.edu/vpus/forms/index.htm.

- If the course(s) equivalency is not listed in the Transfer Articulation system, the course must be evaluated by the relevant Department's designee/representative. The Department designee/representative must note the approved evaluation on the petition and return the
form to the student so it can be filed in his/her advising records. (Transfer credits cannot be added without a completed form.)
- Students will not receive credit for courses taken at another institution while matriculated at Temple, unless prior permission is received from their school or college through their advising center.

Students should note that:

- Credits will be transferred to Temple only upon the completion of the course(s) with a grade of "C-" or better. See Admissions: Transfer Credit.
- Some Temple schools and colleges have additional limitations on the kind or number of transfer credits accepted.
- Once matriculated at Temple, it is expected that General Education courses be completed at Temple.
- Transfer credit is not awarded for internships, practical, field studies or independent studies not supervised by Temple University faculty. Students should check with their School/College academic advisor for exceptions.
- Students may also receive transfer credit for courses taken through a pre-approved study abroad program. However, students planning to receive transfer credit for courses completed on a non-Temple program must complete the form "Request for Approval to Study Abroad on a non-Temple Program" for course equivalency approvals. For information about Temple study abroad programs, see Education Abroad. For information about receiving permission to study abroad through another institution, see Study Abroad Approval Procedures for External Programs.
- Transfer credits do not affect a student's Temple grade point average.
- A student cannot receive credit for the same course twice.
- Grades earned in transfer courses cannot be used to replace grades earned in the Temple equivalent courses.
- A student will not be approved to take a course(s) at another institution if it is the third time that the student will have taken the course(s).
- Thirty (30) of a student's last 45 credits must be taken at Temple University. (Some majors have additional residency requirements.) See Academic Residency Requirements.
- To be eligible for Latin Honors at graduation, a student must complete a minimum of 60 semester hours of the program while matriculated at Temple.

Once a student has received prior permission and taken a course elsewhere, the student must have an official transcript from that institution sent to the Admissions Office as soon the transcript is available.

## Placement Testing

Go to the Measurement and Research Center web site at www.temple.edu/marc/placements for details.

Also, see the Admissions: Placement Testing section of the Bulletin.

## Plagiarism and Academic Cheating

See Academic Honesty in the Student Responsibilities and Rights section of the Bulletin.

## Prerequisites and Co-requisites

A course prerequisite is any requirement an academic department identifies as essential for a student to complete before taking a course. The university is responsible for publishing prerequisite requirements. All prerequisites, whether they apply to an individual course or to all courses in a department, should be stated in the electronic version of the university's Course Catalog. They should also be stated in the course syllabus.

Course prerequisites consist of one or more of the following: completion of placement or proficiency tests or other assessments; achievement of specified scores on placement or proficiency tests or other assessments; possession of specified knowledge or skills; approval after audition; approval of portfolio; declaration of major or admission to restricted program; completion of specific courses, sets of courses, and/or kinds of courses; completion of a specified number of semester hours or achievement of a specified class level; achievement of specified grades in prerequisite courses or sets of courses; achievement of a specified GPA; approval of an application or proposal; permission of the instructor, department, or other person or office; satisfaction of other specified requirements.

Students are responsible for knowing and completing all published prerequisite requirements for a course before taking that course. The university has the obligation to inform students of prerequisite requirements. It has the right to cancel a student's registration in a course if the student has not satisfied the published prerequisite requirements for that course.

A course co-requisite is a requirement that must be completed at the same time as the course for which it is required. The university is responsible for publishing co-requisite requirements. All co-requisites, whether they apply to an individual course or to all courses in a department, should be stated in the electronic version of the university's Course Catalog. They should also be stated in the course syllabus. Co-requisites may be specified courses, permissions, admission to programs, and/or other requirements. Students are responsible for knowing and completing all published co-requisite requirements for a course. The university has the obligation to inform students of co-requisite requirements and the right to cancel a student's registration in a course if the student has not arranged to satisfy the co-requisite requirements for that course.

## Probation and Dismissal

See Academic Standing (Undergraduate).

## Registration

See the Registration section of the Bulletin.

## Repeating a Course

Undergraduate and graduate students may repeat a course to earn a higher grade; only the highest grade earned will be used in calculating the grade point average. Undergraduate and graduate students will not be permitted to repeat a course more than twice.

## Definitions

The term "repeat" is applied when a student retakes a course. Except for courses designated to be taken multiple times, such as independent study, research, or other courses, credit for a given course will be granted only once.

## Policy Statement

All students are permitted to repeat a course one time. Students who need to repeat a course a second time must obtain the approval of the dean/designee of their home school or college and be registered with assistance. No students may repeat a course a third time.

If a course was taken previously with a standard grading option, it cannot be repeated with a credit/no credit grading option. Students are responsible for ensuring registration carries the appropriate grading option. All occurrences of a course where a grade is earned, including withdrawals (W) and withdrawals excused (WE), appear on the transcript, but only the highest grade earned is used in calculating the grade point average. Since credits are awarded only once for a course, repeats can affect athletic eligibility, academic standing and financial aid status.

All course withdrawals, with the exception of "withdrawal with approved excuse (WE)" are included in the course repeat count (see policy \# 02.10.14 Withdrawal from Classes).

First repeat: Undergraduate students are strongly encouraged to meet with an academic advisor prior to registration to discuss academic and financial implications.

Graduate students seeking to repeat a course are required to meet with an academic advisor to register.

Second repeat: Undergraduate and graduate students must obtain the approval of the dean/designee of their home school or college and be registered with assistance.

If in the allotted number of repeats, students are unable to successfully complete the following university requirements (including their course equivalencies), they will be dismissed from the university:

- English 0701: Introduction to Academic Discourse
- English 0802: Analytical Reading and Writing
- IH 0851: Mosaic: Humanities Seminar I
- IH 0852: Mosaic: Humanities Seminar II
- Math 0701: Elementary Algebra

Students unable to successfully complete courses that are required for their majors or school/college requirements in the allotted number of repeats must meet with their academic advisors to discuss alternate graduation plans. Students who have exhausted course attempts for course(s) required for their major will be required to change majors. If the selected new major does not require the course in question, it is possible that the new major may be in the same school or college. Students who have exhausted allowable course attempts in course(s) required for their degree program (school/college requirements) will be required to transfer internally (IUT) within the university from their current school or college to a school or college degree program that does not require the course in question.

Following the awarding of a degree, no changes in the grade point average will be made, even through the repeat process.

## Notes

## 1. Dates of official enactment and amendments

Adopted by the president on November 13, 2002. First effective on September 1, 2003. Amended by the president on February 8, 2011. Effective May 2011 (for Summer Session I)-GPA calculation with highest grade. Effective March 2012 (for Summer I, II and Fall 2012 registrations)--maximum number of course repeats including their course equivalencies.

## 2. History

The February 8, 2011 amendment added the limit on the number of repeats.
The May 18, 2012 amendment clarified that students who have exhausted allowable course attempts in courses required for the major or school/college degree requirements may be required to change majors or transfer internally within Temple to another school or college.

## Supersedes

This policy supersedes all other policies and procedures related to repeating a course.

## 3. Cross References

Policy \# 02.10.11, Academic Standing (Undergraduate)
Policy \# 02.10.14, Withdrawal from Classes (Undergraduate and Graduate Classes)
Policy \# 02.10.17, Academic Forgiveness (Undergraduate)

## (Policy \# 02.10.12)

## Satisfactory Academic Progress

Satisfactory academic progress is determined by a number of factors, including a student's semester grade point average, cumulative grade point average, and the number of semester hours attempted and completed. A student's progress is reviewed at the end of each semester by the
student's Temple school or college and may affect the student's ability to continue in a program or major and eligibility for financial aid. Students should be advised that course withdrawals and incompletes will affect their progress and thus their academic standing. See Academic Standing and Grade Point Average.

## Schedule Revision (Drop/Add)

See Schedule Revision (Drop/Add) in the Registration section of the Bulletin.

## Second Degrees

Generally, students having already completed a bachelor's degree experience would be encouraged in the first instance to begin graduate-level academic work in the new discipline. Students who already hold a bachelor's degree, however, may earn a second bachelor's degree in some schools and colleges of Temple University when the second degree sought is in a sufficiently different field of study. Students interested in earning a second degree should consult with the Office of the Dean of the school or college offering the desired degree.

Students at the undergraduate level may not be enrolled in concurrent undergraduate degree programs, but may regularly have second majors, or might consider an approved accelerated or joint program with a Temple graduate or professional school, if they meet admissions qualifications. See the list of accelerated programs and requirements.

Currently, the requirements for students pursuing a second degree are under review. The revisions, if approved, will minimally require that students complete a minimum of 30 semester hours in residence at Temple beyond those required for the first degree.

## Simultaneous Enrollment

Matriculated students at Temple University may not be enrolled simultaneously at another institution in the same semester or summer session and receive permission to transfer those credits to Temple. Certain exceptions are allowed, if permission is given in advance, for courses unavailable at Temple but needed to complete degree requirements for the next scheduled awarding of degrees; or for specialized study where alternatives are not available at Temple; or as part of established programs. Students taking a Temple online course during the summer and living well beyond commuting distance of a Temple campus may also be approved for simultaneous enrollment at another institution. See Permission to Take Courses at Another Institution.

## Study Abroad Approval Procedures for External Programs

To receive credit for courses taken on an external study abroad program, students are required to complete Temple's External Program Approval form, which includes seeking permission from an advisor in Education Abroad, having any anticipated courses evaluated and approved by appropriate academic departments, and receiving academic approval from their Temple
school/college academic advising office. To explore external program opportunities, or to initiate the approval process, students should contact or visit Education Abroad.

Students should discuss their study abroad plans with their academic advisor. Permission to study abroad is rescinded if the student's GPA falls below 2.5, or the student is placed on academic warning or probation. As with all courses accepted in transfer, only a grade of C- or higher is acceptable.

See Education Abroad in the Academic Opportunities section.

## Transcripts

A student's academic history is contained in a transcript, which is maintained by the Office of the University Registrar.

Official transcripts are issued upon the written request of the student, carry the seal of the Office of the University Registrar, and are usually sent directly to another educational institution, a potential employer or other approved third party. The fee for each transcript is \$8.25 (\$6.00 transcript fee $+\$ 2.25$ Clearinghouse processing fee). Additional fees apply for expedited processing and shipping.

Official transcripts may also be issued directly to the student but will be identified with information that will indicate to the reader (whether a potential employer or another educational institution) that it was so issued.

A transcript is considered correct and final one calendar year after it is issued. If a student identifies an error, the Office of the University Registrar must be notified in writing within one calendar year.

## Transfer Between Colleges Within the University

Intra-University Transfer (IUT) denotes a student's movement from one academic unit within the university to another and/or from one campus to another.

Transfer between academic units is not automatic. If students decide to earn their degrees in an academic unit other than the one in which they are matriculated, they must make application for the transfer and can do so at anytime except the months of January and August.

The Intra-University Transfer form can be picked up at any advising center or dean's office. Students then submit the form to the college to which they wish to transfer. The student will be notified of the decision by the office of the dean of the proposed college.

Students may initiate transfer from one college of the university to another if they are in good academic standing and have a minimum cumulative GPA of 2.0. Higher averages are required by a number of schools and colleges, and students should consult the individual school or college policy section of the Bulletin for IUT GPA requirements. In addition to GPA requirements, the

Tyler School of Art has portfolio requirements and the Esther Boyer College of Music and Dance has audition requirements.

## Transfer Credit

See Admissions: Transfer Credit.

## Undergraduate Credit for Graduate Level Courses

Undergraduate students may take 5000-level graduate courses with the permission of the instructor and the dean's designee for undergraduate degree credit. Undergraduates who wish to take higher level graduate courses must have the permission of the dean, the Graduate School and Undergraduate Studies.

Undergraduate students taking graduate level courses for partial fulfillment of undergraduate degree requirements may not use these credits to fulfill graduate-level degree requirements unless formally accepted into an accelerated, undergraduate/graduate/professional program.

## Withdrawal Policies

## WITHDRAWAL FROM CLASSES (policy 02.10.14)

During the first two weeks of the fall or spring semester or summer sessions, students may drop one or more courses with no record of the class appearing on the transcript. In weeks three through nine of the fall or spring semester, or during weeks three and four of summer sessions, students may withdraw with the assistance of an academic advisor--or by using the withdrawal function in Self-Service Banner (SSB). The course will be recorded on the transcript with the notation of "W," indicating that the student withdrew. After week nine of the fall or spring semester, or week four of summer sessions, students may not withdraw from courses. Withdrawing from courses during the prescribed period may have serious consequences for academic progress to the degree, for financial aid eligibility, (for international students) visa requirements, and (for student athletes) NCAA eligibility for competition. Students should consult carefully with their instructors and academic advisors before withdrawing from classes. Drop and Withdrawal deadlines are published for each semester and summer session on the following web site: www.temple.edu/registrar/documents/calendars/.

| Withdrawal Grades and Transcript Notations |  |  |
| :---: | :--- | :--- |
|  |  |  |
| Withdrawal <br> Grade | Action | Transcript Notation |
|  |  |  |
| W | Withdrawal from <br> course | Displayed on transcript; not included in GPA calculations; counts as a course <br> attempt under the provisions of the course repeat policy. |
|  |  |  |


| WE | Withdrawal with <br> approved excuse | Approved by student's Dean's Office or the Provost's office for excused <br> withdrawals due to medical, catastrophic or other circumstances beyond the <br> student's control; not counted as a course attempt under the provisions of the <br> Repeat policy; not included in GPA calculations. |
| :---: | :--- | :--- |
| WF | Withdrawal with <br> a failing grade | This is an historical grade used prior to September 2003; included in GPA <br> calculations with 0.00 points. The WF is no longer a grading option. |
| WS | Withdrawal from <br> the semester | This is an historical grade used prior to June 2011; denotes withdrawal from all <br> courses in the term. |

## COMPLETE WITHDRAWAL POLICY

A student may withdraw from the semester's courses by notifying the advising office of his/her college. The dean/dean's representative shall determine whether there is legitimate reason for withdrawal with symbol WE (excused approval authorized by the dean) in all courses in which the student is enrolled, consulting with the instructors when necessary and verifying confirming documentation. Course withdrawals ('W') count as course attempts under the provisions of the repeat policy (02.10.12). Excused withdrawals ('WE') do not count.

## REFUNDS FOR WITHDRAWALS

Complete refund of tuition or cancellation of tuition charges will be made only if the drop form or student's SSB entry is processed by the end of the second week of classes of the fall and spring semesters or summer sessions.

Students withdrawing after these periods are responsible for payment of all charges incurred. No refund or adjustments of charges will be made for withdrawals after the second week unless specified under the university's refund policy. See the bottom of the Tuition and Fees section for the Refund Policy.

## Academic Opportunities

## Experiential Learning

## Internships

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

The Office of the Senior Vice Provost for Undergraduate Studies also provides information about internship opportunities. For more information, go to www.temple.edu/vpus/opportunities/index.htm.

Community-Based Learning

Michele O’Connor, Associate Vice Provost
500 Conwell Hall
215-204-0550
michele.oconnor@temple.edu
Community Service

Office of Community Relations
Community Education Center
1509 Cecil B. Moore Avenue, Second Floor
215-204-7913
www.temple.edu/community
Temple Volunteers, the university's Office of Community Service, is dedicated to providing students with the resources and guidance necessary to immerse themselves in action for positive social change. As a team of administration, staff, and student leaders, we work to establish strong relationships within and beyond the Temple campus through community service. Temple Volunteers offers everything from one-day service activities to long-term opportunities and alternative break programs. For more information, visit www.temple.edu/community.

## First Year \& Transfer Programs

Michele O’Connor, Associate Vice Provost
500 Conwell Hall
215-204-0550
michele.oconnor@temple.edu

## University Seminar Series

## First-Year (Freshman) Student Seminars

First-Year (Freshman) Student Seminars are academic courses designed to support student learning and development in the critical first semester of college. University Seminar 1001, First Year Seminar I, can be taken as part of a Learning Community or as a stand-alone course. College-specific seminars are offered by the College of Science and Technology and the School of Communications and Theater.

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

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

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

## Sophomore Seminar

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

## Transfer Seminar

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

## Global Citizenship Seminar

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

## Junior Seminar

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

## Peer Mentor Development Seminar

University Seminar 3002, Peer Mentor Development, is a variable credit course (0 to 1 credit) that introduces students to content and communication skills identified as integral to serving as a peer mentor in the college setting. Through this course, students become proficient guides to

Temple and community resources, well-versed in college and academic success strategies, and equipped with effective interpersonal communication skills.

## Resident Assistant Development Seminar

University Seminar 3003, Resident Assistant Development, is a 1-credit course that introduces students to topics and issues pertaining to the Resident Assistant (RA) position. Students in this course will be exposed to leadership and student development theories, practical strategies related to community building, crisis management and conflict resolution, and inclusivity concepts. This class examines a theoretical exploration of residential life and will not encompass the entire resident assistant role. Course material will be grounded in student development theory as well as experiential learning. Students will discuss experiences using their first few months as a Resident Assistant to learn from each other and develop best practices.

## Learning Communities

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

Many learning communities include a section of University Seminar 1001, First Year Seminar I. Learning Communities meet General Education, foundational, or academic requirements.

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

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

## Transfer Student Newsletter

The newsletter, TRANSITIONS, is available for new transfer students at the start of each semester. The newsletter provides an overview of policies, procedures, programs and academic opportunities that are available to all Temple students.

## Online Learning

Dr. Dominique Monolescu Kliger, Director
665 Ritter Annex
215-204-3943
www.temple.edu/distanceandsummer

The Distance Learning Program is designed to give students a remote, high-quality education, providing them more flexibility in when and how they attend classes. Courses are offered at both the undergraduate and graduate levels and also for continuing education students.

Continuing degree-seeking (matriculated) students can register online via Self-Service Banner in the TUportal. Non-degree seeking students must register through the Office of Continuing Studies at 1810 Liacouras Walk, First Floor, Room 101 (215-204-2500). Non-degree seeking students can obtain their registration forms online (www.temple.edu/vpus/arc/) and submit them by fax to 215-204-2516. For more information, check the Distance Learning Program web site.

Each week, a student will access Blackboard to view assignments and reading materials, and participate in virtual classes (when scheduled). The Distance Learning Program offers virtual and on campus sessions to help students familiarize themselves with the university's online interactive audio and video online tools and with the library's online databases before enrolling in an online course.

The Distance Learning Program provides access to over 300 course titles via online, blended, virtual, and videoconferencing formats. In addition, the following programs can be completed entirely online: 1. Ed.M. in Education Psychology; 2. MBA; 3. Doctor of Physical Therapy program; and 4. the Clinical Doctorate of Occupational Therapy (DOT).

For successful completion of an online course, students are recommended to have daily access to a computer with a fast internet connection (DSL or cable type of connections are recommended). Visit the Distance Learning Program's web site for more information.

## Pre-Professional and Pre-Graduate Programs

## Pre-Law Program

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

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

Pre-Professional Health Studies
Neida Perez, Ed.M., Director

Pre-Professional Health Studies
1810 Liacouras Walk, Suite 100
215-204-2513
healthadvising@temple.edu
www.temple.edu/healthadvising
Advising offered by the office of Pre-Professional Health Studies supplements the academic advising (course registration, major requirements and graduation review) provided by the Academic Advisors in the student's primary college which is based on their Major program of study. The office assists students in their academic and experiential preparation for programs in dentistry, medicine, optometry, pharmacy, podiatry, and veterinary medicine or for graduate study in Physical Therapy, Occupational Therapy and Physician Assistant Programs.

Beginning with our electronic (ePortfolio) system as well as special sections of the First-Year Seminar designed specifically for students interested in preparing for a career as a health care professional, advising through Pre-Professional Health Studies will help students stay organized as they identify tracks / programs best suited to their interests in the health care professions. Temple undergraduates will find numerous opportunities both in and out of the classroom to develop the knowledge, skills, and experiences to prepare them for their future endeavors. Temple also offers research opportunities in a wide range of academic disciplines of interest to pre-professional health studies students, and funding is available to support undergraduate research and travel to present at conferences.

## Health Scholar Programs

## Pre-Med Health Scholars

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

Dentistry, Pharmacy, Physical Therapy, and Podiatry Accelerated Programs
Accelerated Programs allow Pre: Dentistry, Pharmacy, and Podiatry (3+4 Tracks) as well as Physical Therapy ( $3+3$ Track) students the option of earning both their Bachelor of Arts and Graduate degrees in a shorter period of time after successfully passing all courses in the first year of professional school.

Accelerated program Applications from interested entering freshman are available on the health advising web site. Completed applications are due by the end of the first semester at Temple University. The Accelerated BA/DMD, BA/PharmD, BA/DPM, or DPT Programs are designed for high-achieving students who have distinguished themselves with impressive high school academic records and a demonstrated interest in their respective field.

## Military Science (ROTC) Credits Applicable for Graduation

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

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

| Department | Course \# | Course Name | Credits | Semester |
| :--- | :---: | :--- | :---: | :---: | :--- |
| Military Science | 3001 | Applied Leadership \& Management I | 2 |  |
| Military Science | 3002 | Applied Leadership \& Management II | 2 |  |
| Military Science | 4001 | Advanced Leadership \& Management I | 2 |  |
| Military Science | 4002 | Advanced Leadership \& Management II | 2 |  |
|  |  |  |  |  |
| Aerospace Studies | 3011 | Air Force Leadership Studies I | 3 |  |
| Aerospace Studies | 3021 | Air Force Leadership Studies I | 3 |  |
| Aerospace Studies | 4031 | National Security Affairs I | 3 |  |
| Aerospace Studies | 4041 | National Security Affairs II | 3 |  |
|  |  |  |  |  |
| Naval Science | 3001 | Naval Ships Systems I: Engineering | 3 | Fall only |
| Naval Science | 3002 | Naval Ships Systems II: Weapons | 3 | Spring only |
| Naval Science | 3003 | Evolution of Warfare | 3 | Fall only |
| Naval Science | 4001 | Naval Operations and Seamanship | 3 | Fall only |
| Naval Science | 4002 | Leadership \& Ethics | 3 | Spring only |
| Naval Science | 4003 | Amphibious Warfare | 3 |  |

For more information about the applicability of ROTC, NROTC and AFROTC courses for graduation credit, please call the Office of the Senior Vice Provost for Undergraduate Studies (215.204.2044).

## Military Science - Army Reserve Officers' Training Corps (Army ROTC)

Gregory J. Nardi, Lieutenant Colonel
Ritter Hall, Lower Level
215-204-7480 or 215-204-2482
Fax: 215-204-7481
www.temple.edu/rotc

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

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

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

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

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

During the Advanced Course (normally the junior and senior years), the student receives instruction designed to enhance leadership abilities; reinforce managerial, supervisory, and accountability skills; and further develop the individual's foundation of military knowledge. The highlight of this instruction is the student's attendance at the five-week ROTC National Advance Leadership Course, usually during the summer between the junior and senior years. The camp is a series of rigorous leadership challenges in which the Temple student competes against students from 272 other colleges and universities. Advanced Course students (enrolled in the commissioning program) receive a tax-free stipend (juniors - $\$ 450.00$ per month and seniors $\$ 500$ per month) each year of the Advanced Course. When students complete the Advanced Course, they are obligated to accept a commission as a Second Lieutenant and upon graduation from college, incur either an active duty or reserve forces duty service commitment in the United States Army.

## Two-Year Commissioning Program

The Two-Year Program consists of the Advanced Course and is open to any qualified full-time graduate or undergraduate student who has at least two years of academic study remaining at Temple University and has completed the Basic Course or its equivalent. Basic Course equivalency can be granted for prior active or reserve military service. Additionally, Temple students can receive this equivalency by attending a five-week ROTC Leadership Training Camp at Fort Knox, Kentucky, during the summer. Following successful completion of this challenging
program, the student is eligible to enter the ROTC Advanced Course. Students attending the Leadership Training Camp incur a military obligation, and they are required to enroll in the ROTC Advanced Course. Students of exceptional academic accomplishment may qualify for Basic Course Placement Credit without being required to attend Leader Training Camp. If you are a sophomore or junior with between 54-65 credit hours complete, please contact us for additional information at 215-204-7480/4453/2482.

## Scholarships

The Military Science Department administers the Army Scholarship Program, which includes numerous options. The scholarships are awarded based on local and national competitions and are for four, three, and two years. The scholarships pay tuition or room and board, a \$1200 annual allowance for books and lab fees, and a monthly stipend that varies between $\$ 350$ to $\$ 500$ a month. The scholarships are awarded based on academic merit, and a student need not be enrolled in Army ROTC to apply. Inquiries should be directed to Mrs. Jackie Hankins-Kent, Administrative Officer, Department of Military Science/ROTC, Ritter Hall - Lower Level, Room 4A, 215-204-7480/9622.

## Course Offerings

Military Science (Army ROTC)

| Basic Courses | Credits | Semester |  |
| :---: | :--- | :---: | :--- |
| 1001 | Introduction to Military Science I | 1 s.h. | Fall |
| 1002 | Introduction to Military Science II | 1 s.h. | Spring |
| 2001 | Small Unit Operations \& Leadership I | 1 s.h. | Fall |
| 2002 | Small Unit Operations \& Leadership II | 1 s.h. | Spring |
| Advanced Courses |  |  |  |
| 3001 | Applied Leadership \& Management I | 2 s.h. | Fall |
| 3002 | Applied Leadership \& Management II | 2 s.h. | Spring |
| 4001 | Advanced Leadership \& Management I | 2 s.h. | Fall |
| 4002 | Advanced Leadership \& Management II | 2 s.h. | Spring |
| 4003 | Leadership Lab | 0 s.h. | All semesters |

## Military Science Course Descriptions

For the full description of each course, please click on the Course Descriptions link.
Enrollment is open to all students, but full participation in some of the military training is limited to students enrolled in the commissioning program. Contact the Military Science Department for details.

## Military Science Faculty

Gregory J. Nardi, Lieutenant Colonel, Armor, Professor of Military Science, B.S. - United States Military Academy, MBA - Touro University International, M.S. - U.S. Army Command and General Staff College

Marco Young, Lieutenant Colonel, Military Intelligence, Assistant Professor of Military Science/Battalion Executive Officer, B.S. - Drexel University (e-mail: myoung01@temple.edu)

Francis J. DiMartini, Major, Armor, Assistant Professor of Military Science, B.A. - Temple University (e-mail: francis.dimartini@temple.edu)

Douglas M. Flach, Master Sergeant, Commandant of Cadets and Senior Military Instructor (email: douglas.flach@temple.edu)

## Aerospace Studies - Air Force Reserve Officers' Training Corps (AFROTC)

Department of Aerospace Studies
Saint Joseph's University
5600 City Avenue
Philadelphia, PA 19131
610-660-3190
rotc@sju.edu
www.sju.edu/afrotc/
Students are eligible to participate in the Air Force Reserve Officer Training Corps (AFROTC) through an agreement with Saint Joseph's University. All aerospace studies courses will be held on the Saint Joseph's University campus, although students can register through Temple's Self Service Banner system for their AFROTC courses. The AFROTC program enables highly qualified college students to earn a commission as an Air Force officer while concurrently satisfying requirements for his or her baccalaureate degree.

AFROTC offers three- and four-year curricula leading to a commission as a Second Lieutenant in the Air Force. (Two-year accommodations are available for nursing students.) In the four-year curriculum, a student takes the General Military Course (GMC) during the freshman and sophomore years, attends a four-week summer training program, and then takes the Professional Officer Course (POC) in the junior and senior years. In the three-year curriculum, a student attends both the freshman and sophomore GMC courses. A student is under no contractual obligation to the Air Force until entering the POC or accepting an Air Force scholarship.

The subject matter of the freshman and sophomore years is developed from a historical perspective and focuses on the scope, structure, and history of military application emphasizing the development of air power and its relationship to current events. During the junior and senior years, the curriculum concentrates on the concepts and practices of leadership and management, and the role of national security forces in contemporary American society.

In addition to the academic portion of the curricula, each cadet participates in group physical training and a two-hour Leadership Laboratory each week. During this period, the day-to-day skills and working environment of the Air Force are discussed and explained. The Leadership Lab utilizes a student organization designed for the practice of leadership and management techniques.

Air Force ROTC offers scholarships for three and four years on a competitive basis to the best qualified applicants. All scholarships are applied to tuition and lab fees, and include a textbook allowance and a tax-free monthly stipend which varies from $\$ 250$ to $\$ 400$, depending on graduation date.

For further information on the cross-enrollment program, scholarships, and career opportunities, contact AFROTC Det 750, Saint Joseph's University, Philadelphia PA 19131; 610-660-3190; rotc@sju.edu; www.sju.edu/afrotc/

Course Offerings

| Aerospace Studies (Air Force ROTC) |  |  |  |
| :---: | :--- | :---: | :--- |
| Courses | Credits | Semester |  |
| 1011 | The Foundation of the United States Air Force I | 1 s.h. | Fall |
| 1012 | Air Force Leadership Laboratory I | 0 s.h. | Fall |
| 1021 | The Foundation of the United States Air Force II | 1 s.h. | Spring |
| 1022 | Air Force Leadership Laboratory II | 0 s.h. | Spring |
| 2031 | The Evolution of U.S. Air \& Space Power I | 1 s.h. | Fall |
| 2041 | The Evolution of U.S. Air \& Space Power II | 1 s.h. | Spring |
| 3011 | Air Force Leadership Studies I | 3 s.h. | Fall |
| 3021 | Air Force Leadership Studies II | 3 s.h. | Spring |
| 4031 | National Security Affairs I | 3 s.h. | Fall |
| 4041 | National Security Affairs II | 3 s.h. | Spring |

For a full description of each course in Aerospace Studies, please click on the Course Descriptions link.

## Naval Science - Naval Reserve Officers' Training Corps (NROTC)

Director, Naval Science Department
University of Pennsylvania
NROTC Unit
417 Hollenback Building
3000 South Street
Philadelphia, PA 19104-6399
215-898-7436
Fax: 215-573-2067
nrotc@pobox.upenn.edu
www.vpul.upenn.edu/nrotc
Temple students are eligible to participate in the Naval Reserve Officers’ Training Corps (NROTC) through an agreement with the University of Pennsylvania. All naval science courses are held on the University of Pennsylvania campus, although students register through Temple's Self Service Banner system for their NROTC courses. The NROTC Program enables a college student to earn a commission in the Navy or the Marine Corps while concurrently satisfying
requirements for his or her baccalaureate degree. Scholarship and non-scholarship programs are available.

Navy-Option scholarship and College Program (non-scholarship) students must enroll in Naval Science (NAV SCI) 1001 and 1002 during their freshman year, NAV SCI 2001 and 2002 during their sophomore year, NAV SCI 3001 and 3002 in their junior year, and NAV SCI 4001 and 4002 in their senior year. Those seeking commissions in the Marine Corps will enroll in NAV SCI 1001 and 1002 during their freshman year, NAV SCI 2001 during their sophomore year; NAV SCI 3003 and 4003 can be taken in either their junior or senior year, NAV SCI 4002 during their senior year only. All students are required to enroll in NAV SCI 1003 during every semester they attend. Tailored programs are available for students wishing to join NROTC after the start of their freshman year and before the beginning of their junior year.

Students participating in the Navy scholarship program must complete one year of calculus (recommended for College Program students, not required for Nurse Corps candidates), one year of calculus-based physics (recommended for College Program students, not required for Nurse Corps candidates), one course in cultural awareness (waivers for Nurse Corps candidates may be available on a case-by-case basis), one course in American military history or national security policy (not required for Nurse Corps candidates), and one year of English. College Program students must complete one year of college-level algebra, one year of physical science courses, one computer science course, and one year of English. Marine-Option students are only required to complete one course in American military history or national security policy. Students must check with their naval science instructors to determine specific courses that fulfill the above requirements.

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

## Course Offerings

| Naval Science (Navy ROTC) |  |  |
| :---: | :--- | :---: |
| Courses | Credits |  |
| 1001 | Naval Orientation | 3 s.h. |
| 1002 | Seapower \& Maritime Affairs | 3 s.h. |
| 1003 | Naval Science Drill | 0 s.h. |
| 2001 | Leadership \& Management | 3 s.h. |
| 2002 | Navigation | 3 s.h. |
| 3001 | Naval Ships Systems I: Engineering | 3 s.h. |
| 3002 | Naval Ships Systems II: Weapons | 3 s.h. |
| 3003 | Evolution of Warfare | 3 s.h. |
| 4001 | Naval Operations and Seamanship | 3 s.h. |
| 4002 | Leadership \& Ethics | 3 s.h. |
| 4003 | Amphibious Warfare | 3 s.h. |

For a full description of each course in Naval Science, please click on the Course Descriptions link.

## Education Abroad

Denise A. Connerty, Assistant Vice President of International Affairs
200 Tuttleman Learning Center
215-204-0720
www.temple.edu/studyabroad
International education takes many forms at Temple: learning other languages; spending a summer, semester or year studying abroad; building an international concentration into a major; or enrolling in special programs such as the Latin American Studies Semester. Students are encouraged to consult their school/college and course descriptions for further information on international and language studies at Temple's Philadelphia campuses.

Study abroad is one of the most rewarding and beneficial experiences available to Temple students. The opportunity to gain firsthand understanding of other cultures and languages through study abroad is personally enriching, and adding an international dimension to one's education enables students to better understand and contextualize global issues and international events. Temple students have almost limitless options when it comes to studying abroad. Students may spend a semester, academic year or summer participating on one of Temple's numerous programs abroad, or they may choose to participate on an accredited external program through another university or study abroad provider. Students receiving financial aid can usually apply most, if not all, sources of aid to their study abroad fees. Education Abroad can provide students with further information about study abroad, as well as resources and guidance on choosing a program that is best suited to their academic needs and interests.

Scholarships for semester, academic year, and summer study abroad are available for qualified Temple students. A number of external scholarships, such as Fulbright and Vira Heinz, are also administered by Education Abroad. In addition, advising is available concerning a variety of other options for financing study abroad.

Students interested in receiving more information about study abroad should visit the Education Abroad web site at www.temple.edu/studyabroad or contact the office at 215-204-0720 or study.abroad@temple.edu.

## Semester and Academic Year Programs

## Temple University, Japan Campus (TUJ)

Bruce Stronach, Dean
TUJ is the Tokyo campus of Temple University. Founded in 1982, TUJ is the oldest and largest foreign university in Japan and has developed into a nationally-recognized institution offering an
extensive range of educational programs. With an enrollment of 3,150 students and a faculty of 173, TUJ offers B.A. degrees with majors in American studies, art, Asian studies, business management, communications, economics, general studies, international affairs, political science, psychological studies, and tourism and hospitality management. TUJ also offers A.A. degrees, a B.S. in International Business, an M.B.A., a Master of Science in Education, a Doctor of Education in TESOL (Teaching English to Speakers of Other Languages), and a Master of Laws.

American undergraduate students may study at Temple Japan for a semester, year and/or summer, choosing from a broad range of courses in Liberal Arts, Asian Studies, and Japanese language. Internships are also available. Temple faculty, on assignment from Philadelphia, teach in the program along with visiting professors from other universities and special faculty hired in Japan. All coursework, with the exception of Japanese language courses, is conducted in English.

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

TUJ is ideally located in central Tokyo in Minato-ku. Just 20 minutes walking distance from Roppongi, one of Tokyo's major entertainment districts, Minato-ku is home to several embassies, shops, and restaurants. Students have the option of securing their own housing or of taking advantage of housing offered by TUJ. A limited number of homestays with Japanese families are also available for students interested in complete linguistic and cultural immersion.

Information on application, costs, and financial aid can be obtained from Education Abroad. Temple charges regular tuition rates for the Japan program; additional costs include airfare, living expenses, medical insurance, and program expenses.

## Temple University London

Erin Palmer
School of Communications and Theater
6 Annenberg Hall
215-204-6535

The School of Communications and Theater offers both semester and summer programs in London. These programs are open to all Temple students, no matter what their major, as well as those from other universities. Recent course offerings have included British Mass Media, World of the Play, British Film, Political Communications, and Travel Writing. Internships are also available.

Accommodation in shared, self-contained flats is arranged by the program.

## Temple University Rome

Hilary L. Link, Dean

Temple's campus in Rome offers courses in architecture, landscape architecture, international business, liberal arts, and visual arts. Each semester, students from Temple and other universities around the U.S. study in Rome and take courses designed to take advantage of the city's rich resources.

The Temple University Rome dean oversees the academic program and arranges for student support services. A distinguished teaching faculty, both European and American, provide a firstrate educational experience. All courses are part of Temple's undergraduate and graduate curricula and carry full academic credit. Students who have not studied Italian previously must enroll in an elementary Italian language course while in the program in order to take best advantage of their stay in Italy.

An extensive field study program complements the traditional classroom and studio curricula. Classes make regular trips to museums, architectural sites, and other points of interest in Rome, and many courses include field trips to other parts of Italy and Europe. The Villa Caproni, located in the heart of Rome on the Tiber River, houses the Temple Rome program. The facilities at the Villa Caproni include a library with 15,000 volumes, classrooms, art and architecture studios, an art gallery, and complete technical facilities. Students have the option of securing their own housing or choosing Temple-arranged accommodations in the residence. The residence is a convenient 30 -minute walk to the Villa Caproni and 5 minutes from one of the major outdoor markets in Rome. A limited number of homestays with Italian families are also available for students interested in complete linguistic and cultural immersion.

Information on application, costs, and financial aid can be obtained from Education Abroad. Temple charges regular tuition rates for the Rome program; additional costs include airfare, living expenses, medical insurance, and program expenses.

## Temple University in Spain

## Dr. Jamie Durán, Program Director

Temple University's spring semester program in Spain was developed in response to the success of its existing summer session in Oviedo. Based at the University of Oviedo, the semester program is designed for students with at least four semesters of college level Spanish, or the equivalent, and who are committed to furthering their Spanish language skills.

Spain program participants are enrolled in the Cursos de Lengua y Cultura Españolas para Extranjeros program at the University of Oviedo's humanities campus, El Milán. All students enroll in one of two tracks, Intermediate or Advanced, depending on their Spanish language background, and choose from coursework in Spanish language, literature, translation, history and art. Courses are taught by native Spanish-speaking professors of the University of Oviedo, and by Temple University faculty member, Dr. Jaime Durán.

As a complement to academic courses, cultural programming opportunities and organized leisure activities are arranged throughout the semester to help students acquire in-depth knowledge of various aspects of Spanish and Asturian culture, as well as to strengthen students' Spanish language proficiency outside of a formal classroom setting. Additionally, for one week during the program, students participate in a non-credit enrichment workshop which, in the past, has included themes such as dance, short story, photography, cartoons and journalism. The university also hosts cultural activities, including film series, short story and photography competitions, and organized visits to sites of interest studied in class. Programs which facilitate connections between international and Spanish students, including a language partner conversation exchange, are also offered and organized by the university.

Accommodations are arranged with a local Spanish host family. Students are provided with three meals a day and laundry service. This living arrangement offers the best opportunity to practice the language in a natural setting and have direct access to local lifestyle, gastronomy and social life.

Information on application, costs, and financial aid can be obtained from Education Abroad. Temple charges regular tuition rates for the Spain program; additional costs include airfare, living expenses, medical insurance, and program expenses.

## Exchange Programs

Temple University students may participate in any of Temple's university-wide exchange programs. Currently, exchange partnerships exist with universities in Germany, Puerto Rico, England, China, Taiwan, and Korea. Students selected for these programs must qualify academically and be fluent in Spanish or German, respectively, for study in Puerto Rico and Germany.

Applications to participate in these programs are due in the early spring. For further information, contact Temple's Education Abroad. Each exchange program can accommodate only a small number of students annually. Specialized exchange programs are also available through some schools and colleges. Check with your school or college advising office for a list of these programs.

## Summer Programs Abroad

Each year, a number of Temple faculty members direct summer programs abroad for academic credit. Some programs change on an annual basis; others have been part of Temple's summer curriculum for many years. The programs generally last four to six weeks, admit qualified students from Temple as well as other universities, and charge Temple's regular tuition rates for summer programs abroad. In recent years, summer programs have been conducted in Costa Rica, France, Germany, Ghana, India, Italy, Jamaica, Japan, and Spain.

## University Honors Program

Ruth Ost, Director<br>204 Tuttleman Learning Center<br>215-204-0710<br>honors@temple.edu<br>http://honors.temple.edu/

The University Honors Program, a dynamic and inclusive community, is a comprehensive, fouryear program designed to challenge boundaries, expand possibilities and prepare high-achieving students for the world ahead. At the core of the program are classes taught by faculty highly regarded for their scholarship and well-loved for their teaching. Honors classes are typically small seminars in which students and faculty have a chance to engage deeply with each other on the topics at hand.

Overseeing the program is a dedicated staff that provides holistic support services. They advise students on major choices, graduate and professional school applications, scholarship and fellowship opportunities, and career decisions.

The University Honors Program is open to students enrolled in every undergraduate school and college. No special application is required for incoming first-year students. (All applications are screened for Honors.) Current Temple students or transfer students who would like to be considered for the program must apply through the Honors web site. Applications are reviewed at the end of each semester after grades have been posted.

Benefits of the program include, among others: exclusive access to Honors courses; the option to live in the Honors Living-Learning Community in 1300 for four years; community service and leadership opportunities; priority registration; and Honors transcript notation. For the class of 2017, those admitted to Honors as incoming first-year students will be eligible for summer stipend(s). More details can be found in the Honors Handbook on the Honors web site.

To earn the Honors transcript notation, incoming first-year students and transfer students with fewer than 45 credits must complete ten Honors courses, including the English 0902, Mosaic I, and Mosaic II sequence in Honors unless they have placed out of one or more of those courses through placement test scores and/or transfer credit. Additionally, four of the ten must be at or above the 2000 level. Students admitted to Honors who have accrued between 45 and 59 credits complete eight Honors courses (four of which must be at or above the 2000 level); students admitted to Honors with 60 or more credits need to complete only six Honors courses (four of which must be at or above the 2000 level).

Students may contract a limited number of upper level non-Honors courses and graduate courses for Honors credit with Honors and faculty approval.

All students must show evidence of continued progress in completing course requirements or will be dismissed from the program.

To be in Honors good standing, students must maintain a 3.25 cumulative GPA. If students' cumulative GPA drops below 3.25, they will be on Honors probation. Students remain on Honors probation as long as their subsequent semester GPAs remain at or above 3.25. Students return to Honors good standing when their cumulative GPA returns to 3.25 or above. Should students receive a semester GPA below 3.25 while on probation, they will be dismissed from the program*. As a condition of completing the Honors Program, students must graduate with at least a 3.25 cumulative GPA.
*One exception: Students admitted to Honors as incoming first-year students will not be dismissed due to GPA until after their first semester sophomore year.

Students are strongly encouraged to complete an Honors Scholar Project during their senior year. Project proposals (which can be a research thesis, creative work, or other appropriate project in the major or a related field) are submitted to the Honors Program, preferably during or immediately after junior year. When the project is finished, it must be approved by the Honors Program and two faculty members in the appropriate field(s) of study (a project mentor and a second reader). Further, students are required to present their work (or work-in-progress) in a Temple, regional or national venue. This achievement will be indicated by an additional transcript notation, reading: Honors Scholar Thesis, followed by the title.

Students may visit the Honors Program Office in Tuttleman Learning Center, Room 204, to meet with an advisor if they have any questions about requirements - or for advising. Further information can be found on the Honors web site: http://honors.temple.edu/.

## Undergraduate Research and Peer Teaching

Emily A. Moerer, Assistant Vice Provost

500 Conwell Hall
215-204-4991
emoerer@temple.edu

## Creative Arts, Research and Scholarship Program

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

## Diamond Peer Teachers Program

The Diamond Peer Teachers Program provides upper-level undergraduates at Temple University the opportunity to experience the challenges and rewards of college-level teaching, to work with
faculty mentors to develop their own pedagogical skills, and to provide supplemental instruction in lower-level courses. Peer Teachers earn a stipend and one (1) internship credit. For more information, go to www.temple.edu/vpus/opportunities/index.htm\#peer.

## Undergraduate Teaching with Technology Fellows Program

The Undergraduate Teaching with Technology Fellows Program provides selected undergraduates the opportunity to work closely with Temple faculty members, providing handson training in using instructional technology, recommendations for ways to incorporate technology into teaching, and student perspective on teaching with technology to engage students in learning. Participants are supervised by a Faculty Fellow and receive a semester stipend. For more information, go to www.temple.edu/vpus/opportunities/TechnologyFellows.htm.

## Diamond Research Scholars Program

The Diamond Research Scholars Program offers a seven-month long funded research experience under the direction of a faculty mentor. Participants receive a summer stipend and tuition remission for one (1) hour of research or independent study for their research or creative arts project. Scholars are expected to participate in the annual undergraduate research conference, TURF-CreWS. For more information on the Diamond Research Scholars Program, go to www.temple.edu/vpus/opportunities/ResearchScholars.htm.

## Temple Undergraduate Research Forum - Creative Works Symposium

The Temple Undergraduate Research Forum - Creative Works Symposium (TURF-CreWS) provides ambitious, intellectually-motivated undergraduate students the opportunity to present and defend their original research or creative work among colleagues, faculty, family, and friends. TURF-CreWS is open to all departments and all colleges. Through its emphasis on original research or creative work, from theory-driven critical analysis of significant social issues to the development of unique individual artistic talents, TURF-CreWS seeks to inspire undergraduate students to engage, analyze, critique, and advise the world around them, beginning with their own social, ideological or cultural communities, so that they may contribute ideas that make for a better society and world. For more information on TURF-CreWS, go to www.temple.edu/vpus/opportunities/TURF.htm.

## Accelerated Degree Programs

Temple University offers several Accelerated Degree Programs arranged between undergraduate and graduate or professional schools and colleges. Students apply separately to and must be accepted by both programs. The curricula of accelerated degree programs are not integrated, thus students must complete all curricular requirements of each program. However, the programs may allow special coordination of scheduling or allocation of electives. Upon successful completion
of each component of the accelerated program, the student will receive the degree specific to that component.

Students interested in the dental, medical, pharmacy, physical therapy or podiatry programs should contact Neida Perez in the Office of Pre-Professional Health Studies (www.temple.edu/healthadvising; e-mail: healthadvising@temple.edu; phone: 215-204-2513) as early in their academic career as possible to discuss eligibility, professional school applications and requirements to fulfill both the undergraduate and professional program requirements.

Below is a list of accelerated programs. Click on the program you are interested in to find more information.

## 4+1 Undergraduate/Graduate Accelerated Programs:

Eligible undergraduate students use up to 12 specified graduate credits approved by the school/college to fulfill requirements for their undergraduate degree. Upon graduation from their undergraduate program, students move seamlessly into their graduate program, which they complete in one additional year.

Fox School of Business and Management
B.B.A. (Business Management or Marketing)/M.Ed.

College of Education
B.S.Ed. in Early Childhood Education/M. Ed. in Special Education

College of Engineering
B.S./M.S. in Civil Engineering
B.S. in Civil Engineering/M.S. in Environmental Engineering
B.S./M.S. in Electrical Engineering
B.S. in Electrical Engineering with Computer Engineering Concentration/M.S. in

Electrical Engineering
B.S./M.S. in Mechanical Engineering
B.S. in Mechanical Engineering with Bioengineering Concentration/M.S. in

BioEngineering
B.S.E.T. in Construction Management Technology/M.S. in Civil Engineering

College of Health Professions and Social Work
Nurse Scholars Program

- B.S. in Nursing (BSN)/Doctor of Nursing Practice (DNP) with a concentration in Adult-Gerontology Primary Care (previously Adult Nurse Practitioner)
- B.S. in Nursing (BSN)/Doctor of Nursing Practice (DNP) with a concentration in Family-Individual Across the Lifespan (previously Family Nurse Practitioner)


## B.S. in Therapeutic Recreation/M.S. Recreation Therapy

## School of Media and Communication

Temple University Japan only-- first 3 years at TUJ; last 2 years at Temple Main Campus

- B.A. in Communication Studies/Policy, Regulation, and Advocacy Track/M.S. in Communication Management
- B.A. in Communication Studies/Contemporary Media Environments Track/M.A. in Media Studies and Production
B.S./B.A./Master of Journalism

College of Liberal Arts
B.A./M.A. in Criminal Justice
B.A./M.Ed. in English
B.A./M.A. in English
B.A./M.Ed. in Foreign Languages
B.A./M.Ed. in Geography \& Urban Studies
B.A./M.Ed. in History

School of Environmental Design
B.S. in Community Development/M.S. in Community and Regional Planning

College of Science and Technology
B.A/M.Ed. with Teaching Certification-Secondary Specialization (Biology)
B.S./M.Ed. with Teaching Certification-Secondary Specialization (Biology)
B.S./M.Ed. with Teaching Certification-Middle Level Specializations (Mathematics \& Science or Science \& Literacy)
B.A./M.Ed. with Teaching Certification-Middle Level Specializations (Mathematics \& Science or Science \& Literacy)
B.A./M.A. in Chemistry
B.S./M.A. in Chemistry
B.A./M.Ed. with Teaching Certification-Secondary Specialization (Chemistry)
B.S./M.Ed. with Teaching Certification-Middle Level Specializations (Mathematics \& Science or Science \& Literacy)
B.A./M.Ed. with Teaching Certification-Middle Level Specializations (Mathematics \& Science or Science \& Literacy)
B.A. in Computer Science/M.S. in Information Science \& Technology
B.S./M.S. in Computer Science
B.S. in Computer Science/M.S. in Information Science \& Technology
B.A./M.S. in Information Science \& Technology
B.S./M.S. in Information Science \& Technology
B.A./M.Ed. in Geology
B.S./M.Ed. with Teaching Certification-Secondary Specialization (Geology)
B.S./M.Ed. with Teaching Certification-Middle Level Specializations (Mathematics \& Science or Science \& Literacy)
B.A./M.Ed. with Teaching Certification-Middle Level Specializations (Mathematics \& Science or Science \& Literacy)
B.A./M.A. in Mathematics
B.S./M.A. in Mathematics
B.A/M.Ed. with Teaching Certification-Secondary Specialization (Mathematics)
B.S./M.Ed. with Teaching Certification-Secondary Specialization (Mathematics)
B.S./M.Ed. with Teaching Certification-Middle Level Specializations (Mathematics \& Science or Mathematics \& Literacy)
B.A./M.Ed. with Teaching Certification-Middle Level Specializations (Mathematics \& Science or Mathematics \& Literacy)
B.A./M.Ed. with Teaching Certification-Secondary Specialization (Natural Sciences)
B.A./M.Ed. with Teaching Certification-Middle Level Specializations (Mathematics \& Science or Science \& Literacy)
B.A./M.A. in Physics
B.S./M.A. in Physics
B.A/M.Ed. with Teaching Certification-Secondary Specialization (Physics)
B.S./M.Ed. with Teaching Certification-Secondary Specialization (Physics)
B.S./M.Ed. with Teaching Certification-Middle Level Specializations (Mathematics \& Science or Science \& Literacy)
B.A./M.Ed. with Teaching Certification-Middle Level Specializations (Mathematics \& Science or Science \& Literacy)

## 3+2, 3+3, 3+4 Undergraduate/Professional Accelerated Programs

## 3+2 B.S./M.S. for International Students

3+4 Dental Program (B.A./D.M.D.)

- Biology + Dental
- Chemistry + Dental
- Computer Science + Dental
- Geology + Dental
- Information Science \& Technology + Dental
- Mathematics + Dental
- Natural Science + Dental
- Physics + Dental


## 3+3 Law Program (B.B.A./J.D.)

- Legal Studies + Law

3+3 Law Program (B.A./J.D.)

- Any CLA major + Law

3+4 Medical Program (B.A./M.D.)

- Biology + Medical
- Chemistry + Medical
- Computer Science + Medical
- Geology + Medical
- Information Science \& Technology + Medical
- Mathematics + Medical
- Natural Science + Medical

3+4 Pharmacy Program (B.A./Pharm.D.)

- Biology + Pharmacy
- Chemistry + Pharmacy
- Computer Science + Pharmacy
- Geology + Pharmacy
- Information Science \& Technology + Pharmacy
- Mathematics + Pharmacy
- Natural Science + Pharmacy
- Physics + Pharmacy

3+3 Physical Therapy Program (B.S./D.P.T.)

- Kinesiology + Physical Therapy

3+3 Physical Therapy Program (B.A./D.P.T.)

- Biology + Physical Therapy
- Chemistry + Physical Therapy
- Computer Science + Physical Therapy
- Geology + Physical Therapy
- Information Science \& Technology + Physical Therapy
- Mathematics + Physical Therapy
- Natural Science + Physical Therapy

3+4 Podiatry Program (B.A./D.P.M.)

- Biology + Podiatry
- Chemistry + Podiatry
- Computer Science + Podiatry
- Geology + Podiatry
- Information Science \& Technology + Podiatry
- Mathematics + Podiatry
- Natural Science + Podiatry
- Physics + Podiatry


## Honor Societies

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

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

Golden Key: Golden Key is a national academic honors organization dedicated to excellence. Golden Key is interdisciplinary and unites the talents of the brightest undergraduate students in America. Golden Key also provides service opportunities for all university students.

Membership is by invitation only, and no more than the top $15 \%$ percent of the juniors and seniors enrolled may be eligible. The Golden Key mailbox is in The Student Center where the Student Organization Offices are located.

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

# Student Leadership \& Development Opportunities 

## Office of Leadership Development

Howard Gittis Student Center<br>1755 N. 13th Street, Room 219M<br>Philadelphia, PA 19122<br>215-204-7145<br>www.temple.edu/studentaffairs/leadership/

The Office of Leadership Development works to create future generations of leaders who live and lead with integrity and meaning. We encourage the development of honesty, character and self-awareness by providing avenues for students to impact their own lives as well as create an environment to change communities on local and global levels.

The department's three initiatives are:

- Academic Connections - education and development are most transformational when in and out of classroom learning is intricately linked. Therefore, the office works to create and instruct leadership courses and build connections amongst the various schools, colleges, and faculty that offer existing leadership-related curricular content.
- Diamond Leaders - Diamond Leaders prepare to become impactful leaders in their community through their active roles on campus and their participation on Lead Teams dedicated to programming, service, and peer facilitation.
- Student Leadership Challenge - Service as Temple's signature leadership development program for all students, the Student Leadership Challenge provides dynamic and comprehensive programs that give students access to a rich variety of interactive leadership development opportunities. Students may earn their way to becoming a Diamond Leader by participating in these programs throughout the year and earning Leadership Diamond Points.

In addition to the events in the Student leadership Challenge, the office sponsors the LeaderShape Institute and hosts the Leadership Living Learning Community through University Housing and Residential Life.

## Student Activities

Howard Gittis Student Center
1755 N. 13th Street, Room 219M
Philadelphia, PA 19122
215-204-7131
http://studentactivities.temple.edu/
@tuactivities
Looking for something to do on campus? You are in the right place! Student Activities enhances the student experience by developing and empowering students, creating opportunities for
meaningful interpersonal relationships, supporting student organizations, and providing fun, engaging programs for the diverse campus community.

One of the best ways to get involved is to become a member of our registered organizations!

## Student Organizations

Student Activities works to support and empower student organizations as they enhance campus culture with their events, ideas and leadership. The staff aims to serve as a resource, and provide a path of development for students outside the classroom. With groups devoted to everything from cultural groups to competitive dance to community involvement, chances are we have a registered organization for you. Our office provides these organizations with meeting spaces, financial management, programming assistance, and anything else they need to contribute to student life at Temple University.

## Fraternity and Sorority Life

Student Activities supports fraternities and sororities as they provide a focus on leadership, scholarship, service and brotherhood/sisterhood. These groups foster lifetime relationships both between members and to the University and contribute to the diversity of campus. Each chapter falls under the umbrella of the Interfraternity Council, the Multicultural Greek Council, the National Pan-Hellenic Council, and the Panhellenic Association. The groups all come together for community events planned by the Temple University Greek Association.

## Main Campus Program Board (MCPB)

MCPB is a student-led organization that plans the largest events on campus. From road trips to Broadway shows to campus concerts, you can help us plan any event you would like to see on campus. Follow us on Twitter @TemplesMCPB or go to www.temple.edu/mcpb to learn more about the events that will become the highlight of every Temple student's college experience! Along with Student Activities, we help plan and implement the following University events:

- Welcome Week: The entire campus joins together to welcome all new and returning students to campus. A FREE concert, hypnotist and a 100-foot banana split have been highlights from past years!
- Homecoming: Enjoy pep rallies, pageants, and great sporting events.


## Temple Student Government (TSG)

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

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

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

## Philly Connections

Philly Connections presents students with the opportunity to experience the many cultural aspects of a major U.S. city within the budget of a college student. Encompassing every fun event in and around the area, students are given a rare chance to experience Philadelphia at fantastic discount prices! Check out our web site for deals on sporting events and theater tickets.

## Free Food and Fun Fridays

Check out the Student Center Atrium every Friday from 10 p.m. to 1 a.m. for your weekly dose of FREE Food and Fun. The events on tap for the evening are different each week, but you are guaranteed a chance to win prizes, listen to your favorite music, and eat a fulfilling snack!

## Memorable Moments

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

## Service Immersion

The vision of the immersion program is to actively engage Temple University students in meaningful experiences that foster cultural awareness, global understanding, and social responsibility through learning, service and reflection. Students are encouraged to apply in the fall semester for our three programs in the spring semester: Philadelphia, South Dakota and El Paso, Texas.

## Additional Student Activities

In addition to the Main Campus activities listed above, the Temple University Ambler campus offers a variety of student activities. Please visit www.temple.edu/ambler/student life, or contact the Office of Student Life (267-468-8425) in Bright Hall, Room 101, for further information.

## Office of Student Media

## Howard Gittis Student Center

1755 N. 13th Street, Room 304
Philadelphia, PA 19122
Students on the Main Campus produce their own editorially-independent newspaper, The Temple News, during the academic year and distribute it to all campuses. The Temple News is published weekly in print (each Tuesday during the fall and spring semesters) and provides daily updated content, which also includes photo slide shows and video pieces, online at www.temple-
news.com and on its blog, Broad\&Cecil, at http://broadandcecil.temple-news.com. The Temple News was one of 10 non-daily newspapers to win the prestigious Pacemaker Award from the Associated Collegiate Press in 2006 and was named a finalist for the award in 2007 for its print and online product. In 2008, The Temple News won an Online Pacemaker award for its web site and followed that up by winning the prestigious EPPY award from Editor\&Publisher in 2009 for having the nation's best college newspaper web site. In 2012, the paper won four Keystone Press awards from the Pennsylvania Newspaper Association. Readers can follow The Temple News on Twitter @TheTempleNews.

Students also produce and publish Templar, Temple's undergraduate annual yearbook. Templar is a three-time winner of the American Scholastic Press Association's first place award as one of the top college yearbooks in the country, having won the award in 2006, 2007 and 2008. Readers can follow Templar on Twitter @TemplarYearbook.

The Office of Student Media now advises WHIP, Temple's student-run internet radio station that broadcasts out of its studio in room 108 of the TECH Center. WHIP is an acronym that stands for "We Have Infinite Potential." The station broadcasts a wide array of programming, from news to sports to a diverse musical format, and is now one of just 14 stations nationally to be featured through Clear Channel's iHeart Radio College Radio category. Listeners can follow WHIP on Twitter @WhipRadio.

Students at Temple University Ambler campus produce The Parable, a literary magazine each spring, as well as The Temple Column newspaper. Students at Temple University Ambler campus also manage and operate their own radio station, WRFT 1610 AM, which broadcasts a variety of music formats. Visit www.temple.edu/ambler/student_life for more information.

## Academic Support

## Academic Computer Services

Students can take advantage of a number of first-class technology resources available at Temple University, including the TECH (Teaching, Education, Collaboration and Help) Center, a 75,000-square-foot, state-of-the-art technology facility located on Main Campus at 12th Street and Montgomery Avenue. The TECH Center contains 700 computers available for student use; 13 breakout rooms for collaboration and group study; specialized labs, including video editing, recording booths, music composition, graphic design and multimedia studio; social space with lounge areas and plasma televisions, and a Starbucks café. In addition, for the convenience of students, there is 24 -hour access to the center. For more information on the TECH Center, go to http://techcenter.temple.edu.

A 24-hour Help Desk is also located in the TECH Center. At the help desk, professional consultants offer technical assistance on a wide range of computer topics. To obtain assistance, students can stop by the Help Desk on the first floor of the TECH Center, call 215-204-8000, or send an e-mail to help@temple.edu.

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

TUmail is an integrated e-mail system accessible anywhere on the internet to students using a web browser or software such as Microsoft Outlook or Google Mail. The Blackboard system enables faculty and students to share coursework materials and discuss topics online. Self Service Banner allows students to view course prerequisites and register for classes, view rosters, check grades, view account balances and financial aid information, and pay bills, all on the web.

For up-to-date information on the rapidly-changing nature of technology at Temple, including wireless access and security awareness initiatives, go to the Computer Services web site at www.temple.edu/cs.

For the locations of Computer Services Help Desks at Ambler, Fort Washington, TUCC and the Health Sciences Center, go to the Walk-In Support section of the Computer Services web site (www.temple.edu/cs/helpdesk/contact/walkin.htm).

The Ambler Learning Center on Ambler Campus is a state-of-the-art facility incorporating smart classrooms, wireless technology, new computer labs/classrooms, breakout room and study lounges.

## Academic Resource Center

The Academic Resource Center was created to serve the needs of Temple University students who have not yet decided on a school/college or major. The team of professionally trained and dedicated academic advisors will assist students in navigating the transition to campus life as well as provide academic and career exploration assistance to our students. Services include individual and group advising appointments, academic success workshops, and major exploration programs all tailored to support personal growth and to promote scholastic achievement.

Academic advisors are available 9:00 a.m. - 4:30 p.m. on a walk-in basis on Monday, walk-in or appointment basis Tuesday through Thursday, and by appointment on Friday. Please call 215-204-2500, visit www.temple.edu/vpus/arc, or stop by our office for assistance.

## Advising

It is recommended, and in some cases required, that students consult with an advisor prior to registration. The advisor reviews the proposed coursework and attempts to keep students informed of the requirements for graduation. In addition, the advisor helps the students achieve breadth in the curriculum and provides other assistance as needed.

Academic advisors strive to avoid errors when advising students about program requirements, although the college cannot assume liability for errors in advising. Students must, therefore, assume primary responsibility for knowing the requirements for their degree and for acquiring current information about their academic status.

Students are required to meet with an advisor when they do not meet the academic standards set by their college. See the Academic Policies section of the Bulletin, called Academic Standing, for detailed information.

Each school, college, and campus of the university offers a range of academic advising for students. Professional advisors and/or faculty advisors help students plan curriculum, choose majors, make vocational and post-graduate plans, and resolve a variety of academic issues. Students should consult the specific advising unit in their colleges and schools for services and policies that apply to them. Please refer to your school or college section of this Bulletin for locations and specific information about these units.

Some of the services offered by the advising centers are:

- New Student Orientation for freshmen and first semester transfer students.
- Curriculum advising for continuing students who have completed fewer than 30 credit hours. Students with a declared major and more than 30 credits should see their school or college Advising section of this Bulletin to determine advising policies that apply.
- Students enrolled in the University Honors Program may also be advised in the Honors Office in Tuttleman Learning Center until they have completed 60 semester hours, with the exception of the Fox School of Business and Management. All other students are advised in their departments.
- Registration Assistance for students. This includes online processing of original registrations and/or schedule revisions, and course withdrawals through the ninth week of the spring/fall semester and the third day of the summer sessions.
- Academic counseling for students to develop a meaningful education plan compatible with life goals. Through contact with departmental faculty, students gain an in-depth appreciation of a specific discipline and discover opportunities associated with their field of interest. Students can also meet with advisors to discuss a variety of academic concerns and develop some possible solutions. Students experiencing academic difficulty work with advisors to learn strategies for overcoming the obstacles to success.
- The advising centers help students understand the policies and procedures that are integral to achieving a successful and fluid transition through university life. This includes such things as Academic Progress Reports, Academic Good Standing, Grievance procedures, and registration policies.
- Intra-University Transfer (IUT) Advising for students changing programs or campuses at Temple.
- Withdrawal and Readmission interviews.
- Graduation Reviews for students entering their senior year.
- Petition Requests are initiated by the advising center on behalf of the student and include: attending another university for a semester or summer course, grading in one course on a credit/no credit system, registering for an overload, evaluating life experience credit and
credit by examination, reviewing of transfer credit evaluation, considering DARS exceptions, and receiving approval for an exception to policy.
- Referral to other services. Advisors make referrals to such services as financial aid, career development, counseling, tutoring, disability services, and testing.
- Preparation for Registration. Advisors aid students in the period during the fall and spring semesters when currently-enrolled students register. Prior to the processing of their registrations, students should meet with advisors to review their DARS documents and discuss course selections for the upcoming semester. DARS for all students are available on the web through the TUportal.


## Student Athlete Academic Advising \& Support Center

Justin Miller, Director
1800 N. Broad Street
Pearson Hall 103
215-204-9002
www.temple.edu/vpus/rasc/index.html

## Hours of Operation

Center Hours:
Monday-Friday 8:30 a.m. - 5:00 p.m.
The Student Athlete Academic Advising \& Support Center (SAAASC) monitors the academic progress of all student athletes. From the admissions stage through graduation, the center provides coordination of academic services, academic counseling and advising, and tutoring services. The center has a strong commitment to the education and graduation of all student athletes.

The mission of the Student Athlete Academic Advising \& Support Center at Temple University is to assist all student athletes in their development as individuals and as active members of the university community. The center will provide an environment that fosters student- athletes’ personal, academic, and social growth. The Center also supports student-athletes by coordinating and providing the resources and opportunities for them to develop and refine the skills needed to achieve their personal and academic goals.

SAAASC promotes academic excellence by ensuring student-athletes' welfare at every opportunity, while empowering student- athletes in their decision-making and their development of life skills. Student-athletes will be accountable and responsible members of Temple University and the surrounding communities.

## Study Hall

In order to assist student athletes with balancing their academic endeavors with their athletic commitments, the Student Athlete Academic Advising \& Support Center provides structured, quiet study hall services to student athletes.

The study hall facilities in Pearson Hall are available to student-athletes Monday through Thursday from 9 a.m. to 3 p.m. and 6 p.m. to 9:30 p.m., Fridays 9 a.m. to 3 p.m., and Sundays 2 p.m. to 5 p.m.

Study hall hours in the Edberg-Olson Football Complex are determined by the football staff.

## Student-Athlete Tutoring

Tutoring is a service offered to student-athletes by the Student Athlete Academic Advising \& Support Center. The tutorial program is a supplement to classroom instruction, individual study, and preparation.

Tutorial services are available on an individual, small group, and walk-in basis during scheduled study sessions. Review sessions for courses with high student-athlete enrollment are also offered throughout each semester.

Tutor Program Contact:
Allison Vendt, Program Coordinator
215-204-4966 (Direct Line)
215-204-9002 (Main Office number)
avendt@temple.edu

## Degree Audit Reporting System (DARS)

Debbie Bennett-Kenney, DARS and Transfer Systems Coordinator
Sheila Brogden, DARS Sr. Encoder
dars@temple.edu
www.temple.edu/vpus/resources/dars.htm

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

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

Using the new interactive audit, students can view and run degree audits online, and project how future courses might apply towards their degree. A new feature allows students to view details of the courses required, such as the description and its attribute(s). This function is easily activated by clicking on a course link within the audit. Audits are web-based, secured, highly-interactive, and compatible with major modern browsers.

Students can request a degree audit by clicking on the Student Tools tab in TUportal and then, in the Records channel, clicking on Degree Audit.

Students can learn more about DARS at the DARS web site, including information about how to interpret the DARS, general resources available in the DARS office, and general information about the system.

## Pre-Professional Health Studies: Advising \& Programs

Neida Pérez, Ed.M., Director
Pre-Professional Health Studies
1810 Liacouras Walk, Suite 100
215-204-2513
healthadvising@temple.edu
www.temple.edu/healthadvising
The office of Pre-Professional Health Studies at Temple University provides advising, counseling, and application support for students interested in preparing for specific careers in health care. Advising offered by the office supplements the academic advising (course registration, major requirements and graduation review) provided by the Academic Advisors in the student's primary college which is based on their Major program of study.

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

Health Professional schools for:

- Dentistry
- Medicine
- Optometry
- Pharmacy
- Podiatry
- Veterinary Medicine
-or-
Graduate Program options in:
- Physical Therapy
- Occupational Therapy
- Physician Assistant

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

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


## Special Admissions Programs

## The Pre-Med Health Scholar Program

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

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

 Accelerated Programs allow Pre: Dentistry, Pharmacy, and Podiatry (3+4 Tracks) as well as Physical Therapy ( $3+3$ Track) students the option of earning both their Bachelor of Arts and Graduate degrees in a shorter period of time after successfully passing all courses in the first year of professional school. Each program offers a Linkage Agreement with the corresponding Temple University professional school or graduate program.Applications from interested entering freshman are available on the health advising web site. Completed applications are due by the end of the first semester at Temple University. The Accelerated BA/DMD, BA/PharmD, BA/DPM, or BA/DPT Programs are designed for highachieving students who have distinguished themselves with impressive high school academic records and a demonstrated interest in their respective field.

## Scholar Development and Fellowships Advising

Tuttleman Learning Center, Suite 201
215-204-0708
215-204-0704 (fax)
www.temple.edu/vpus/fellowships/
Temple University students are eligible to apply to a variety of funded opportunities, including scholarships, fellowships, funded summer research opportunities and funded internships.

Fellowships Advising will help any Temple student identify awards and opportunities that are well suited to their aspirations and accomplishments, and will provide guidance and support throughout the application process.

## The University Libraries

## http://library.temple.edu/

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

The combined collections include more than 3 million volumes and 27,000 current serial subscriptions, and over 600 research databases, as well as extensive collections of microforms, maps, photographs, and audiovisual materials.

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

Information retrieval: Research databases, full-text resources, the online catalog, electronic references, and other information and services are at http://library.temple.edu/. The online catalog (diamond.temple.edu) lists library holdings and course reserves and their circulation status, and links directly to selected electronic course reserve materials. The Paley Library offers a computing commons and hundreds of seats for study. A media services center provides access to audio-visual resources, and offers specialized viewing/listening stations and study rooms.

Expert assistance in using the library resources is provided by reference staff. Students are introduced to basic information literacy skills through the University General Education program. Librarians collaborate with faculty to integrate research skills development into general education courses, such as the freshman Analytical Reading and Writing course. Librarians also provide user education classes tailored to individual courses. Individual questions are answered in person, as well as by phone, e-mail, text message, online chat, and IM. Go to the Ask A Librarian web site at http://ask.library.temple.edu/ to ask questions and retrieve information.

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

## Locations:

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

- Ambler Library, 580 Meetinghouse Road, Ambler, PA 19002, 267-468-8640
- Charles L. Blockson Afro-American Historical Collection, Sullivan Hall, Main Campus, 215-204-6632
- Harrisburg Library, 234 Strawberry Square, Harrisburg, PA 17101, 717-232-6400
- Health Sciences Library, 3500 N. Broad Street, Health Science Campus, 215-707-2665
- Charles E. Krause Library of Podiatric Medicine, School of Podiatric Medicine, 8th and Race Streets, Philadelphia, PA, 215-629-0300
- Law Library, Charles Klein Law Building, Main Campus, 215-204-7981
- Paley Library, 1210 W. Berks Street, Main Campus, 215-204-0744
- The Science and Engineering Library, College of Engineering Building, Second Floor, Main Campus, 215-204-7828

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

- College of Liberal Arts Educational Technology Center, AL-21 Anderson Hall, 215-204-8265
- Esther Boyer College of Music Alice Tully Library, Rock Hall, 215-204-5531
- Esther Boyer College of Music Listening Library, 100 Presser Hall, 215-204-8338
- Social Science Data Library, 863 Gladfelter Hall, 215-204-5001


## Math \& Science Resource Center (MSRC)

Mona Zaoudeh, Director
1810 Liacouras Walk, Room 201
215-204-8466
www.temple.edu/msrc

## Hours of Operation for Fall and Spring Semesters on Main Campus:

Monday-Thursday, 8:30 a.m. - 8:30 p.m.
Friday, 8:30 a.m. - 3:30 p.m.
Saturday, 10:30 a.m. - 2:30 p.m.
(Summer I and II hours of operation can be found on the MSRC web site)

## Ambler Campus

102 Learning Center
Visit the MSRC web site for hours of operation: www.temple.edu/msrc/tutoring/schedules
The Math and Science Resource Center's (MSRC) mission is to create a dynamic, effective learning environment for Temple undergraduate students. The MSRC provides academic services and resources for a range of courses from mathematics and statistics to biology, chemistry and physics. The services and resources are available to all students: from those who are experiencing difficulties in a course to those already excelling academically.

To help students learn and master math and science course content, the MSRC offers individual/group drop-in tutoring in its Main and Ambler locations, as well as online tutoring for Ambler and TUCC students. MSRC tutors are Temple students majoring in Biology, Chemistry, Mathematics, Physics, Statistics and related fields. These tutors receive special training to develop effective tutoring strategies in their specific field of study. This training prepares tutors to help students, especially those new to university-level courses, overcome their difficulties.

In addition to tutoring services, the MSRC provides an array of resources to help Temple students achieve their academic goals. Tutors use sample problem sets approved by academic departments to conduct exam review sessions that emphasize fundamental principles introduced in the classroom. At the end of each semester, final exam review sessions are provided for classes with high enrollments. During these sessions, tutors reinforce material presented during the course and address specific questions students may have. Workshops for specific courses are offered per an instructor's or special program's request.

The MSRC has a fully-equipped computer laboratory/classroom designed for working in mathematics and science, and for assisting other students who are working on web-based assignments or need to use specialized software such as Matlab or Maple. The workstations have both color and laser printers to produce finished, high-quality assignments. The MSRC also has a Laptop Loaner Program in the tutoring lab so that students can access online assignments and software while working with a tutor. In addition to the computer laboratory, the MSRC also has a resource library where students may borrow materials, such as textbooks, student solutions manuals, reference books, and calculators.

A valid Temple student ID is all that is needed to use any of the MSRC's resources or services. Visit the MSRC office or web site (www.temple.edu/msrc) for up-to-date announcements and resources.

## The Russell Conwell Learning Center

## Recipient of the National "2011 Lee Noel - Randi Levitz Retention Excellence Award"

Michael Stokes, M.Ed., Director
1700 N. Broad Street, Room 202
215-204-1252
michael.stokes@temple.edu
www.temple.edu/rcc
The Russell Conwell Center is a University Learning Center designed to help you become a more effective learner. If you want to perform better academically, get higher grades, review/prepare for a class, enhance your leadership skills, or chart a career path come to the Russell Conwell Center (RCC). The RCC is comprised of a network of programs providing comprehensive academic support, professional development, and leadership training to facilitate student retention and graduation and to help students prepare for their future careers. Among the academic support students have available are:

- Academic coaching
- Tutoring
- Career exploration and development
- Specialized career and learning assessments
- Educational workshops
- Certificate skill proficiency programs
- professional development seminars
- Leadership development
- Academic counseling
- Supplemental Instruction for Science, Math, Social Science courses

The RCC also has six computer labs and a laptop loan program for student use. The RCC employment program hires over 100 students each year as tutors, classroom assistants, instructors and office assistants. Furthermore, the RCC serves as the home of the Supplement Scholarship Committee, providing annual scholarships to over 100 Temple University students. In addition to serving students during the academic year, the RCC offers a six-week Summer Bridge Program for entering freshmen through its "Freshmen Admission Programs" described below. The RCC also serves Philadelphia high school students who aspire to attend college through two Temple University Upward Bound Programs. The RCC offers a wide range of services and support to students in high school and undergraduate education and preparation for graduate school. Stop by and see how we can assist you.

## Undergraduate Support Programs and RCC Freshman Admission Programs [Emerging Scholars Program, Classic Student Support Services, and STEM Student Support Services]:

These three RCC programs provide academic support and retention services for freshmen or current students, who seek to achieve academic success, build leadership, join a supportive community, or participate in educational and cultural programs. The RCC programs offer extensive leadership opportunities and internships for students to strengthen their skills and learn strategies and concepts, while applying their skills in various leadership experiences. Students can arrange individual tutoring or join a study group for those courses that are most challenging. If a study group is not available in your desired course, you can form one with the assistance of RCC staff. Staff will also provide an individual review of your study skills and strategies to develop the optimum plan for you. Moreover, online and in-person workshops are available for students, covering academic, career, leadership, cultural and professional development topics.

The mission, objectives and services of the three programs are essentially the same, with the primary distinctions established by state or federal requirements as outlined by the different funding sources. Students admitted by the Temple Office of Undergraduate Admissions and assigned to the RCC may begin their university experience during a six-week Summer Bridge Program prior to their fall enrollment. Upon successful completion of the Summer Bridge Program, students matriculate as Temple University freshmen in the fall semester and receive advisement, academic support and service from the RCC throughout their undergraduate career. The Summer Bridge Programs are an excellent opportunity to get a "jump start" on your Temple education. The program is designed to improve student's academic skills in mathematics, writing,

English, and research and library skills. Students complete various academic assessments and develop a four-year academic plan to keep them on track toward graduation. Students also receive academic and educational counseling to facilitate their successful transition into the collegiate academic, social, and cultural milieu, creating a foundation for academic excellence. Students currently attending Temple can join the RCC by contacting Michael Stokes at 215-2045544 or by visiting the office at 1700 N. Broad St., Room 202.

## Pre-College Programs [Upward Bound and Math Science Upward Bound Programs, both funded by the U.S. Department of Education]:

The Upward Bound and Math Science Upward Bound Programs prepare Philadelphia high school students for successful entry into, and graduation from, college. During the academic year and six-week summer program, students participate in academic enrichment; enroll in mathematics, English and science classes; attend workshops; and receive tutorial services and leadership development. A full range of academic assessment and counseling is also provided with a focus on academic, career, financial and personal development. Students are guided through the career development process to understand and select appropriate majors, leading to a career that matches their interests, skills, and abilities. Students also receive SAT preparation throughout the program. During the summer program, students reside on campus at Temple University during the week to gain insight into, and experience the nuances of, college life. In addition, the programs assist students in developing their leadership and public speaking skills, while sponsoring field trips, college tours and site-visits to educational, cultural, and sciencerelated institutions. While students in the Math Science Upward Bound Program receive the same programmatic services, they also spend their summer preparing a biological, mathematical or technological research proposal that is presented at the Summer Science Symposium. This research proposal is then conducted during the academic year and presented at the city-wide George Washington Carver Science Fair. For more information contact Michael Stokes at 215-204-5544 or Vanessa Atkins at 215-204-7653 or stop by the office at 1700 N. Broad St., Room 202.

## Tutoring Services

Tutoring at no charge is available in the following schools, colleges, and departments:
Main Campus and Health Science Campus
Accounting
403 Alter Hall
215-204-8110

Alliance for Minority Participation (AMP) Bridges to Baccalaureate Program
A306 Barton Hall
215-204-4550

College of Health Professions
1316 Ontario St.

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Jones Hall, Room }51
215-707-8214
Economics
6 2 6 ~ R i t t e r ~ A n n e x ~
215-204-8880
Engineering
Engineering Building, Room 349
215-204-7800
Finance
401 Alter Hall
215-204-8451
French
Anderson Hall, Room 512
215-204-8266
Intellectual Heritage
215A Anderson Hall
215-204-1770
Kinesiology (formerly Physical Education)
Tutoring is available to students enrolled in 1223 or 1224, Anatomy and Physiology. 215-204-1947
Marketing
501 Alter Hall
215-204-8111
Math and Science Resources Center (MSRC)
Walk-in basis, no appointments necessary
1810 Liacouras Walk
Room 201 - Main Office
Room 208 - Tutoring Lab
215-204-8466
www.temple.edu/msrc/
Praxis Tests
Office of Student Services
College of Education
215-204-6010
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Risk Management and Insurance (RSK MGT)
601 Alter Hall
Tutoring is available for RSK MGT 2101
Russell Conwell Educational Services Center
Group and individual tutoring are available in numerous courses upon request; there is also the opportunity to join ongoing, structured study sessions or participate in Supplemental Instruction for highly demanding science and math courses.
1700 N. Broad, Room 202
215-204-1252
www.temple.edu/rcc
Social Work, School of
New Career Ladders in Social Work
521 Ritter Annex
215-204-7611
William Thompson, Communication Skills Instructor
650 Ritter Annex
215-204-6029
Statistics
390 Speakman Hall
215-204-8144
University Writing Center
201 Tuttleman Learning Center
215-204-0702
www.temple.edu/writingctr

## Ambler Campus

Office of Academic Advising and Career Development
109 West Hall
267-468-8200
Math/Science Resource Center
102 Learning Center
267-468-8386
www.temple.edu/msrc
Writing
102 Learning Center
267-468-8204

## Center City Campus

Statistics
Sixth Floor, 1515 Market St.

## Other Tutoring Sources

- Instructors may be able to recommend tutors, often graduate students working toward master's or doctoral degrees in the department.
- Departmental offices generally have lists of qualified tutors available to work with undergraduates.
- The Student Assistance Center, first floor, Student Center, Main Campus, maintains a list of students available to tutor in a variety of subjects. These tutoring services often are available for a nominal hourly fee, arranged with the tutor.
- At the Ambler campus, the Office of Academic Advising and Career Development, 109 West Hall (267-468-8200), maintains information about tutoring services.


## The University Writing Center

Lori Salem, Director
www.temple.edu/writingctr
Locations and Hours:

## Main Campus

Hours: Monday - Thursday, 8:30 a.m. to 8:30 p.m.
Friday, 8:30 a.m. to 4:30 p.m.
Saturday 10:00 a.m. to 4:00 p.m.
201 Tuttleman Learning Center
215-204-0702

## Ambler Campus

Call 267-468-8204 for hours
102 Learning Center
The University Writing Center provides services to students and faculty across the university. These services include tutoring, workshops, and seminars, as well as a computer classroom. Many of these services, including tutoring, are accessible online through the center's web site. All services are free-of-charge to Temple students and faculty. Tutoring services are offered on a drop-in basis or by appointment.

Center staff include graduate students and advanced undergraduates from a variety of fields and disciplines, including history, English, philosophy, education, and honors. All are selected based on their demonstrated writing ability and teaching aptitude. Staff participate in regular professional development sessions.

## Services for Students

Students can work one-on-one or in small groups with center staff on writing being done for any course. They may also bring writing being done outside of course work. Tutors work with students at any stage of a writing project, from planning and drafting to revising and editing. They encourage students to focus on specific aspects of their writing, such as organization, sentence clarity, or paragraph structure. Writing Center staff cannot edit students' papers for them.

Students who come to the center for tutoring can also make use of the center's computer lab. They can use desktop publishing software to write and print papers; plan, outline, revise, edit, and proofread; and format and generate bibliographies and citations. The lab is connected to the internet; students may access the web and all library research facilities. Help is available for using these technologies. The lab also includes hardware and software designed to assist students with disabilities.

The center maintains an interactive web site. Students can access and download resources and handouts, and they can also access online tutoring. Students can submit papers or questions to the e-mail tutoring service, and they will receive a reply from a tutor within 24-36 hours.

## Services for Faculty

Faculty teaching a writing or writing-intensive course can request an in-class writing workshop on a wide variety of topics. The writing workshops are interactive, and they are tailored to specific courses and assignments. To request a workshop, faculty can call the center or access the center's web site.

Faculty can also request a writing fellow to support their teaching in writing-intensive courses. Writing Fellows are specially-selected graduate and upper-division undergraduate students who are carefully trained to work as peer tutors. Fellows are paired with writing-intensive courses in the disciplines, and they provide tutoring for all students in those classes.

Faculty teaching writing-intensive courses are invited to request use of the center's state of the art computer classroom. This 27-station classroom is organized in a seminar style, with access to projection and to the internet. Technical support for faculty using this facility is also available.

## Student Services

## Career Center

220 Mitten Hall
215-204-7981
215-204-4462 (Fax)
www.temple.edu/careercenter

Serving all Temple students and alumni, the Career Center provides a full range of services to optimize internship and employment opportunities and enhance lifelong career success.

## Both in person and over the web we provide:

- Career assessment, exploration programs/resources and industry information to help you Explore your options for your major and career.
- Guidelines, strategies and expert advice on resume and cover letter writing, interviewing and job search skills to help you Learn how to market your best self.
- On-line job and internship postings and on-campus recruiting through the OwINetwork, Career Fairs and web resources to help you Connect with employers for internships, part-time and fulltime positions.


## Two ways to access our rich resources:

Career Coaching:
15-minute drop-in appointments
30-minute scheduled appointments
Group workshops
Virtual Career Center:
www.temple.edu/careercenter
24/7 access to all of these resources, and more!
Disability Resources \& Services

100 Ritter Annex
1301 Cecil B. Moore Avenue
215-204-1280
215-204-1786 (TTY)
215-204-6794 (Fax)
www.temple.edu/disability
Attending a university can be exciting and challenging for any student, and equally so for students with a disability. However, students with a disability have told us they have extra considerations, some of which they can sort out themselves and some for which they may need assistance. Disability Resources \& Services is here to assist you in ensuring your disability does not obstruct your academic success.

We have over 30 years experience in supporting students with a disability and have a team of knowledgeable staff ready to assist you.

It is estimated that 8\% of university students have some kind of disability. Students with a disability include those with physical, visual, hearing, medical, psychological, and learning disabilities. The largest groups of students who use our service are those with learning disabilities, attention-deficit hyperactivity disorder, and psychological disabilities.

Temple University provides the following support services to students with a disability:
o Pre-College Prep Information
o Intake Assessment
o Campus Accessibility
o Placement Exam Accommodations
o In-Class Support Services

- Note-taking
- Testing Accommodations
- Alternate Format Materials
- Sign Language and CART Services
o Access to Assistive Technology
- Screen Readers
- Text to Speech Software
- Speech to Text Software
- Alternate hardware - keyboard, mouse, etc.
- Assistive Listening Devices
o Accessible Housing Options
o Scholarship Information and Resources
We strive to ensure disability does not become an obstacle to academic success for any student who chooses Temple University. Contact Disability Resources \& Services and allow us to work with you in ensuring your educational experience is barrier free.

Disability Resources \& Services is a confidential service.
Check out our web site www.temple.edu/disability and see how we can assist you.
Services are available at all Temple University campuses. Some Disability Resources \& Services' campus contacts are listed below. For contact information at other campuses, go to www.temple.edu/disability/contact.html.

## Temple University Main Campus

100 Ritter Annex
1301 Cecil B. Moore Avenue
Philadelphia, PA 19122
215-204-1280 (Voice)
215-204-1786 (TTY)
215-204-6794 (Fax)
drs@temple.edu
www.temple.edu/disability

## Temple University Ambler and Fort Washington

West Hall 109
580 Meetinghouse Road
Ambler, PA 19002
267-468-8200 (Voice)

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267-468-8262 (TTY)
267-468-8201 (Fax)
www.temple.edu/ambler/ac_services/disability.htm
Temple University Center City (TUCC)
Advising Coordinator
1 5 1 5 \text { Market Street, First Floor}
Philadelphia, PA 19102
215-204-4358 (Voice)
215-204-1900 (TTY)
215-204-5813 (Fax)
Temple University Harrisburg
Academic Advisor
234 Strawberry Square
Harrisburg, PA 17101
717-232-6400 (Voice)
717-231-3667 (TTY)
717-221-1634 (Fax)
866-769-1860 (Toll Free)
Health Sciences Center, College of Health Professions and Social Work
Associate Dean
3307 North Broad Street
Philadelphia, PA }1914
215-707-4800 (Voice)
215-707-7819 (Fax)
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## Veteran Affairs

215-204-6130 or 267-468-8102
tuvets@temple.edu
www.temple.edu/veterans
Making the transition from military to college life can be challenging. To assist with this transition, Temple University Veteran Affairs works with the various university departments to plan and implement educational and social programs to help veteran students succeed at Temple University

Designated a Military Friendly School for 2013-2014 by G.I. Jobs Magazine, Temple University, a proud participant of the Yellow Ribbon Program, provides access to excellence and opportunities for success for military service members and veterans who are admitted to and/or enrolled at Temple. Each school and college at the university, as well as all the key student services departments that provide direct service to veterans, has a designated veteran point of contact person to help assist students. Each school and college also has a veteran academic
advisor. More information can be found on the web site at www.temple.edu/veterans. The University is committed to assisting these students with making a smooth transition from the military to student life.

For more information, please contact the Associate Director for Adult and Veteran Student Recruitment at 215-204-6130 or 267-468-8102 or e-mail tuvets@temple.edu. Questions regarding the certification process and VA benefits can be directed to the University's Certifying Officer in the Office of the University Registrar at 215-204-7378.

## Campus Recreation

Steve Young, M.Ed., Director
Pearson McGonigle Halls 048-02
Suite 303, 1800 N. Broad Street
215-204-1267
215-204-3800 (Fax)
campusrec@temple.edu
www.temple.edu/studentaffairs/campusrec
www.twitter.com/templecampusrec
www.facebook.com/templecrec
Temple University Campus Recreation, a department within the Division of Student Affairs, is the coordinating office for recreational sports programs at Main Campus. More than 4,000 students, faculty, and staff participate daily in one or more of the various activities offered by our office. These activities include intramurals (men's, women's, co-rec), sports clubs and organizations, informal recreation, special events and programs, group fitness, adapted recreation, aquatics, and student staff development.

## Facilities

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

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

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

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

Pearson McGonigle Halls - 1800 N. Broad Street, 2nd Floor Fitness Mezzanine Area The Fitness Mezzanine is a new informal recreation area located on the second floor of the Pearson McGonigle Halls. The 2,200 square foot Fitness Mezzanine features the following equipment: 14 cardio machines, 8 selectorized pieces, interactive Xbox Kinect and Nintendo Wii
gaming stations and 3 heavy bag and 3 speed bag workout stations. Boxing workout and gaming stations are available during designated hours; please check the Campus Recreation web site for more information. General Campus Recreation access policies and equipment use policies apply. Access to the Fitness Mezzanine Area must be through the second floor - Room PH-200.

## Pearson McGonigle Halls - 1800 N. Broad Street, Climbing Wall, Atrium

Recreational climbing is now available in the Pearson McGonigle Halls Atrium, featuring a 26 foot climbing wall, a 26 foot free standing tower and a 12 foot bouldering wall. Hours of operation will be listed on the Campus Recreation web site each semester. Equipment available for recreational use will include harnesses, carabiners, and climbing shoes. Orientations, belay certifications and climbing clinics will be offered at specified times throughout the semester. ID with valid recreation access is required to enter the climbing wall area. Limited space is available in the climbing wall area for patron access. Please Note: Due to the nature of climbing wall activities and the safety orientations required to use the wall, guest pass holders are not permitted entry into the climbing wall area. Special event activities are offered throughout the semester as well. Alterations to the normal schedule will be posted in the facilities and on the web site in advance.

## Pearson McGonigle Halls Pools (30/31) - 1800 N. Broad Street, Ground Level

Aquatics programs are held in Pearson Hall Pools $30 \& 31$. Pool 30 is available for scheduled recreational swimming hours with some specific hours identified for lap swimming. Other aquatics events throughout the semester include: Swim into Shape, Water Aerobics, and Learn to Swim/Guard Classes.

## Temple University Fitness Center (TUF) - 1600 N. Broad Street, 2nd Floor

The TUF center is a 16,000 square foot fitness facility that includes cardiovascular machines and selectorized weight training equipment. It also has significant space dedicated to circuit training, light weight, strength and core workout areas. TUF has backpack locker and sport towel services as well as a lounge area available for use by students, employees and alumni rec patrons.

## Temple Administrative Services Building Fitness Center - 2450 W. Hunting Park Avenue

Campus Recreation manages the employee-only 4,300 square foot corporate fitness center at Temple's Administrative Services Building (TASB). The center offers a full line of strength equipment, numerous cardiovascular exercise machines and stretching/abdominal areas. Access is available through payroll deduction.

## Informal Recreation

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

## Group Fitness

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

## Adapted Recreation

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

## Intramural Sports

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

## Sport Clubs \& Sport Organizations

Sport Clubs and Sport Organizations are groups of individuals who share a common interest in a sport activity and have gained university recognition via registration procedures governed by Campus Recreation. Sport Clubs and Sport Organizations differ in scope and purpose and are classified as highly-competitive, instructional, and/or recreational. The key element to the program is that it is student-initiated and organized with an emphasis placed on participation and interest in the same activity. There are currently 28 active clubs: Badminton, Bowling, Cycling, Equestrian, Fencing, Field Hockey, Gymnastics, Handball, Ice Hockey, Indoor Rock Climbing, Karate, Lacrosse (Men's \& Women's), Paintball, Powerlifting, Roller Hockey, Rugby (Men's \& Women's, Sevens), Snowboarding, Soccer (Men's \& Women's), Swimming, Taekwondo, Tennis, Ultimate Frisbee, and Volleyball (Men's \& Women's). Additional clubs and organizations are not being added at this present time. Sport Club and Sport Organization Interest Forms and Club Contact Lists may be obtained by visiting the Campus Recreation web site or the main office in Suite 303 of Pearson McGonigle Halls.

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

## Ambler Campus

Ambler Campus offers a variety of recreational and intramural activities. The campus includes the Red Barn Gym, basketball courts, a fitness center, outdoor pool, sand volleyball pit, a multipurpose field and tennis courts. For information about Ambler Campus recreational activities and facilities, visit the web site at www.temple.edu/ambler/campus life/recreation.htm. For gymnasium information, call 267-468-8151. For pool information, call 267-468-8152.

## International Student Services

Martyn J. Miller, Ph.D., Director
1700 N. Broad Street, Office 203B
215-204-7708 (Phone)
215-204-6166 (Fax)
www.temple.edu/isss and www.temple.edu/ielp
International Student and Scholar Services (ISSS) provides services and support to Temple University's international students, scholars and researchers. Contributing to Temple's intellectual and cultural diversity, the international student and scholar community represents more than 120 countries and offers a unique opportunity to expand one's cultural and academic horizons. To accomplish its mission, International Student and Scholar Services generates all legal documents required for nonimmigrant students and scholars; provides advisory and counseling services; serves as a liaison to university departments, U.S. and foreign government agencies, and the greater community; facilitates the assimilation of international students and scholars into the larger Temple community; and contributes to the international community's cross-cultural understanding and appreciation. Detailed information on programs and services offered by ISSS is available from the office in 1700 N. Broad St. or the office's web site at www.temple.edu/isss.

The Intensive English Language Program provides English-language training to individuals seeking to improve their English language skills to prepare for admission to Temple University or other universities or colleges whose primary language of instruction is English. Detailed information on programs offered by IELP is available from the office in 1700 N . Broad St. or the office's web site at www.temple.edu/ielp.

Temple University requires all new and continuing international students in Nonimmigrant Student (both F-1 and J-1) status to carry health insurance that meets certain minimum standards determined by the United States Department of State. For detailed information, please see www.temple.edu/hr/students/healthinsurance/international.htm.

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

Eligibility for employment for individuals in Nonimmigrant Student (F-1 and J-1) status is based on regulations of the USCIS and the DOS. For detailed information, please see www.temple.edu/isss/employment/index.html.

Major medical health insurance is required for all international students in Nonimmigrant Student (F-1 and J-1) status. International students are required to submit to the university's Benefits Office evidence of coverage by a health insurance policy that meets the minimum coverage required by Temple University (consistent with standards established by the United States Department of State): maximum deductible of $\$ 500$ per accident or illness; payment of at least $75 \%$ of covered medical expenses; maximum benefit of $\$ 50,000$ per accident or illness; repatriation benefits of no less than $\$ 7,500$; and medical evacuation benefits of no less than $\$ 10,000$. Students may also purchase such health insurance upon arrival at Temple University. For further information, please contact the university's Benefits Office at 215-9262270 or e-mail StudentInsurance@temple.edu. For detailed information, please see www.temple.edu/hr/students/index.html.

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

A mandatory orientation session is held for new international students at the beginning of each academic term. For more information, please see the International Student and Scholar Services web site at www.temple.edu/isss/future-students/orientation-international.html and the Office of Orientation web site at www.temple.edu/studentaffairs/orientation.

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

## Department of Intercollegiate Athletics

Www.owlsports.com
The Department of Intercollegiate Athletics is committed to pursuing excellence at the Division I Football Bowl Subdivision (FBS) level and providing opportunities for its diverse studentathletes to maximize their athletic, academic and life-skill potential. The department sponsors 24 sports and provides high-level coaches and administrators, whose goal is to instill a winning attitude on and off the field of play through core values such as teamwork, leadership and service to others. As one of the most visible messengers of the Temple story, the Department of Intercollegiate Athletics strives to be a unifying force for the university with the city of Philadelphia, The Commonwealth of Pennsylvania, as well as the nation. Temple University is a proud member of the National Collegiate Athletic Association, the Atlantic 10 Conference, the American Athletic Conference and the ECAC.

## Office of the Dean of Students

Howard Gittis Student Center, Room 304
215-204-7188
215-204-1663 (Fax)
www.temple.edu/studentaffairs/deanofstudents/
The mission of the Office of the Dean of Students is to engage, develop, and retain Temple students by providing them with supportive services, advocacy, and education. The Dean of Students office provides assistance to students and their parents/families in an effort to ensure co-curricular learning and overall collegiate success. The Dean's office also leads the University's CARE (Crisis Assessment Response and Education) Team and serves as a resource to faculty and staff who have concerns about a student. The areas which report through the Dean of Students are: CARE Team, Disability Resources and Services, HEART Wellness Resource Center, Leadership Development, Orientation, Student Activities (including Greek Life and student government), Student Conduct and Community Standards, Student Media, and Tuttleman Counseling Services.

## Student Center Operations

Main Campus
Second Floor Mezzanine, Howard Gittis Student Center
215-204-7131
www.temple.edu/studentcenters/

Health Sciences Center
Second Floor, Student Faculty Center
215-707-4017
www.temple.edu/studentcenters/

Student Center Operations is responsible for the management of the Main Campus Student Center, the Student Faculty Center on the Health Science Campus and a variety of other studentfocused spaces on Temple's Main Campus. Our role is to be the living, dining, meeting and recreation room for the greater campus community. To foster excellent interactions, we offer flexible student focused spaces, opportunities for student leadership and employment, and areas for student organizations to host events, programs and meetings.

On the Main Campus in the Howard Gittis Student Center our areas include the Game Room, the "Reel" Cinema, the Information Desk, the Graphics Media Center, and the Student Organizations Village. Additionally, just off the Atrium you will find the Book Store (Barnes \& Noble), Philadelphia Federal Credit Union (PFCU), a UPS Store, Parking Services and the Walker Food Court. We also manage the Owl Cove and the Great Court in Mitten Hall, and a variety of outdoor spaces including the Bell Tower and Liacouras Walk for Student Organization use. All use of Student Center meeting and conference room spaces, lounges, and special event areas are managed by the Operations team, and we support over 7000 events each year.

On the Health Sciences Campus, just north on Broad Street, in the Student Faculty Center (SFC), you will find another wonderful student center facility. The SFC includes both activities and operations with a primary focus on Health Science students - but all are welcome to attend events or programs. Our office manages the Recreation Center and all conference services needs for the Health Science Campus. All Student Center facilities are designed and managed with a strong student focus, to provide avenues for leadership through employment, and facilities which foster both formal and informal involvement.

The Main Campus Student Center offers a three-story atrium as a grand entrance to a variety of Student Affairs offices in the building. The Dean of Students; Student Activities; Orientation; Student Conduct; Temple Student Government; Temple News (student newspaper); and the Templar (student yearbook) all "live" in the Howard Gittis Student Center.

The Student Faculty Center also offers a bookstore, study and informal lounges, conference rooms, game spaces, a television lounge, dance studio, gymnasium, and fitness center. Your Temple identification card allows you access to the facility.

If you are interested in getting involved, finding a great place to meet and relax, or using space for your event, program or meeting, please visit us on the web at www.temple.edu/studentcenters/ or in our offices for more information - and please make sure to visit your Student Centers often!

## Student Health \& Wellness

## Student Health Services

1810 Liacouras Walk, Fourth Floor
215-204-7500
215-204-4660 (Fax)
www.temple.edu/studenthealth
Student Health Services strives to promote a high standard of health among Temple University students through programs in preventive medicine and health education, in addition to diagnosis and treatment of injury and illness. Care providers include doctors, nurse practitioners, and nurses. Services offered at the Main, Ambler, and Health Sciences Center campuses include basic medical care, an immunization/allergy injection clinic, family planning services, and a selfcare center. Other services offered at Main Campus include nutritional consultation and HIV testing.

## Student Health Fee

As part of the University Services Fee, students are charged each semester during the academic year to help subsidize the basic diagnostic and treatment services provided by health care providers at all four campus locations. There are charges for services not covered by the Student Health Fee such as dispensed medications, orthopedic supplies, and immunizations. Office
laboratory tests can be performed at Ambler and Health Sciences Center offices, while more extensive laboratory testing is available at the Main Campus office. Please check the Student Responsibilities section for further information on health fee and insurance.

## Tuttleman Counseling Services

John DiMino, Ph.D., Director

1810 Liacouras Walk
215-204-7276
215-204-5419 (Fax)
www.temple.edu/counseling/
Tuttleman Counseling Services (TCS) is a comprehensive provider of mental health services to Temple's student population. Our mission is to support and enhance the psychological functioning of our students and thereby support the academic mission of the university. It is recognized that our students are dealing with a variety of major life issues as they pursue their education. These include separation and individuation, identity formation, relationships, affiliation, and career choices. In addition, some students come to us with prior mental health histories and medication needs.

TCS is first and foremost a provider of individual and group counseling services. Couple and occasionally family counseling is available as well at the student's request. This foundation provides students with support and guidance for a wide variety of problems, from adjustment issues and transitory difficulties to more serious psychological problems and even severe mental illness. Whenever possible, we seek to help students avoid or reduce self-harm that may stem from making poor choices. TCS provides services in the following areas:

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

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

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

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

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

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

Hours are 8:30 a.m. to 5:00 p.m., Monday - Friday. Walk-in Clinic hours for accessing services are 10:00 a.m. to 1:30 p.m. on Monday, Tuesday, Thursday, and Friday, and 9:00 a.m. to 12 noon on Wednesday. The staff also provides on-site services at the Ambler campus. Students are seen by appointment except in emergency situations when immediate care is required. Services are free and confidential for all registered students. Please call 215-204-7276 for more information.

## HEART Wellness Resource Center

Kimberly Chestnut, Ph.D., Director
Mitten Hall - Lower Level
215-204-8436
215-204-9710 (Fax)
tuheart@temple.edu
www.temple.edu/studentaffairs/heart
HEART Wellness Resource Center is the on-campus health education and prevention department. The center is staffed by masters and doctorate level health professionals and supported by peer health educators. We are committed to providing comprehensive wellness resources and services that empower Temple University students in making informed, healthier choices, and achieving academic success. We also work with faculty, staff, and departments in training and consultation capacities to support them in addressing student health needs and concerns. The HEART Wellness Resource Center's multifaceted model helps to create a collective consciousness of wellness on Temple's campus--with the hope of producing students who are not only well-educated but also healthy.

HEART Wellness Resource Center provides training, consultation, and programs on a variety of topics, including:

- LGBTQA
- Alcohol and Substance Abuse
- Sexual Assault, Rape and Dating Violence
- Healthy Relationships
- Safer Sex
- Diversity
- Alcohol and Sex
- Sexually Transmitted Infections
- Stress/Time Management
- Self-Esteem
- Body Image and Nutrition
- HIV
- Sexuality: Orientation, Gender, Identity
- Mental Health

HEART Wellness Resource Center provides a safe space for students to receive free, anonymous or confidential health information in a supportive environment. We engage with students in a variety of ways:

- Individual Health Education sessions
- Health Programming
- Peer Education
- Health-Related Referrals
- Condom Sales
- Promotion of a healthier campus environment
- Course instruction
- HIV Testing
- Campus-wide wellness events

HEART Wellness Resource Center offers students opportunities to get involved as peer educators and interns. These students receive comprehensive wellness training, preparing them to support campus-wide health and wellness initiatives. Students can receive academic credit for their work with the HEART Wellness Resource Center and there are a limited number of paid positions for students who have successfully completed our peer education class (Public Health 2304).

Hours are 8:00 a.m. to 5:00 p.m., Monday - Friday. Please call 215-204-8436 for more information or visit our web site at www.temple.edu/studentaffairs/heart.

## SARS

Temple University has adopted a policy on Severe Acute Respiratory Syndrome (SARS), which may be viewed at http://policies.temple.edu/getdoc.asp?policy no=04.64.11.

# University Housing \& Dining Services 

## University Housing \& Residential Life

Michael D. Scales

Associate Vice President for Student Affairs
Director of University Housing \& Residential Life
1910 Liacouras Walk
215-204-7184
215-204-3261 (Fax)
www.temple.edu/housing/
Residence halls at the Main campus, as well as several leased, off-campus housing options, provide an opportunity for students to extend their learning experiences beyond the classroom, library, and laboratory.

University Housing \& Residential Life works to create group-living environments in which each student is encouraged to develop as an individual in an atmosphere that promotes emotional, social, and intellectual growth. In addition, University Housing \& Residential Life is committed to creating community-living environments that value and promote an appreciation for diversity of cultures, lifestyles, and people.

Please check the Office of University Housing \& Residential Life web site listed above for additional information on residential services available. The Office of University Housing \& Residential Life web site also provides online resources to assist Temple University students in locating off-campus housing.

## Dining Services

Temple University Dining Services by Sodexo is pleased to offer students a multitude of Meal Plans that can be used at our many dining locations. We offer Meal Plans that are flexible and adaptable to every student's schedule and dining needs.

Temple University Dining Services provides meals during breakfast, lunch, dinner and "Fourth Meal" during the week and during brunch and dinner on weekends. If variety is what you are looking for, whether hot entrees, cold sandwiches, vegetarian or vegan, Gluten-Free, Kosher, Sushi...the choice is yours!

Dining Services has many locations on Main Campus from our all-you-care-to eat Dining Hall and our Food Court with 13 stores including national brands like: Wow Café \& Wingery, Einstein Brothers Bagels and Auntie Anne's. We also have 15 locations spread across Main Campus in almost all of the academic buildings where students can use their Meal Plans to get that quick bite to eat before class.

## Temple Dining Services Meal Plan Packages

Whether you're a morning person or a night owl; a meat-and-potatoes lover or veggie aficionado; a resident or a commuter student; undergraduate or graduate; Meal Plans are offered to fit every lifestyle. Dining Services is now offering a PREMIUM Meal Plan that will provide students with the ultimate flexibility! With the Premium Meal Plan there are no restrictions on when you can use your meals. You have VIP, All-Access Pass during any meal period. The Premium Plans range from $25,15,12,10,8$ and 5 meals per week to 15,30 and 45 meals per semester. To find a full list of our Meal Plans, visit www.tudining.com. Meal Plans are accepted at almost all Temple University Dining Locations (excluding Starbucks). Many of our Meal Plans have Diamond Dollars included for the extra convenience of grabbing that quick cup of coffee in the morning. Students may add additional Diamond Dollars at any time during the school year. Students can always access their accounts through the Diamond Dollars web site at www.temple.edu/diamonddollars to check their balance or even to see where they have been spending their Diamond Dollars.

## Dining on the Ambler Campus

Temple Dining Services operates Café a la Carte, located in the Ambler Learning Center, where you can get beverages, salads, sandwiches, fresh fruit cups, yogurts, desserts, snacks, and much more!

## University Services

## Temple University Alumni Association

Sullivan Hall, Suite 100
Main Campus
215-204-7521
alumrel@temple.edu
alumni.temple.edu
As a current Temple student, embrace your role as an alumnus/a-in-residence and plug into the Temple University Alumni Association's (TUAA) global network of more than 285,000 living alumni now - before you don a cap and gown!

Here's what it means for you:

- Opportunities to connect with alumni at an upcoming event, including Homecoming (October $16-20,2013$ ) and Alumni Weekend
- Access to the Student Alumni Association, regional alumni chapters, alumni societies and meaningful alumni volunteer opportunities
- Exclusive Owls-only benefits, including special offers on auto and home insurance, Temple License Plates (currently available to individuals living in Delaware, Maryland, New Jersey, or Pennsylvania), discounted tickets to Six Flags Great Adventure and more.

Stop by the Alumni Center in Sullivan Hall--the historic building dedicated by President Franklin Roosevelt in 1936--to learn more about how the Student Alumni Association and TUAA can enhance your on-campus experience. The Alumni Center is open Monday through Friday from 8:30 a.m. to 5:00 p.m.

For more information on the student resources available through the TUAA, call 215-204-7521, e-mail alumrel@temple.edu, or visit alumni.temple.edu.

## Bookstore

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

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

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

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

## Regular hours of operation are:

## Main Campus

www.temple.edu/bookstore
13th St. and Montgomery Ave.
The Gittis Student Center, lower level; 215-204-5578
Monday - Thursday: 9:00 a.m. - 6:00 p.m.
Friday: 9:00 a.m. - 5:00 p.m.
Saturday: 11:00 a.m. - 3:00 p.m.

## Law School

http://templelaw.bkstore.com/bkstore/content
Barnes \& Noble @ Temple University Bookstore
1700 N. Broad St., Ground Floor; 215-204-0514
Monday - Thursday: 7:30 a.m. - 7:00 p.m.

Friday: 8:00 a.m. - 6:00 p.m.
Saturday: 11:00 a.m. - 5:00 p.m.

## Ambler Campus

http://templeambler.bkstore.com/bkstore/content
Bright Hall, First Floor; 267-468-8460
Monday - Thursday: 9:00 a.m. - 7:00 p.m.
Friday: 9:00 a.m. - 4:00 p.m.

## Health Sciences Center

http://temple-med.bkstore.com/bkstore/content
3340 N. Broad St.
Student Faculty Center, First Floor; 215-707-3157
Monday - Friday: 8:30 a.m. - 4:30 p.m.

## TUCC Campus

http://templecenter.bkstore.com/bkstore/content
1515 Market St., Third Floor; 215-204-1527
Monday - Thursday: 12:00 p.m. - 8:00 p.m.
Friday: 12:00 p.m. - 4:00 p.m.

## Campus Safety Services

Campus Police
Carl Bittenbender, Executive Director

## Campus Police Locations

Main Headquarters, 1101 W. Montgomery Avenue, Philadelphia, PA 19122; 215-204-7998
Berks Mall Center Station, corner of Berks Mall and Beasley Walk; 215-204-8895
Health Sciences Center, Parkinson Pavilion, Broad and Tioga Streets, Philadelphia, PA
Ambler Campus, Bright Hall, Room 103; 267-468-8480

## Emergency Phone Number for all campuses

On Campus: 1-1234
Off Campus: 215-204-1234
TTY: 215-204-2357

These phone numbers will reach the Department of Campus Safety Services from all campuses. You can also reach us through our web site at www.temple.edu/safety.

Campus Safety Services is a multi-faceted department that is committed to serving the students, faculty, employees, visitors, families and vendors, who work for, study at and visit our campuses. The department services a diverse community, 24 hours a day, 365 days a year. The two divisions are Police Officers and Security Officers. The Campus Police division currently
has over 130 campus police officers who patrol our area campuses by foot, by bike and in patrol cars. They are police professionals who receive state-mandated training at an accredited police academy. The Security division officers work inside various buildings, checking IDs and assisting staff and visitors.

During the academic year, members of the Temple Community are free to use the OWLoop shuttle and TUr Door service on the Main Campus from 5:30 p.m. to 6:00 a.m. All services are operated by Facilities Management and information is available on their web site at www.temple.edu/facilities/.

The Department of Campus Safety Services also offers a variety of Crime Prevention programs, including self-defense, street smarts, and big-city living programs. For further information call 215-204-5870.

Our Annual Security Report is available on our web site.

## Parking Services \& Inter Campus Bus Service

## Parking:

Office of Parking Services
Lower Level, Student Center (Main Campus)
1755 North 13th Street
215-204-5301
parking@temple.edu
www.temple.edu/parking
Temple University Main and the Health Science Campuses have surface parking areas and parking garages available. Surface parking areas are also available at the Ambler Campus. Temple University Center City (TUCC) has negotiated parking discounts with nearby parking garages.

Part-Time Parking is available for individuals who park infrequently and permits you to park in the Liacouras Garage and the Montgomery Garage. The hangtag is valid for one academic year (September through August) and is complimentary. In addition to the hangtag, the daily rate of $\$ 7$ is deducted from your Parking Account per entry. We suggest the minimum debit fund purchase of $\$ 70$ for 10 parking admittances.

Guaranteed Access Parking is available for individuals who park frequently or need overnight parking. The Commuter rate is $\$ 240$ per semester and is available in Area \#6, Area \#10, Temple Towers, the Liacouras Garage and the Montgomery Garage. 24 hour/7 day a week access is available for students who need overnight parking. The Overnight rate is $\$ 400$ per semester and is available in the Bell Garage, Liacouras Garage and the Montgomery Garage. The operating hours of all of our facilities are located on our web site.

Your hangtag and your OWLcard are the mechanisms that control your entrance into and exit from the parking area or garage. Failure to display your hangtag/decal will result in a citation.

Parkers may conveniently purchase parking on our web site, www.temple.edu/parking. You can also visit our Main Campus offices, located in the lower level of the Howard Gittis Student Center, in the Liacouras Garage and in the Montgomery Garage, or our office on the Health Sciences campus.
\$3 Hourly Visitor Parking is available in the Montgomery Garage. The Flat Cash Rate is \$15 in Area \#1, Area \#10, Temple Towers and the Liacouras Garage.

Ambler Campus Parkers require only a hangtag to use the area. The $\$ 85$ fee allows them to park for the entire academic year. Ambler Parkers who need to park on Main Campus must either set up a Parking Account and park in the Montgomery Garage for the Daily Rate of $\$ 7$, or utilize the \$3 Hourly Rate in the Montgomery Garage.

Note: Availability of areas is subject to change during summer and holidays and for a few special events.

## Inter/Intra Campus Bus Service:

The University provides Evening Shuttle services for those students living on and around the Main Campus. The OwLoop or Main Campus Shuttle provides regular route service 7 days per week between the hours of 5:30 p.m. to 6:00 a.m. The TUr Door service, which also operates during the same hours as the OwLoop, transports students directly to their off-campus residences. The OwLoop bus will be at every stop, indicated on the route map, approximately every 25-35 minutes. Use this service to obtain secure, fast passage to all major Main Campus locations. The TUr Door service departs at least every half hour on the hour and half hour from the Transportation Hub at 12th \& Berks Streets near the Paley library. TUr Door will transport students directly to their off campus residences via the fastest route possible. TUr Door shuttle operates within the area bordered by Cumberland Street to the North, Girard Avenue to the South, Fifth Street to the East and Twentieth Street to the West. The two routes are distinguished by the lettering and appearance of the buses.

A map of the OwLoop bus route and the TUr Door service area, as well as photos of the buses used for each route, can be found at www.temple.edu/facilities/pdf/owlloop.pdf.

Temple University provides daily shuttle transit services to and from the Ambler, Health Science and Main Campuses. The Monday through Friday service currently operates from 7:00 a.m. through 6:30 p.m. The service is offered at no charge to all students, faculty and staff of the University. All buses are equipped with Wi-Fi internet coverage via Verizon 4G service which is provided at no charge to the passengers. All scheduled departures, in addition to the Main and Ambler Campus, stop at the Health Science Campus on Broad Street. During the school year, there is a regular Monday through Friday service except for semester breaks. During the summer months, there is no service. In addition, there is free shuttle bus service on a regular schedule between the Ambler SEPTA station and the Ambler Campus during the fall and spring semesters. Please check the Office of Facilities Management web site at
www.temple.edu/facilities/shuttles.html for a schedule of shuttle services. Information on these schedules may also be obtained at the Office of Parking Services or Campus Safety.

## Retail Operations

Bookstores are located at each campus. (See above for locations.) In addition to textbooks, these stores also feature a variety of products that will meet students’ needs on campus. Students may also find retail and food outlets on Main Campus along Liacouras Walk, on Broad Street at the Shops at Avenue North, on 12th Street (next to the TECH Center), and on Cecil B. Moore Avenue, west of Broad Street.

## Academic Programs

This section of the Bulletin provides information on academic programs in the university, including individual schools and colleges, as well as their academic departments. Other academic programs and requirements that can be found in this section include a listing of Programs of Study, University General Education requirements, University College, University Studies, Intercollegial Programs, and Temple University Japan Campus programs.

## Attention New Freshmen and Transfer Students:

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

New freshmen starting in the 2013-2014 academic year are required to complete the GenEd curriculum. Students who have fewer than 15 transferrable credits are considered freshmen. Additionally, students whose transfer credits were earned while in high school, regardless of the number of transfer credits, are considered freshmen.

New transfer students starting in the 2013-2014 academic year are required to complete the GenEd curriculum. Students who attempted 15 or more transferrable credits after high school and prior to being admitted to Temple University are considered transfer students.

## Attention Current Students:

Current students who started at Temple University before Fall 2013 should click on the Archived Bulletins link to find the requirements of their program of study for their Bulletin year.

## Chart of Degrees

The Chart of Degrees lists Temple University's degree programs alphabetically, showing the name of the degree; which school or college grants the degree; and the campus or campuses on which all or most of the course work for the degree may be completed.

Information regarding the abbreviations found within the Chart of Degrees is provided in the key chart listed on this page.

Students should be aware that, while all programs cannot be completed on all campuses, courses in many programs are offered on multiple campuses. To learn what specific courses are offered on which campuses in a given semester, refer to the Class Schedule.

## Key for Campuses

- AMB - Ambler
- CC - Temple University Center City
- FTW - Fort Washington through Ambler Campus
- HAR - Harrisburg, PA
- HSC - Health Sciences (including Podiatry)
- JPN - Temple University Japan
- MN - Main
- XBC - Bucks County Community College
- XSJ* - St. Joseph's University
- XPN* - University of Pennsylvania
*R.O.T.C. only


## Key for Schools and Colleges

- BC - Esther Boyer College of Music \& Dance
- BU - Fox School of Business \& Management
- CA - Center for the Arts
- CO - School of Media \& Communication
- DN - Maurice H. Kornberg School of Dentistry
- ED - College of Education
- EN - College of Engineering
- EV - School of Environmental Design
- HP - College of Health Professions \& Social Work
- LA - College of Liberal Arts
- LW - School of Law
- ME - School of Medicine
- PH - School of Pharmacy
- PM - School of Podiatric Medicine
- ST - College of Science \& Technology
- SW - School of Social Work
- TA - Tyler School of Art
- TH - School of Tourism \& Hospitality Management
- UC - University College
- US - University Studies


## Degree Symbols and Classifications

- A.A. - Associate in Arts
- A.S. - Associate in Science
- B.A. - Bachelor of Arts
- B.A./M.A. - Five-year Bachelor's and Master's Program
- B.B.A. - Bachelor of Business Administration
- B.F.A. - Bachelor of Fine Arts
- B.F.A. w/TC - Bachelor of Fine Arts with Teaching Certification
- B.M. - Bachelor of Music
- B.S. - Bachelor of Science
- B.S.A.T - Bachelor of Science in Athletic Training
- B.S.BIOE - Bachelor of Science in Bioengineering
- B.S.C.E. - Bachelor of Science in Civil Engineering
- B.S.E. - Bachelor of Science in Engineering
- B.S.Ed. - Bachelor of Science in Education
- B.S.E.E. - Bachelor of Science in Electrical Engineering
- B.S.E.T. - Bachelor of Science in Engineering Technology
- B.S.M.E. - Bachelor of Science in Mechanical Engineering
- B.S.N. - Bachelor of Science in Nursing
- B.S.W. - Bachelor of Social Work
- Ed.S. - Education Specialist
- MAcc - Master of Accountancy
- M.A. - Master of Arts
- M.Arch. - Master of Architecture
- M.B.A. - Master of Business Administration
- M.B.A./M.S. - Combined Degree
- M.Ed. - Master of Education
- M.F.A. - Master of Fine Arts
- M.H.M. - Master of Healthcare Management
- M.J. - Master of Journalism
- M.L.A. - Master of Liberal Arts
- MLArch - Master of Landscape Architecture
- M.M. - Master of Music
- M.M.Ed. - Master of Music Education
- M.M.T. - Master of Music Therapy
- M.O.T. - Master of Occupational Therapy
- M.P.H. - Master of Public Health
- M.S. - Master of Science
- M.S.C.E. - Master of Science in Civil Engineering
- M.S.E.E. - Master of Science in Electrical Engineering
- M.S.Ed. - Master of Science in Education
- M.S.Env.E. - Master of Science in Environmental Engineering
- M.S.M.E. - Master of Science in Mechanical Engineering
- M.S.N. - Master of Science in Nursing
- M.S.W. - Master of Social Work
- M.T.H.M. - Master of Tourism and Hospitality Management
- D.B.A. - Doctor of Business Administration
- D.M.D. - Doctor of Dental Medicine
- D.M.A. - Doctor of Musical Arts
- DNP - Doctor of Nursing Practice
- D.O.T. - Doctor of Occupational Therapy
- D.P.M. - Doctor of Podiatric Medicine
- D.P.T. - Doctor of Physical Therapy
- Ed.D. - Doctor of Education
- J.D. - Juris Doctor (first professional degree for law)
- M.D. - Doctor of Medicine
- Ph.D. - Doctor of Philosophy
- Pharm.D. - Doctor of Pharmacy
- P.S.M. - Professional Science Masters
- L.L.M. - Master of Laws (further specialization after JD degree)
- S.J.D. - Doctor of Juridical Science


## Program Names and Degrees Offered

This is a general summary of programs available for incoming students.
Note: The link in the Program Name column goes to the page describing the program within the Undergraduate Bulletin.

| Major | A cohesive combination of courses including introductory, intermediate, and <br> advanced coursework that designates a student's primary area of undergraduate <br> study. Majors can be established or restructured to include required or optional <br> tracks/concentrations. A major is typically 36-76 credit hours. Majors are <br> designated on University transcripts at the time the degree is awarded. |
| :--- | :--- |
| Minor | A designated sequence of courses in a discipline or area of undergraduate study. <br> Like the major, it is expected to have coherence and increasing sophistication. <br> A minor is typically 18-24 credit hours (or approximately half of the major) and <br> is independent of the student's major. Minors are designated on University <br> transcripts when the degree is awarded. |
| Track / Concentration | A coordinated grouping of courses, typically one-third of a major, representing <br> a sub-specialization or emphasis within a major field available for students <br> majoring in that discipline. Track/Concentrations may be offered at the <br> undergraduate, graduate, or professional level. Majors with track/concentration <br> are designated on University transcripts when the degree is awarded. |
| Certificate | An academic program in which the student completes a prescribed course of <br> study, typically 12 or more credit hours. This may be at the undergraduate, <br> graduate or professional level. |

Campus - The baccalaureate degree can be completed at the campuses displayed in bold only.

| Program Name | Baccalaureate | Minor, <br> Conc., <br> Cert., <br> Track | Post- <br> Baccalaureate | Post- <br> Baccalaureate <br> Minor, Conc., <br> Cert. | College | Campus |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | MAcc |  | BU | MN |
| Accountancy |  |  |  | BU | MN, CC, AMB |  |
| Accounting | B.B.A. | Minor |  |  |  |  |


| Program Name | Baccalaureate | Minor, <br> Conc., <br> Cert., <br> Track | Post- <br> Baccalaureate | Post- <br> Baccalaureate <br> Minor, Conc., Cert. | College | Campus |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  <br> Financial Management |  |  | M.S. | Post-M.B.A. Cert. | BU | CC |
| Actuarial Science | B.B.A. |  | M.S. | Post-M.B.A. Cert. | BU | MN |
| Adult \& Organizational Development | B.A. | Minor | M.Ed. |  | ED | MN, CC, AMB |
| Advertising | B.A. |  |  |  | CO | MN |
| -- Creative Copywriting |  | Track |  |  | CO | MN |
| -- Account Management |  | Track |  |  | CO | MN |
| -- Creative Art Direction |  | Track |  |  | CO | MN |
| -- Research |  | Track |  |  | CO | MN |
| - International Communication |  | Conc. |  |  | CO | MN |
| African American Studies | B.A. | Minor | M.A., Ph.D. |  | LA | MN |
| American/International Law |  |  | L.L.M. |  | LW | MN |
| $\begin{array}{\|l\|} \hline \text { American/International Law - } \\ \text { China } \end{array}$ |  |  | L.L.M. |  | LW | MN |
| American Legal Studies |  |  |  | Cert. | LW | JPN |
| American Studies | B.A. | Minor |  |  | LA | MN, JPN |
| -- Asian American Studies |  | Minor |  |  | LA | MN |
| Anthropology | B.A. | Minor | M.A., Ph.D. |  | LA | MN |
| -- Human Biology |  | Conc. |  |  | LA | MN |
| -- Visual Anthropology |  | Track, Minor |  |  | LA | MN |
| Applied Behavioral Analysis |  |  |  | Grad Cert. | ED | MN |
| Applied Mathematics | B.S. |  |  |  | ST | MN |
| Arabic |  | Cert., <br> Minor |  |  | LA | MN |
| Architecture | B.S. |  |  | M.Arch. | TA | MN |
| Architectural Preservation | B.S. |  |  |  | TA | MN |
| Art | B.A. | Minor |  |  | TA | MN, JPN |
| -- Digital Media |  | Conc., <br> Minor |  |  | TA | MN, JPN |
| -- Studio Art |  | Conc. |  |  | TA | MN |
| -- Visual Studies |  | Conc. |  |  | TA | MN |
| Art Education | B.S.Ed. |  | M.Ed. |  | TA | MN |
| Art History | B.A. | Minor | M.A., Ph.D. |  | TA | MN |
| Arts in Community |  | Cert. |  | Cert. | TA | MN |


| Program Name | Baccalaureate | Minor, <br> Conc., <br> Cert., <br> Track |  | Post- <br> Baccalaureate <br> Baccalaureate <br> Minor, Conc., <br> Cert. |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| Program Name | Baccalaureate | Minor, <br> Conc., <br> Cert., <br> Track |  | Post- <br> Baccalaureate <br> Baccalaureate <br> Minor, Conc., <br> Cert. | College |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | Campus


| Program Name | Baccalaureate | Minor, <br> Conc., <br> Cert., <br> Track |  | Post- <br> Baccalaureate <br> Baccalaureate <br> Minor, Conc., <br> Cert. | College |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | Campus


| Program Name | Baccalaureate | Minor, <br> Conc., <br> Cert., <br> Track | Post- <br> Baccalaureate | Post- <br> Baccalaureate <br> Minor, Conc., Cert. | College | Campus |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| -- Transportation Planning |  |  |  | M.S. Conc., Grad Cert | EV | AMB, HAR |
| Community Development | B.S. | Minor |  |  | EV | AMB |
| Composition (Music) | B.M. |  | M.M., D.M.A. |  | BC | MN |
| Computer Science | B.A., B.S. | Minor | M.S. |  | ST | MN |
| Computer \& Information Science |  |  | Ph.D. |  | ST | MN |
| -- Computer \& Network Systems |  |  |  | Ph.D. Track | ST | MN |
| -- Artificial Intelligence \& Applications |  |  |  | Ph.D. Track | ST | MN |
| -- Information Systems |  |  |  | Ph.D. Track | ST | MN |
| -- Software Systems |  |  |  | Ph.D. Track | ST | MN |
| Computer \& Information Sciences, Fox School of Business \& Management, see Management Information Systems |  |  |  |  |  |  |
| Construction Management Technology | B.S.E.T. |  |  |  | EN | MN |
| -- Cooperative Education Program |  |  |  |  | EN | MN |
| Construction Safety <br> Management |  | Cert. |  |  | HP | MN |
| $\begin{array}{\|l\|} \hline \text { Corporate Social } \\ \hline \text { Responsibility } \\ \hline \end{array}$ |  | Minor |  |  | BU | MN |
| Counseling Psychology |  |  | M.Ed., Ph.D. |  | ED | MN |
| Creative Writing |  |  | M.F.A. |  | LA | MN |
| Criminal Justice | B.A. | Minor | M.A., Ph.D. |  | LA | MN, AMB |
| Dance | B.F.A. |  | $\begin{aligned} & \text { M.A., M.F.A., } \\ & \text { Ph.D. } \end{aligned}$ |  | BC | MN |
| -- Dance Education |  | Track |  |  | BC | MN |
| -- Performance/Choreography |  | Track |  |  | BC | MN |
| Dentistry |  |  | D.M.D. |  | DN | HSC |
| -- Endodontics |  |  |  | Specialty Cert. | DN | HSC |
| -- Oral Biology |  |  | M.S. |  | DN | HSC |
| -- Orthodontics |  |  |  | Specialty Cert. | DN | HSC |
| -- Periodontics |  |  |  | Specialty Cert. | DN | HSC |
| -- Advanced Education in General Dentistry |  |  |  | Cert. | DN | HSC |
| -- Advanced DMD Program for Faculty |  |  | D.M.D. |  | DN | HSC |


| Program Name | Baccalaureate | Minor, <br> Conc., <br> Cert., <br> Track | Post- <br> Baccalaureate | Post- <br> Baccalaureate <br> Minor, Conc., Cert. | College | Campus |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - Post-Dental Program for Foreign Trained Dentists |  |  | D.M.D. |  | DN | HSC |
| Digital Marketing |  | Minor |  |  | BU | MN |
| Digital Media Technologies |  | Minor |  |  | ST, CO | MN |
| Disability Studies |  |  |  | Grad Cert. | ED | MN |
| Diversity Leadership |  |  |  | Grad Cert. | ED | MN |
| Doctor of Business <br> Administration (Executive <br> Program) |  |  | D.B.A. |  | BU | MN |
| Documentary Arts \& Ethnographic Research |  |  |  | Grad Cert. | CA | MN |
| Early Childhood-Elementary <br> Ed (PreK-4) | B.S.Ed. |  |  |  | ED | MN, AMB |
| -- Special Education |  | Conc. |  |  | ED | MN, AMB |
| Earth \& Space Science with Teaching | B.S. |  |  |  | ST | MN |
| Ecological Planning \& Design |  | Minor |  |  | EV | AMB |
| Economics | B.B.A. |  |  |  | BU | MN, AMB, CC |
| Economics | B.A. | Minor | M.A., Ph.D. |  | LA | MN, AMB, CC, JPN |
| -- Management Career |  | Cert. |  |  | LA | MN, AMB |
| -- Political Economy |  | Cert. |  |  | LA | MN, JPN |
| Education |  |  | M.S.Ed., Ph.D. |  | ED | MN |
| -- Accomplished Teaching |  |  |  | M.S.Ed. Conc. | ED | MN, FTW |
| -- Adult \& Organizational Development |  |  |  | Ph.D. Conc. | ED | MN |
| -- Applied Behavioral Analysis |  |  |  | M.S.Ed. Conc., Grad. Cert. | ED | MN |
| -- Applied Linguistics |  |  |  | Ph.D. Conc. | ED | MN |
| -- Autism Endorsement |  |  |  | Grad. Cert. | ED | MN |
| -- Career \& Technical Education |  |  |  | M.S.Ed. Conc. | ED | MN |
| ---- Business Education |  |  |  | M.S.Ed. Cert. | ED | MN |
| ---- Industrial Education |  |  |  | M.S.Ed. Cert. | ED | MN |
| ---- Marketing Education |  |  |  | M.S.Ed. Cert. | ED | MN |
| -- Educational Psychology |  |  |  | Ph.D. Conc. | ED | MN |
| -- Literacy \& Learners |  |  |  | Ph.D. Conc. | ED | MN |
| -- Math \& Science Education |  |  |  | Ph.D. Conc. | ED | MN |


| Program Name | Baccalaureate | Minor, <br> Conc., <br> Cert., <br> Track | Post- <br> Baccalaureate | Post- <br> Baccalaureate <br> Minor, Conc., Cert. | College | Campus |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| -- Reading |  |  |  | M.S.Ed. Conc. | ED | MN |
| -- Special Education |  |  |  | Ph.D. Conc. | ED | MN |
| -- Teaching English as a Second Language |  |  |  | M.S.Ed. Conc. | ED | MN |
| -- Urban Education |  |  |  | Ph.D. Conc. | ED | MN |
| Educational Leadership |  |  | M.Ed., Ed.D. |  | ED | MN, FTW |
| -- K-12 |  |  |  | Conc. | ED | MN, FTW |
| -- Higher Education |  |  |  | Conc. | ED | MN |
| Educational Psychology |  |  | M.Ed. |  | ED | MN |
| Educational Psychology/ Learning Technology |  |  | M.Ed. |  | ED | MN |
| Electrical Engineering | B.S.E.E. |  | M.S.E.E. | Cert. | EN | MN |
| -- Bioelectrical Engineering |  | Conc. |  |  | EN | MN |
| -- Bioengineering |  | Conc. |  |  | EN | MN |
| -- Computer Engineering |  | Conc. |  | Cert. | EN | MN |
| - Cooperative Education Program |  |  |  |  | EN | MN |
| Elementary Education |  |  |  | M.Ed. Conc. | ED | MN, XBC |
| Emergency Management with Special Populations |  | Cert. |  |  | HP | MN |
| Employee Benefits Law |  |  |  | Cert. | LW | MN |
| Engineering | B.S.E. |  | Ph.D. |  | EN | MN |
| Engineering Technology | B.S.E.T. |  |  |  | EN | MN |
| -- Computer Technology |  | Track |  |  | EN | MN |
| -- Construction Technology |  | Track |  |  | EN | MN |
| - Cooperative Education Program |  |  |  |  | EN | MN |
| -- Energy Technology |  | Track |  |  | EN | MN |
| -- Environmental Technology |  | Track |  |  | EN | MN |
| -- General Technology |  | Track |  |  | EN | MN |
| -- Mechanical/ Manufacturing Technology |  | Track |  |  | EN | MN |
| -- Mechatronics Technology |  | Track |  |  | EN | MN |
| English | B.A. | Minor | M.A., Ph.D. |  | LA | $\begin{aligned} & \text { MN, AMB, } \\ & \text { CC, JPN } \end{aligned}$ |
| -- Creative Writing |  | Conc. |  |  | LA | MN |
| -- Writing |  | Cert. |  |  | LA | MN, AMB |


| Program Name | Baccalaureate | Minor, <br> Conc., <br> Cert., <br> Track | Post- <br> Baccalaureate | Post- <br> Baccalaureate <br> Minor, Conc., Cert. | College | Campus |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| English as a Second Language |  | Cert. |  | Grad Cert. | ED | MN |
| English Education/7-12 |  |  |  | Cert. | ED | MN |
| Entertainment Law \& Business |  | Minor |  |  | BU | MN |
| Entrepreneurship | B.B.A. | Cert., <br> Minor |  | Grad Cert. | BU | MN |
| Environmental Engineering |  |  | M.S.Env.E. (thesis), M.S.Env.E. (non-thesis) |  | EN | MN |
| Environmental Health |  |  | M.S. |  | HP | MN |
| Environmental Horticulture |  | Minor |  |  | EV | AMB |
| Environmental Science | B.S. |  |  |  | ST | MN |
| Environmental Studies | B.A. | Minor |  |  | LA | MN, AMB |
| Environmental Sustainability |  | Cert. |  |  | EV | AMB |
| Epidemiology |  |  | M.S. |  | HP | MN |
| Estate Planning |  |  |  | Cert. | LW | MN |
| Executive MBA Program |  |  | M.B.A. |  | BU | MN |
| Facilities Management | B.S. |  |  |  | TA | MN |
| Fibers \& Material Studies | B.F.A. |  | M.F.A. |  | TA | MN |
| -- Art Education |  | Conc. |  |  | TA | MN |
| Film \& Media Arts | B.A. |  | M.F.A. |  | CA | MN |
| Finance | B.B.A. | Minor | M.S. | Post-M.B.A. Cert. | BU | MN, CC |
| Financial Analysis \& Risk Management |  |  | M.S. |  | BU | MN |
| Financial Engineering |  |  | M.S. |  | BU | MN |
| French | B.A. | Minor, Cert. |  |  | LA | MN |
| General Science with Teaching | B.S. |  |  |  | ST | MN |
| General Program | A.A., B.A. |  |  |  | LA | JPN |
| General Business Studies |  | Minor |  |  | BU | MN, AMB |
| General \& Strategic Management |  |  |  | Post-M.B.A. Cert. | BU | MN |
| Geography \& Urban Studies | B.A. | Minor | M.A., Ph.D. |  | LA | MN, JPN |
| -- Geography of Tourism |  | Cert. |  |  | LA | MN |


| Program Name | Baccalaureate | Minor, Conc., Cert., Track | Post- <br> Baccalaureate | Post- <br> Baccalaureate <br> Minor, Conc., Cert. | College | Campus |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| -- Geography of Sports, Recreation, \& Tourism Planning |  | Cert. |  |  | LA | MN |
| -- Travel \& Tourism |  | Cert. |  |  | LA | MN |
| Geology | B.A., B.S. | Minor | M.S. |  | ST | MN |
| Geoscience |  |  |  | Ph.D. | ST | MN |
| German | B.A. | Minor, Cert. |  |  | LA | MN |
| Gerontology |  | Cert. |  |  | SW | MN, AMB |
| Global Health |  |  |  | Grad Cert. | HP | MN |
|  <br> Development ommunication (new for fall 2014) |  |  | M.S. |  | CO | MN |
| Graduate Certificate Program |  |  | M.Ed. |  | ED | MN, HAR |
| -- Elementary Education |  |  |  | Conc. | ED | MN |
| -- Secondary Education |  |  |  | Conc. | ED | MN |
| -- Career \& Technical Education |  |  |  | Conc. | ED | MN |
| Graduate Tax |  |  | L.L.M. |  | LW | MN |
| Graphic \& Interactive Design | B.F.A. |  | M.F.A. |  | TA | MN |
| -- Art Education |  | Conc. |  |  | TA | MN |


| Program Name | Baccalaureate | Minor, <br> Conc., <br> Cert., <br> Track | Post- <br> Baccalaureate | Post- <br> Baccalaureate <br> Minor, Conc., <br> Cert. | College | Campus |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Healthcare Financial |  |  | M.S. | BU | CC |  |
| Management |  |  |  |  |  |  |


| Program Name | Baccalaureate | Minor, <br> Conc., <br> Cert., <br> Track | Post- <br> Baccalaureate | Post- <br> Baccalaureate <br> Minor, Conc., <br> Cert. | College | Campus |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | B.S.


| Program Name | Baccalaureate | Minor, <br> Conc., <br> Cert., | Post- <br> Baccalaureate | Bast <br> Baccalaureate <br> Minor, Conc., |  | Cert. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| Program Name | Baccalaureate\| | Minor, <br> Conc., <br> Cert., <br> Track | Post- <br> Baccalaureate | Post- <br> Baccalaureate <br> Minor, Conc., Cert. | College | Campus |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Law |  |  | $\begin{aligned} & \text { J.D., L.L.M., } \\ & \text { S.J.D. } \end{aligned}$ |  | LW | MN, JPN |
| Leadership |  | Cert. |  |  | BU | MN, AMB, CC |
| Leadership |  | Minor |  |  | CO | MN |
| Leading \& Learning in Urban Schools |  |  |  | Cert. | ED | MN |
| Legal Education |  |  | L.L.M. |  | LW | MN |
| Legal Studies | B.B.A. | Minor | $\begin{aligned} & \hline \text { J.D./M.B.A. } \\ & \text { (Dual) } \end{aligned}$ |  | BU/LW | MN, CC |
| Legal Studies for Human Resource Managers |  | Minor |  |  | BU | MN |
| Law - Trial Advocacy |  |  | L.L.M. |  | LW | MN |
| Lesbian, Gay, Bisexual \& Transgender Studies (LGBT) |  | Minor |  |  | LA | MN |
| Liberal Arts |  |  | M.L.A. |  | LA | CC, JPN |
| Linguistics | B.A. |  | M.A. |  | HP | MN |
| $\begin{aligned} & \text { Management Information } \\ & \hline \text { Systems } \end{aligned}$ | B.B.A. | Minor, Cert. | M.S. | Ph.D. Conc., Post-M.B.A. Cert. | BU | MN, CC |
| Marketing | B.B.A. | Minor | M.S. | Post-M.B.A. Cert. | BU | MN, AMB, CC |
| Media \& Communication |  |  | Ph.D. |  | CO | MN |
| Mathematical Economics | B.A. |  |  |  | LA/ST | MN |
| Mathematics | B.A., B.S. | Minor | M.A., Ph.D. |  | ST | MN |
| - 5 year M.A. |  |  | B.A./M.A., B.S./M.A. |  | ST/EN | MN |
| Mathematics \& Computer Science | B.S. |  |  |  | ST | MN |
| Mathematics \& Computer Science with Teaching | B.S. |  |  |  | ST | MN |
| Mathematics \& Physics | B.S. |  |  |  | ST | MN |
| Mathematics \& Technology with Teaching | B.S. |  |  |  | ST | MN |
| Mathematics Education/7-12 |  |  |  | Cert. | ED | MN |
| Mathematics with Teaching | B.S. |  |  |  | ST | MN |
| Mechanical Engineering | B.S.M.E. |  | M.S.M.E. |  | EN | MN |
| -- Bioengineering |  | Conc. |  |  | EN | MN |
| -- Cooperative Education Program |  |  |  |  | EN | MN |


| Program Name | Baccalaureate | Minor, <br> Conc., <br> Cert. <br> Track | Post- <br> Baccalaureate | Bascalaureate <br> Minor, Conc., <br> Cert. |  | College |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| Program Name | Baccalaureate | Minor, <br> Conc., <br> Cert., <br> Track | Post- <br> Baccalaureate | Post- <br> Baccalaureate <br> Minor, Conc., Cert. | College | Campus |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| -- Instrumental/ Jazz Studies Component |  | Conc. |  |  | BC | MN |
| -- Piano/Jazz Studies Component |  | Conc. |  |  | BC | MN |
| -- Voice/Jazz Studies Component |  | Conc. |  |  | BC | MN |
| Music History | B.M. |  | M.M. |  | BC | MN |
| Music <br> -- Jazz Studies | B.M. |  |  |  | BC | MN |
| -- Jazz Composition | B.M. |  |  |  |  | MN |
| -- Jazz Voice Performance | B.M. |  |  |  |  | MN |
| Music Performance | B.M. |  | M.M., D.M.A. |  | BC | MN |
| -- Keyboard/ Harpsichord | B.M. |  | M.M. |  | BC | MN |
| - Keyboard/Piano | B.M. |  | M.M., D.M.A. |  | BC | MN |
| -- Vocal Instruction | B.M. |  |  |  | BC | MN |
| Music Theory | B.M. |  | M.M. |  | BC | MN |
| Music Therapy | B.M. |  | M.M.T., Ph.D. |  | BC | MN |
| - Guitar |  | Conc. |  |  | BC | MN |
| -- Piano |  | Conc. |  |  | BC | MN |
| - Voice |  | Conc. |  |  | BC | MN |
| Music Therapy/Jazz | B.M. |  |  |  | BC | MN |
| -- Jazz, Guitar |  | Conc. |  |  | BC | MN |
| - Jazz, Piano |  | Conc. |  |  | BC | MN |
| -- Jazz, Voice |  | Conc. |  |  | BC | MN |
| National Park Service <br> Management |  | Cert. |  | Post-Bacc. Cert. | UC | AMB, MN |
| Natural Sciences | B.A. |  |  |  | ST | MN |
| Neuroscience |  |  |  | Grad Cert. | LA | MN |
| Neuroscience: Cellular and Molecular | B.S. |  |  |  | ST | MN |
| Neuroscience: Systems, Behavior \& Plasticity | B.S. |  |  |  | LA | MN |
| Neuroscience Research |  | Minor |  |  | LA | MN |
| Nursing | B.S.N. |  | M.S.N. |  | HP | HSC |
| -- Clinical Nurse Leader |  |  |  | Conc. | HP | HSC |
| -- Nurse Educator |  |  |  | Conc. | HP | HSC |
| -- School Nurse |  |  |  | Grad Cert. | HP | HSC |
| Nursing Practice |  |  | DNP |  | HP | HSC |


| Program Name | Baccalaureate | Minor, <br> Conc., <br> Cert., <br> Track | Post- <br> Baccalaureate | Post- <br> Baccalaureate <br> Minor, Conc., Cert. | College | Campus |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| -- Adult-Gerontology Primary Care |  |  | DNP Conc. |  | HP | HSC |
| -- Family-Individual Across Lifespan |  |  | DNP Conc. |  | HP | HSC |
| R.N. to B.S.N | B.S.N. |  |  |  | HP | HSC, XBC |
| Occupational Therapy |  |  | M.O.T., D.O.T. |  | HP | HSC, CC |
| Opera |  |  | M.M. |  | BC | MN |
| Oral Biology |  |  | M.S. |  | DN | MN |


| Program Name | Baccalaureate | Minor, <br> Conc., <br> Cert., <br> Track | Post- <br> Baccalaureate <br> Baccalaureate <br> Minor, Conc., <br> Cert. | College |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | Campus


| Program Name | Baccalaureate | Minor, <br> Conc., <br> Cert., <br> Track | Post- <br> Baccalaureate | Post- <br> Baccalaureate <br> Minor, Conc., <br> Cert. |  | College |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | Campus


| Program Name | Baccalaureate | Minor, <br> Conc., <br> Cert., <br> Track | Post- <br> Baccalaureate | Post- <br> Baccalaureate <br> Minor, Conc., Cert. | College | Campus |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| -- Global Pharmacovigilance / <br> Benefit-Risk Management |  |  |  | Cert. | PH | FTW |
| -- Good Manufacturing <br> Practices (GMPs) for the 21st Century |  |  |  | Cert. | PH | FTW |
| -- Medical Devices |  |  |  | Cert. | PH | FTW |
| Real Estate | B.B.A. |  |  |  | BU | MN |
| Recreation Therapy |  |  | M.S. |  | HP | HSC |
| Religion | B.A. | Minor | M.A., Ph.D. |  | LA | MN, JPN |
| Risk, Insurance \& Healthcare Management |  |  |  | Ph.D. Conc. | BU | MN |
| Risk Management |  |  |  | Post-M.B.A. Cert. | BU | MN |
| Risk Management \& Insurance | B.B.A. |  | M.S. |  | BU | MN, CC |
| -- Employee Benefits |  | Track, Conc. |  |  | BU | MN |
| -- Healthcare Risk <br> Management |  | Track, Conc. |  |  | BU | MN |
| -- Property-Liability/Corporate Risk Management |  | Track |  |  | BU | MN |
| School Health Education |  |  | M.Ed. |  | HP | MN |
| School Nurse |  |  |  | Graduate Cert. | HP | HSC |
| School Psychology |  |  | M.Ed., Ed.S., Ph.D. |  | ED | MN |
| Science Education/7-12 |  |  |  | Cert. | ED | MN |
| Sculpture | B.F.A. |  | M.F.A. |  | TA | MN |
| -- Art Education |  | Conc. |  |  | TA | MN |
| Secondary Education | B.S.Ed. |  | M.Ed. | M.Ed. Conc. | ED | MN |
| -- English Education |  | Conc. |  | M.Ed. Conc. | ED | MN |
| --World Languages Education |  | Conc. |  |  | ED | MN |
| ---- French |  | Cert. |  |  | ED | MN |
| ---- German |  | Cert. |  |  | ED | MN |
| ---- Hebrew |  | Cert. |  |  | ED | MN |
| ---- Italian |  | Cert. |  |  | ED | MN |
| ---- Latin |  | Cert. |  |  | ED | MN |
| ---- Portuguese |  | Cert. |  |  | ED | MN |
| ---- Spanish |  | Cert. |  |  | ED | MN |
| -- Mathematics Education |  | Conc. |  | M.Ed. Conc. | ED | MN |
| -- Science Education |  | Conc. |  | M.Ed. Conc. | ED | MN |


| Program Name | Baccalaureate | Minor, Conc., Cert., Track | Post- <br> Baccalaureate | Post- <br> Baccalaureate <br> Minor, Conc., Cert. | College | Campus |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ---- Chemistry |  | Cert. |  |  | ED | MN |
| ---- Earth \& Space |  | Cert. |  |  | ED | MN |
| ---- Physics |  | Cert. |  |  | ED | MN |
| -- Social Studies |  |  |  | M.Ed. Conc. | ED | MN |
| -- Social Studies Education |  | Conc. |  |  | ED | MN |
| ---- Citizenship Education |  | Cert. |  |  | ED | MN |
| ---- Social Science Education |  | Cert. |  |  | ED | MN |
| -- World/Foreign Languages |  |  |  | M.Ed. Conc. | ED | MN |
| Social Studies Education/7-12 |  |  |  | Cert. | ED | MN |
| Social Work | B.S.W. | Minor | M.S.W. |  | SW | MN, AMB, CC, HAR |
| -- Child \& Family Services |  | Cert. |  |  | SW | MN |
| -- Play Therapy |  |  |  | Graduate Cert. | SW | HAR, AMB |
| Sociology | B.A. | Minor | M.A., Ph.D. |  | LA | MN |
| -- Health Research |  | Cert. |  |  | LA | MN |
| -- Health Track |  | Track |  |  | LA | MN |
| Sociology of Health |  | Minor |  |  | LA | MN |
| Spanish | B.A. | Minor, Cert. | M.A., Ph.D. |  | LA | MN |
| -- Latin American Studies Semester |  | Cert. |  |  | LA | MN |
| -- Multilingual Business <br> \& Government Studies |  | Cert. |  |  | LA | MN |
| -- Spanish \& Latin American Studies for Business |  | Cert. |  |  | LA | MN |
| - Spanish \& Latino <br>  <br> Human Services Professions |  | Cert. |  |  | LA | MN |
| Special Education |  |  |  | M.Ed. | ED | MN |
| -- Applied Behavioral Analysis/Autism Spectrum Disorders |  |  |  | Conc. | ED | MN |
| -- Mild Disabilities |  |  |  | Conc. | ED | MN |
| -- Severe Disabilities |  |  |  | Conc. | ED | MN |
| Speech, Language \& Hearing Science | B.A. |  | M.A. |  | HP | MN |
| Sport Business |  |  | M.S. |  | TH | MN |
| -- Athletics Administration |  |  |  | Conc. | TH | MN |


| Program Name | Baccalaureate | Minor, <br> Conc., <br> Cert., <br> Track | Post- <br> Baccalaureate | Post- <br> Baccalaureate <br> Minor, Conc., Cert. | College | Campus |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| -- Recreation \& Event Management |  |  |  | Conc. | TH | MN |
| -- Sport Analytics |  |  |  | Conc. | TH | MN |
| -- Sport Marketing \& Promotions |  |  |  | Conc. | TH | MN |
| Sport \& Recreation <br> Management | B.S. |  |  |  | TH | MN |
| -- Event Leadership |  | Conc. |  |  | TH | MN |
| -- Governance \& Policy |  | Conc. |  |  | TH | MN |
| -- Sport \& Recreation Promotion |  | Conc. |  |  | TH | MN |
| -- E-Tourism |  | Cert. |  |  | TH | MN |
| -- Geography of Sports, Recreation \& Tourism Planning |  | Cert. |  |  |  | MN |
| -- Geography of Tourism |  | Cert. |  |  | LA | MN |
| Statistics |  | Minor | M.S., Ph.D. |  | BU | MN |
| Stormwater Management |  |  |  | Graduate Cert. | EN | MN |
| Strategic Communication | B.A. |  |  |  | CO | MN |
| -- General Sequence |  | Conc. |  |  | CO | MN, CC |
| - International Communication |  | Conc. |  |  | CO | MN |
| -- Organizational Leadership |  | Conc. |  |  | CO | MN |
| -- Public Relations |  | Conc. |  |  | CO | MN |
| -- Rhetoric \& Public Advocacy |  | Conc. |  |  | CO | MN |
| Strategic Communication \& Cross-Cultural Leadership |  |  |  | Graduate Cert. | CO | MN |
| Strategic Management |  |  |  | Ph.D. Conc. | BU | MN |
| String Pedagogy |  |  | M.M. |  | MU | MN |
| Sustainable Food Systems |  | Cert., <br> Minor |  |  | EV | AMB |
| Sustainable Community Planning |  |  |  | Graduate Cert. | EV | AMB, HAR |
| Sustainability |  | Cert. |  |  | UC | MN, AMB |
| Taxation |  |  | $\begin{aligned} & \hline \text { L.L.M., } \\ & \text { J.D./L.L.M. } \end{aligned}$ |  | LW | MN |
| Teaching in Higher Education |  |  |  | Cert. | ED | MN |


| Program Name | Baccalaureate | Minor, <br> Conc., <br> Cert., <br> Track | Post- <br> Baccalaureate | Post- <br> Baccalaureate <br> Minor, Conc., Cert. | College | Campus |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TESOL (see Curriculum, Instruction \& Technology in Education) |  |  |  | M.S.Ed. Conc. | ED | MN |
| Theater | B.A. | Minor |  |  | CA | MN |
| -- Acting |  | Conc. | M.F.A. |  | CA | MN |
| -- Design/Technology |  | Conc. | M.F.A. |  | CA | MN |
| -- Directing |  | Conc. | M.F.A. |  | CA | MN |
| -- Musical Theater |  | Conc. |  |  | CA | MN |
| -- Playwriting |  |  | M.F.A. |  | CA | MN |
| -- Theater Education |  | Conc. |  |  | CA | MN |
| Theory (Music) | B.M. |  |  |  | MU | MN |
| Therapeutic Recreation | B.S. |  |  |  | HP | MN |
| Tourism \& Sport |  |  |  | Ph.D. Conc. | BU | ** |
| Tourism \& Hospitality Management (Executive Program) |  |  | Executive M.T.H.M. |  | TH | MN |
| Tourism \& Hospitality Management | B.S. |  | M.T.H.M. |  | TH | MN, JPN |
| -- Destination Management |  | Conc. |  |  | TH | MN |
| -- Event Leadership |  | Conc. |  |  | TH | MN |
| -- Hospitality Operations |  | Conc. |  |  | TH | MN |
| - E-Tourism |  | Cert. |  |  | TH | MN |
| - Geography of Sports, Recreation \& Tourism Planning |  | Cert. |  |  | TH | MN |
| -- Geography of Tourism |  | Cert. |  |  | LA | MN |
| -- Hospitality Operations Management |  |  |  | Conc. | TH | MN |
| -- Tourism \& Hospitality Marketing |  |  |  | Conc. | TH | MN |
| Tourism \& Hospitality <br> Management (2+2 program) | B.S. |  |  |  | TH | JPN |
| Transportation Planning |  |  |  | Graduate Cert. | EV | AMB, HAR |
| Trial Advocacy |  |  | L.L.M. |  | LW | MN |
| Trial Advocacy \& Litigation |  |  |  | Cert. | LW | MN |
| Urban Bioethics |  |  | M.A. | Graduate Cert. | ME | HSC |
| Urban Education |  |  | M.Ed. |  | ED | MN |
| Visual Studies | B.A. |  |  |  | TA | MN |
| Vocational/Technical Education (See Career and Technical Education) |  |  |  |  |  |  |


| Program Name | Baccalaureate | Minor, <br> Conc., <br> Cert., <br> Track | Post- <br> Baccalaureate | Post- <br> Baccalaureate <br> Minor, Conc., <br> Cert. | College | Campus |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| World/Foreign Language <br> Education/K-12 |  |  |  | Cert. | ED | MN |
| Women's Studies | B.A. | Minor, <br> Cert. |  | Graduate Cert. | LA | MN |
|  |  |  |  |  |  |  |

*Cooperative programs among Temple University, St. Joseph's University and the University of Pennsylvania ** offered internationally; initially to be offered in Singapore.

## GENERAL EDUCATION

The General Education (GenEd) Program serves as Temple University's liberal education requirements for all undergraduate students and provides a foundation for learning and development practices that help students succeed academically and professionally.

A recent survey of more than 300 employers nationwide conducted by the Association of American Colleges and Universities indicated that the majority of employers seek graduates with 4-year degrees with a mix of deep disciplinary skills and knowledge and a broad base of skills and abilities. Skills and abilities which employers ranked most important for schools and colleges to develop included communication skills, critical thinking skills, the ability to apply abstract theories and ideas to concrete experiences and practices, and problem-solving skills.

The GenEd program attempts to foster the development of such skills through its curriculum by providing students multiple opportunities to exercise, in multiple contexts and settings, their communication, critical thinking, and problem-solving skills and we attempt to do so by helping students make connections from academic knowledge to experience.
"The Philadelphia Experience" has become a hallmark of the new GenEd, with many courses taking students into the city for direct encounters connected to their studies. A science course takes students to the Waterworks to study 19th century sewage treatment. A course in educational policy takes students into schools and community centers. A course in sustainability challenges them to design a solution for storm-water run-off. A course in creativity assigns them to go to First Friday to interview an artist.

These and other modes of stretching and contextualizing traditional disciplinary content prepare students to deal with a rapidly globalizing world, in which the resolution of complicated issues increasingly calls upon the ability to see a problem from many angles and to synthesize divergent perspectives.

Ultimately, GenEd is about equipping our students to make connections between what they learn, their lives and their communities.

Find out more about General Education at http://gened.temple.edu.

## Program Framework

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

## Foundation Courses

| General Education Attribute | Area | Requirement |
| :---: | :---: | :---: |
| GW | Analytical Reading \& Writing | 1 course, 4 credit hours |
| GQ | Quantitative Literacy | 1 course, 4 credit hours |
| GY | Mosaic I | 1 course, 3 credit hours |
| MZ | Mosaic II | 1 course, 3 credit hours |

## Course Sequencing

Students are advised to take the three-semester sequence formed by Analytical Reading \& Writing, Mosaic I and Mosaic II as soon as possible after entering Temple in order and in successive semesters.

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

## Breadth Courses

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

## Finding GenEd Courses

Each General Education area has a list of courses that satisfy the requirements for that area. Descriptions of the areas and their approved courses can be found by clicking on the links under the GenEd Areas heading on the left side of this web page, and at http://gened.temple.edu (select
"Students", then "Courses"). Students may also download a 2013-2014 orientation booklet with course descriptions here.

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

- Go directly to the Class Schedule Search page on the university's web site.
- Go to Self-Service Banner (SSB), which is available on the TUportal.

Students must log onto the TUportal with their username and password. Select the Student tab from the SSB page. Clicking the Registration button will allow users to select and Look Up Classes.

Select the relevant term or semester from the drop down box to begin a search.
Students may select one or many criteria in searching for specific classes; however the more criteria selected, the fewer the number of courses returned.

To get all of the courses fulfilling a GenEd area, in the Subject box, select Accounting and hold the SHIFT key and select Women's Studies to highlight all subject areas. Scroll to the bottom of the page to the General Education or Core Attributes box to select the relevant GenEd area, and hit the Class Search button at the bottom of the page. The results will list all relevant courses in the selected GenEd area for the selected term.

## General Education Policies and Requirements

## In general, students should be aware of the following:

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

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

A GenEd course counts in one GenEd area only.

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

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

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

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

## Repeat \& Withdraw Policy

Students should be aware that opportunities are limited for repeating a course to replace a failing grade under University policy. Repeating a Course ( $\# 0.2$.10.12) prohibits students from retaking a course more than twice unless the course is specifically designated as a course that may be taken for credit multiple times.

If, after a third attempt, students are unable to complete the following General Education requirements with a C- or better, they will be dismissed from the university. These course requirements include:
o GW Analytical Reading \& Writing
o GY Mosaic: Humanities Seminar I
o GZ Mosaic: Humanities Seminar II

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

## Departments, Majors, Minors and GenEd

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

Departments and colleges may not single out a specific GenEd course as a requirement.
A curriculum or degree program may identify a GenEd course as part of an array for its majors or minors. (An array is defined as a set of options from which the student may choose. The array
must present at least three options for any one course chosen.) Courses in an approved array may satisfy both the General Education requirement and the degree, minor or certificate requirement.

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

## Early Progress Reports

All GenEd course instructors will submit Academic Progress Reports.

## Credit/No Credit

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

## General Education Waivers

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

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

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

## Quantitative Literacy (GQ)

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

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

- Any General Education Quantitative Literacy (GQ) course.
- Mathematics 1031, Mathematics 1041, Mathematics 1042, Mathematics 1941, Mathematics 1942, or Mathematics 2043.
- Statistics 2101, Statistics 2910 or Statistics 2103, Statistics 2903 or an equivalent transfer course (primarily for FSBM and STHM majors and FSBM minors).
- Completion of a three-course sequence to include Mathematics 1015, Mathematics 1021 or Education 1017, and Early Childhood Education 3107 (primarily for Early Childhood Elementary Education majors). All courses must be completed to receive the waiver.
- Completion of a four-course sequence to include Mathematics 1015, Mathematics 1021, Mathematics 1022, and Math Education (Secondary) 3145 or Middle Grades Education 3145 (primarily for Middle Grades Education majors concentrating in Science and Language Arts). All courses must be completed to receive the waiver.
- Completion of a four-course sequence to include Mathematics 1021, Psychology 1167 (or Sociology 1167 or Sociology 3201), Nursing 3261, and Nursing 3262 (primarily for Nursing majors). All courses must be completed to receive the waiver.

Courses must be completed with a C- or better to satisfy GenEd waiver requirements.
Department/schools/colleges may stipulate a higher grade to satisfy department/school/college requirements. Consult an academic advisor for more information.

## Arts (GA)

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

## Boyer College of Music and Dance:

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

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

Courses must be completed with a C- or better to satisfy GenEd waiver requirements.
Department/schools/colleges may stipulate a higher grade to satisfy department/school/college requirements. Consult an academic advisor for more information.

## Tyler School of Art:

Pending approval, students in the following degree programs at Tyler School of Art may satisfy the GA requirement by successfully completing a specified multi-course sequence:

## Bachelor of Arts Visual Studies <br> Bachelor of Science Art Education

## Bachelor of Fine Arts

Art History 1156, and Foundation Program 1511 or Visual Studies 1151. All courses must be completed with a C- or better to receive waiver.

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

## Human Behavior (GB)

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

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

- Education 2109: Adolescent Development for Educators, Special Education 2231: Introduction to Inclusive Education, and English Education (Secondary) 3338:
Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12. All courses must be completed with a C-or better to receive waiver.
- Education 2179: Knowing and Learning in Mathematics and Science; Science Education (Secondary)/Math Education (Secondary) 2189: Classroom Interactions; Science Education (Secondary)/Math Education (Secondary) 4189: Project-Based Instruction; and Secondary Education 3796: Differentiated Literacy Instruction in the Disciplines, Grades 7-12. All courses must be completed with a C-or better to receive waiver.

Consult an academic advisor for more information.

## Science \& Technology (GS)

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

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

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

- Botany 1111 - Horticulture 2114
- Biology 1011 - Biology 1012
- Biology 1111 - Biology 2112
- Biology 1911 - Biology 2912 (honors)
- Chemistry 1021/1023 - Chemistry 1022/1024
- Chemistry 1031/1033 - Chemistry 1032/1034
- Chemistry 1041/1043 - Chemistry 1042/1044
- Chemistry 1951/1953 - Chemistry 1952/1954 (honors)
- EES 1001 - EES 2011
- EES 1001 - EES 2015
- EES 1001 - EES 2021
- EES 1001 - EES 2022
- EES 1001 - EES 2061
- EES 2001 - EES 2011
- EES 2001 - EES 2015
- EES 2001 - EES 2021
- EES 2001 - EES 2022
- EES 2001 - EES 2061
- Kinesiology 1223 - Kinesiology 1224
- Physics 1001 - Physics 1004
- Physics 1021 - Physics 1022
- Physics 1061 - Physics 1062
- Physics 2021 - Physics 2022
- Physics 2921 - Physics 2922

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

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


## List I

Botany 1111
Biology 1011
Biology 1111
Biology 1911 (honors)
Chemistry 1021/1023
Chemistry 1031/1033
Chemistry 1041/1043
Chemistry 1951/1953 (honors)
EES 1001
EES 2001
Kinesiology 1223
Physics 1001
Physics 1021

Physics 1061
Physics 2021
Physics 2921 (honors)

## List II

Horticulture 2114
Biology 1012
Biology 2112
Biology 2912 (honors)
Chemistry 1022/1024
Chemistry 1032/1034
Chemistry 1042/1044
Chemistry 1952/1954 (honors)
EES 2011
EES 2015
EES 2021
EES 2022
EES 2061
Kinesiology 1224
Physics 1004
Physics 1022
Physics 1062
Physics 2022
Physics 2922 (honors)
Consult an academic advisor for more information.

## World Society (GG)

Students who successfully complete (with a C- or better) credit-bearing coursework worth at least three semester hours in an approved summer or semester study abroad program will satisfy the World Society requirement. Consult an academic advisor for details.

## General Education Transfer Programs

In general, new transfer students beginning their degree program at Temple should be aware of the following:

- Every Temple undergraduate fulfills the requirements of the General Education Curriculum in some way.
- GenEd policies for transfer students relate only to the university General Education requirements. All requirements of Temple's schools and colleges and major programs of study remain in force. Students should consult the appropriate sections of this Bulletin and their academic advisors about school/college and major requirements.
- The Analytical Reading and Writing requirement may be met by placing out of Temple's Analytical Reading and Writing through a placement test or by transferring in the equivalent of Temple's Analytical Reading and Writing course. Transfer students who completed an English placement test at their previous institution and tested out of their previous institution's English Composition or comparable requirement can be waived from the Analytical Reading and Writing requirement if they have documentation of their placement and have successfully completed a higher-level English/Writing course. Acceptable documentation includes an official letter from the university's registrar, advising unit, a faculty member, or other appropriate university official. In these instances, students will need to meet with an advisor for official approval. Once approval is granted, advisors will complete a DARS exception. Students should check with their advisor if they are unsure whether they have met this requirement.
- The Global/World Society requirement also may be met by participating in an approved Study Abroad program. Transfer students who completed a study abroad at their previous institution should check with their advisor for additional information.


## Completing GenEd Requirements with Transfer Credits

- In addition to the approved GenEd course lists, students required to complete any version of General Education (GenEd) may be able to use their transfer credits to satisfy General Education requirements. Students cannot use the same course to fulfill a General Education and a major or minor requirement.
o Initial evaluation of transfer credits will be made in the Temple Office of Undergraduate Admissions. Re-evaluation of credits will be done by the Temple Admissions Office and academic advisors, in consultation with the General Education Program when necessary, according to standard Temple policies and procedures.
- Transfer courses will be applied to major and minor requirements first and then to GenEd.
- All students are required to take two Writing Intensive courses at Temple University in addition to completing the GenEd requirements. Writing Intensive courses in transfer cannot be used to fulfill this school/college requirement. The two Writing Intensive courses will be designated by the student's major.
- Credit for Prior Learning (completed prior to matriculation at Temple) such as Advanced Placement (AP), International Baccalaureate (IB) and College Level Examination Program (CLEP) will satisfy general education requirements according to current practice, i.e. using course attributes/core equivalents. (See Academic Policies: Credit for Prior Learning for more information.)


## Full GenEd Curriculum

## Requirements for students with fewer than 45 Transfer credits:

Transfer students admitted to Temple with fewer than 45 transfer credits complete the full GenEd Curriculum. All of the requirements in this version of the GenEd may be met either with equivalent transfer courses as described in the table below or with GenEd courses taken at Temple. Please note the above policies regarding completing GenEd requirements with transfer credits.

| General Education Area | Credits Transfer Policy* | Credits |  |
| :--- | :--- | :--- | :--- | :--- |
| Analytical Reading and <br> Writing (GW) | 4 | Any approved composition course (CO or GW) | 3 |
| Mosaic I (GY) | 3 | Any approved Intellectual Heritage equivalent (IA or GY) or an <br> approved Mosaic combination. | 3 (6) |
| Mosaic II (GZ) | 3 | Any approved equivalent (IB or GZ) or an approved Mosaic <br> combination. | 3 |
| U.S. Society (GU) | 3 | Any American Culture (AC) or equivalent | 3 |
| Human Behavior (GB) | 3 | Any Individual and Society (IN) or equivalent | 3 |
| Arts (GA) | 3 or 4 | Any Arts (AR) or equivalent | 3 |
| Race and Diversity (GD) | 3 | Any Studies in Race (RS) or equivalent | 3 |
| Global/World Society (GG) | 3 | Any International Studies (IS) or equivalent | 3 |
| Quantitative Literacy (GQ) | 4 | Any Quantitative Reasoning QA, QB or any course at the Math |  |
| 1011 level or higher | 3 |  |  |
| Science and Technology (GS) | 3 | Any 3 credit Science course (SA or SB) (excluding CIS 1055) | 3 |
| Science and Technology (GS) | 3 | Any 3 credit Science course (SA or SB) (excluding CIS 1055) | 3 |
| Total Credits | $35-36$ | Total Credits | $33-36$ |

*This policy relates only to transfer credit with Core designations. To complete GenEd requirements with courses taken at Temple students should select from the approved GenEd courses.

## 45+ Transfer GenEd

## Requirements for students with 45 or more credits:

Transfer students admitted to Temple with 45 or more transfer credits (and without an Associate's degree approved for GenEd-to-GenEd, Core-to-GenEd or Core-to-Core Transfer) complete the 45+ Transfer GenEd. All of the requirements in this version of the GenEd may be met either with equivalent transfer courses or with GenEd courses taken at Temple. Please note the above policies regarding completing GenEd requirements with transfer credits.

## General Education Requirements for Students with 45 or more transfer credits

| General Education Area | Credits | Transfer Policy* | Credits |
| :--- | :--- | :--- | :--- |
| Analytical Reading and Writing (GW) | 4 | Any approved composition course <br> (CO or GW) | 3 |
| Mosaic I or II (GY or GZ) | 3 | Any approved Intellectual Heritage equivalent (IA, IB, GY <br> or GZ) or an approved Mosaic combination. | 3 (6) |
| One course each in two of these three <br> areas: U.S. Society (GU), Human <br> Behavior (GB) or Arts (GA) | $6-7$ | One course each in two of these three areas: Any American <br> Culture (AC) or equivalent, Any Individual and Society <br> (IN) or equivalent, or Any Arts (AR) or equivalent | 6 |
| Race and Diversity (GD) | 3 | Any Studies in Race (RS) or equivalent | 3 |


| General Education Area | Credits Transfer Policy* | Credits |  |
| :--- | :--- | :--- | :--- | :--- |
| Global/World Society (GG) | 3 | Any International Studies (IS) or equivalent | 3 |
| Quantitative Literacy (GQ) | 4 | Any Quantitative Reasoning QA, QB or any course at the <br> Math 1011 level or higher | 3 |
| Science and Technology (GS) | 3 | Any 3 credit Science course (SA or SB) <br> (excluding CIS 1055) | 3 |
| Total Credits | $26-27$ | Total Credits | $24-27$ |

*This policy relates only to transfer credit with Core designations. To complete GenEd requirements with courses taken at Temple students should select from the approved GenEd courses.

## Eligibility for 45+

The 45+ Transfer GenEd is designed for students who have taken a significant number of courses elsewhere before entering Temple. All college-level courses considered transferable by the Temple Office of Undergraduate Admissions, including those for which evaluation is not complete until after the student begins at Temple, will be counted toward the 45 credit minimum, when they meet either of the following sets of conditions.

1. For students new to Temple: The courses have been taken elsewhere before the student matriculates at Temple.
2. For readmitted students: 45 or more transferable credits have been taken elsewhere since the student's last date of enrollment at Temple and before the date of the student's return to Temple.
3. For both groups of students:

- Credit for Prior Learning, including Advanced Placement, International Baccalaureate and College Level Examination Program (CLEP) credits are counted toward eligibility for the 45+ Transfer GenEd if completed prior to matriculation. Scores must meet the Temple credit-granting standards and be approved by the Temple school or college that offers the equivalent course (see Credit for Prior Learning).
- Courses taken at Temple as a non-matriculated student are not counted toward eligibility for the 45+ Transfer GenEd.
- Courses taken elsewhere by students once they are at Temple, with the permission of the student's Temple school or college, are not counted toward eligibility for the 45+ Transfer GenEd.
- Credit for Prior Learning credits completed by students once they are at Temple, are not counted toward eligibility for the 45+ Transfer GenEd.


## 45+ Transfer GenEd Policies

Transfer students should be aware that this GenEd policy relates only to university General Education (GenEd) requirements. All requirements of Temple's schools and colleges and major programs of study remain in force. Students should consult the appropriate sections of this Bulletin and their academic advisors about school/college and major requirements.

A 45+ Transfer GenEd version of the Degree Audit Reporting System (DARS) document is produced automatically for eligible students who are entering Temple for the first time. For
eligible readmitted students to receive a 45+ Transfer GenEd DARS document, a Temple academic advisor must post the 45+ event in the student's record.

## IB GenEd

## Requirements for the International Baccalaureate General Education Program:

Students who have earned the International Baccalaureate (IB) Diploma and meet minimum eligibility requirements complete the International Baccalaureate General Education Program (IB GenEd Program).

Students accepted into the program will still complete the required number of credits needed for their selected baccalaureate degree - usually between 120-124 credits and will need to complete up to 18-19 credits of the full GenEd Program (35-36 credits).

## Eligibility for IB GenEd Program:

To be eligible for the IB GenEd program, students must be admitted to the University, have earned the IB Diploma with a minimum score of 5 (five) on each exam, and English must be completed at the A1 level. Students must send an official copy of their IB Diploma and Scores to Temple Admissions when available.

Students who completed the IB Diploma, but do not meet the eligibility requirements for the IB GenEd program, will complete the full GenEd Program. However, individual exams may fulfill requirements at Temple. For a complete list of individual IB exams, qualifying scores, and how the exams would be used to fulfill GenEd, major, or minor requirements, see www.temple.edu/vpus/transfer/equivalencies.htm\#IB.

## IB GenEd Program:

Students accepted to the IB GenEd program will need to complete up to 18-19 credits of the full GenEd Program (35-36 credits):

- Required Areas Mosaic I and Mosaic II, U.S. Society, Arts, Race \& Diversity, and one Science \& Technology requirement (five categories/six courses; 18-19 credits) will be need to be completed through coursework at Temple and/or through credit for individual IB exams - if applicable.
o For example, if a qualifying student earned exam scores of five (5) on American History, Theater Arts, and Biology HL and these course equivalents were not required by the student's major or minor at Temple, the student's U.S. Society, Arts, and Science \& Technology requirements for the IB GenEd Program would
be fulfilled. As a result, this student would only take three courses at Temple to complete the remaining requirements for the IB GenEd Program: Mosaic I, Mosaic II and a Race \& Diversity course, i.e. nine credits.
o Please see the table below for additional equivalencies:

Remaining General Education Requirements for IB GenEd students

| General Education Area | Credits | IB exams which may fulfill remaining GenEd requirements* |
| :--- | :--- | :--- |
| Mosaic I (GY) | 3 | No IB Equivalent |
| Mosaic II (GZ) | 3 | No IB Equivalent |
| U.S. Society (GU) | 3 | AMERICAN HISTORY |
| Arts (GA) | $3-4$ | DESIGN <br> VISUAL ARTS (HL) <br> MUSIC <br> THEATRE ARTS |
| Race and Diversity (GD) | 3 | No IB Equivalent |
| Science and Technology (GS) | 3 | BIOLOGY (HL) <br> BIOLOGY (SL) <br> CHEMISTRY (HL) <br> CHEMISTRY (SL) |
| Total Credits | PHYSICS (HL) |  |

* IB equivalencies will be applied to major or minor requirements first and then to GenEd; they cannot be double counted.
- Waived Areas Analytical Reading and Writing (GW), Human Behavior (GB), Global/World Society (GG), Quantitative Literacy (GQ), and one Science and Technology (GS) requirement will be waived, since the learning experiences acquired during the IB program fulfill many of the required outcomes for these areas. In addition to the waiver, credit for exams in these areas will be added to the student's academic history.


## GenEd-to-GenEd, Core-to-GenEd \& Core-to-Core (GenEd Transfer Agreement):

## Requirements for GenEd Transfer Agreement Students

Students entering Temple with an approved Associate degree from a GenEd-to-GenEd or Core-to-GenEd institution have met all of the General Education requirements. These students are identified upon admission to or enrollment in the University by either Admissions or their advising unit. Their fulfillment of the General Education by a GenEd Transfer Agreement is noted on pertinent student records, including the degree audit report (DARs).

## Eligibility for GenEd-to-GenEd, Core-to-GenEd and Core-to-Core

The below institutions have Transfer Agreements with Temple University. Not all Associate degrees from these institutions have been approved for GenEd-to-GenEd or Core-to-GenEd. To review the agreements and which degrees are eligible go to www.temple.edu/vpus/transfer/agreements.htm. You can also consult with your academic advisor to determine if you are a GenEd-to-GenEd or Core-to-GenEd student.

Bucks County Community College
Burlington County College
Camden County College
Community College of Philadelphia
Delaware County Community College
Gloucester County College
Harrisburg Area Community College
Lehigh Carbon Community College
Luzerne County Community College
Mercer County Community College
Montgomery County Community College
Northampton Community College
Valencia Community College (FL)
Valley Forge Military College
Go to www.temple.edu/vpus/transfer/agreements.htm for any updates to the list of GenEd-toGenEd and Core-to-GenEd partner institutions.

Transfer students should be aware that GenEd-to-GenEd and Core-to-GenEd transfer relates only to University General Education requirements. All requirements of Temple's schools and colleges and major programs of study remain in force.

Make sure that your final transcript, indicating receipt of the Associate degree, is available to your Temple advisor, so your advisor can make sure the proper transfer status is noted on your student record. Your official transcript must note the receipt of your degree for an advisor to update the system.

## Analytical Reading \& Writing (GW)

Requirement: One 4-credit hour course.
Writing Placement Exam. The Writing Placement Exam is required for all first-year students, transfer and non-matriculating students who have not successfully completed a credit-bearing, college-level composition course with a grade of C - or better.

The placement exam will indicate if the student should register for English 0701: Introduction to Academic Discourse, English 0802: Analytical Reading \& Writing, or be exempted from the course.

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

Analytical Reading \& Writing is intended to teach students how to:

- Organize ideas in a coherent and logical manner;
- Connect multiple texts through an issue or an idea;
- Identify authors' key arguments;
- Create and defend arguments of one's own; and
- Demonstrate correct grammar, syntax and acknowledgment of sources.


## Analytical Reading \& Writing Courses

- Analytical Reading \& Writing
- English as a Second Language (ESL) Analytical Reading \& Writing
- Honors Analytical Reading \& Writing


## Arts (GA)

Requirement: One 3-credit or 4-credit hour course.
GenEd Arts courses develop artistic literacy. Courses may be centered on one of the arts (e.g. dance, fine arts, music), may be interdisciplinary in nature (e.g. creative writing and theater, film and dance), or may address larger themes (e.g. creativity, the arts and political statement, technology and the arts), but all Arts courses make some connection to other perspectives, disciplines, or subject areas.

GenEd Arts courses are intended to teach students how to:

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


## Arts Courses

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

In addition, a single GenEd course may be offered by more than one department. GenEd courses offered by more than one department will have the same course number and the same course title. A student may not take the same course from multiple departments and earn credit toward graduation. However, if a student wishes to replace her/his grade in a GenEd course, $\mathrm{s} / \mathrm{he}$ may replace the grade with any course bearing the same course number and the same course title regardless of department.

- Arts of the Western World: The Visual Experience
- Arts in Cultural Context
- Creative Acts
- Dramatic Imagination: The Performing Arts in Society
- Exploring Music
- Greek Theater \& Society
- Philadelphia Arts \& Culture
- Shakespeare and Music
- Shakespeare in the Movies
- Shall We Dance? Dance as Narrative in American Film
- The Art of Acting
- The Art of Listening
- The Art of Sacred Space
- The Creative Spirit: A Multidisciplinary View
- The Future of Your TV
- The History of Art in Rome (Rome Campus only)
- The Jazz Century in America
- The Meaning of the Arts
- World Musics \& Cultures
- Honors Art of Acting
- Honors Art of Sacred Space
- Honors Creative Acts
- Honors Greek Theater \& Society
- Honors: Philadelphia Arts \& Culture
- Honors Shakespeare in the Movies
- Honors Shall We Dance? Dance as Narrative in American Film
- Honors: The Art of Listening
- Honors The Creative Spirit: A Multidisciplinary View
- Honors The Meaning of the Arts
- Honors Transnational Cinema
- Honors World Musics \& Cultures

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

## Boyer College of Music:

Students may satisfy the GA requirement by successfully completing one of the following fourcourse sequences:

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

Courses must be completed with a C- or better to satisfy GenEd waiver requirements.
Department/schools/colleges may stipulate a higher grade to satisfy department/school/college requirements.

## Tyler School of Art:

Pending approval, students in the following degree programs at Tyler School of Art may satisfy the GA requirement by successfully completing a specified multi-course sequence:

## Bachelor of Arts Visual Studies <br> Bachelor of Science Art Education <br> Bachelor of Fine Arts

Art History 1156, and Foundation Program 1511 or Visual Studies 1151. All courses must be completed with a C- or better to receive waiver.

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

Consult an academic advisor for details.

## Global/World Society (GG)

Requirement: One 3-credit hour course.
GenEd Global/World Society courses explore societies and cultures outside of the United States. These courses take one of two approaches. Some concentrate on a single nation or region, examining in depth its political, social, historical, cultural, artistic, literary, geographic, and/or economic landscape. Others investigate globalization and its effects across nations and regions.

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

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


## Global/World Society Courses

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

In addition, a single GenEd course may be offered by more than one department. GenEd courses offered by more than one department will have the same course number and the same course title. A student may not take the same course from multiple departments and earn credit toward graduation. However, if a student wishes to replace her/his grade in a GenEd course, $\mathrm{s} / \mathrm{he}$ may replace the grade with any course bearing the same course number and the same course title regardless of department.

- Advertising and Globalization
- Border Crossings: Gendered Dimensions of Globalization
- Confronting Empire: Voices of Resistance
- Development and Globalization
- Education for Liberation Here and Abroad
- Evolution of Culture
- Gender and World Societies
- Global Cities
- Global Slavery
- Imaginary Cities
- Jewish Diaspora in Latin America
- Latin American Media
- Latino Immigration
- Philadelphia Dance Experience
- Religion in the World
- The Detective Novel
- The Global Crisis: Power, Politics and the Making of Our Times
- Turning Points in Human History: The Ancient World
- Turning Points in Human History: The Modern World
- War and Peace
- World Affairs
- World Performances
- World Regions and Cultures: Diversity and Interconnections
- World Society in Literature \& Film
- Honors Advertising and Globalization
- Honors Fate, Hope, and Action: Globalization Today
- Honors Imaginary Cities
- Honors Religion in the World
- Honors War and Peace
- Honors Women in Modern Bengali Film
- Honors World Affairs
- Honors World Performances
- Honors World Society in Literature \& Film

Waiver: Students who successfully complete (with a C- or better) credit-bearing coursework worth at least three semester hours in an approved summer or semester study abroad program will satisfy the Global/World Society requirement. Consult an academic advisor for details.

## Human Behavior (GB)

Requirement: One 3-credit hour course.
GenEd Human Behavior courses address the relationships between individuals and communities. Courses may focus on the relationship between individuals and communities in general or may engage those relationships from specific perspectives (such as art, music, education, religion, economics, politics or education), or look at them within specific themes (such as food \& eating, crime, crisis, sexuality, or adolescence).

Human Behavior courses are intended to teach students how to:

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


## Human Behavior Courses

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

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

- Asian Behavior \& Thought
- Bilingual Communities
- Creativity and Organizational Innovation
- Criminal Behavior
- Disability Identity
- Eating Cultures
- Emotional Intelligence and Leadership
- Guerrilla Altruism: A Mini-Manual of Subversive Activism
- Human Behavior and the Photographic Image
- Human Ecology
- Human Sexuality
- Identity \& Crisis
- Interpersonal Communication: Critical Competencies for Professional and Personal Success
- Kids, Community and Controversy
- Language in Society
- Marginalized Citizenship: Disability and Sexuality
- Philosophy of the Human
- The Quest for Utopia
- Tweens and Teens
- Workings of the Mind
- Youth Cultures
- Honors Asian Behavior \& Thought
- Honors Bilingual Communities
- Honors Criminal Behavior
- Honors Human Sexuality
- Honors Language in Society
- Honors Philosophy of the Human
- Honors: The Quest for Utopia
- Honors Tweens and Teens
- Honors Workings of the Mind
- Honors Youth Cultures

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

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

- Education 2109: Adolescent Development for Educators, Special Education 2231: Introduction to Inclusive Education, and English Education (Secondary) 3338:
Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12. All courses must be completed with a C-or better to receive waiver.
- Education 2179: Knowing and Learning in Mathematics and Science; Science Education (Secondary)/Math Education (Secondary) 2189: Classroom Interactions; Science Education (Secondary)/Math Education (Secondary) 4189: Project-Based Instruction; and Secondary Education 3796: Differentiated Literacy Instruction in the Disciplines, Grades 7-12. All courses must be completed with a C-or better to receive waiver.

Consult an academic advisor for more information.

## Mosaic (GY \& GZ)

Requirement: Mosaic: Humanities Seminar I (3 credits) and Mosaic: Humanities Seminar II (3 credits). Students normally should take Mosaic I in the semester immediately following the completion of Analytical Reading \& Writing, and Mosaic II immediately after completing Mosaic I.

In these small discussion-based classes, students will be guided though a thematic approach to primary texts from great world cultural and intellectual traditions. Themes such as "journeys," or "faith" or "money" are the basis for reading and understanding a set of important texts from different time periods and different cultures. For example, as students explore the theme of "power," they will start with Homer's Iliad and the Declaration of Independence. Expanding on this theme, they will read 18th-century political philosopher John Locke and 20th-century American civil rights leader Martin Luther King Jr., while weaving in important texts from China and the Middle East. As students interrogate the theme of "power," they will be making connections across different time periods, cultures, and types of writing.

The Mosaic sequence will be enhanced by the addition of "texts" from great world musical, artistic and architectural traditions, allowing students to grapple with important themes in a richer multidisciplinary and multicultural fashion.

Mosaic courses build upon the communication and critical thinking skills students developed in the Analytical Reading \& Writing course, particularly the ability to make connections and arguments across different texts. That is why it is so important to take the Analytical Reading \& Writing course before taking Mosaic.

Upon completion of the Mosaic sequence, students will be able to:

- Read in its entirety an unfamiliar and problematic written text (theoretically, historically, or culturally challenging);
- Recognize abstractions, large ideas, and implications associated with difficult written texts;
- Make connections across disciplines, history and cultural boundaries;
- Construct positions, arguments, and interpretations through textual analysis and evaluation; and
- Produce thoughtful writing that reflects persuasive position and the conventions of academic discourse.


## Mosaic Courses

- Mosaic: Humanities Seminar I
- Mosaic: Humanities Seminar II
- Honors Mosaic: Humanities Seminar I
- Honors Mosaic: Humanities Seminar II


## Quantitative Literacy (GQ)

Requirement: One 4-credit hour course.
Math Placement Exam. The Mathematics Placement Exam is required for all first-year students, transfer and non-matriculating students who have not successfully completed a creditbearing, college-level Math course with a grade of C- or better. The placement exam will indicate if the student may register for either a Quantitative Literacy course or a higher-level math course.

A student placed in Math 0701 is required to complete successfully Math 0701 before enrolling in a GenEd Quantitative Literacy course or GenEd Science \& Technology courses, as these courses require students to understand and perform basic computational skills.

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

Quantitative Literacy courses are intended to teach students how to:

- Understand quantitative models that describe real world phenomena and recognize
limitations of those models; limitations of those models;
- Perform simple mathematical computations associated with a quantitative model and make conclusions based on the results;
- Recognize, use, and appreciate mathematical thinking for solving problems that are part of everyday life;
- Understand the various sources of uncertainty and error in empirical data;
- Retrieve, organize, and analyze data associated with a quantitative model; and
- Communicate logical arguments and their conclusions.


## Quantitative Literacy Courses

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

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

- Critical Reasoning and Problem Solving
- Digital Mapping: From Mercator to Mashups
- Investing for the Future
- Math for a Digital World
- Mathematical Patterns
- Quantitative Methods in the Social Sciences
- Statistical Reasoning \& Games of Chance
- Statistics in the News
- Honors Investing for the Future
- Honors Math for a Digital World
- Honors Mathematical Patterns
- Honors Quantitative Methods in the Social Sciences

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

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

- Mathematics 1031, Mathematics 1041, Mathematics 1042, Mathematics 1941, Mathematics 1942, or Mathematics 2043.
- Statistics 2101, Statistics 2910 or Statistics 2103, Statistics 2903 or an equivalent transfer course (primarily for FSBM and STHM majors and FSBM minors).
- Completion of a three-course sequence to include Mathematics 1015, Mathematics 1021 or Education 1017, and Early Childhood Education 3107 (primarily for Early Childhood Education majors). All courses must be completed to receive wavier.
- Completion of a four-course sequence to include Mathematics 1015, Mathematics 1021, Mathematics 1022, and Math Education (Secondary) 3145 or Middle Grades Education 3145 (primarily for Middle Grades Education majors concentrating in Science and Language Arts). All courses must be completed to receive waiver.
- Completion of a four-course sequence to include Mathematics 1021, Psychology 1167 (or Sociology 1167 or Sociology 3201), Nursing 3261, and Nursing 3262 (primarily for Nursing majors). All courses must be completed to receive waiver.

Courses must be completed with a C- or better to satisfy GenEd waiver requirements.
Department/schools/colleges may stipulate a higher grade to satisfy department/school/college requirements.

Consult an academic advisor for details.

## Race \& Diversity (GD)

Requirement: One 3-credit hour course.

Race \& Diversity courses develop a sophisticated understanding of race and racism as dynamic concepts, pointing to the ways in which race intersects with other group identifications such as gender, class, ethnicity, religion, age, sexual orientation or disability.

Race \& Diversity courses are intended to teach students how to:

- Recognize the ways in which race intersects with other group identifications or ascriptions: gender, class, ethnicity, sexual orientation, religion, disability, age;
- Understand the relationships among diversity, justice and power;
- Explore what it means for individuals and institutions to exist in a multi-racial, multicultural world;
- Investigate the various forms race and racism has taken in different places and times; and
- Discuss race matters with diverse others in relation to personal experience.


## Race \& Diversity Courses

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

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

- African Americans, Equality and the Law: Weapon or Tool?
- Classics of African American Theater
- Dimensions of Diversity: What's Brewing in the Melting Pot?
- Embodying Pluralism
- Ethnicity and the Immigrant Experience in the U.S.
- Immigration and the American Dream
- Politics of Identity in America
- Race \& Ethnicity in American Cinema
- Race \& Identity in Judaism
- Race \& Poverty in the Americas
- Race, Identity and Experience in American Art
- Race in the Ancient Mediterranean
- Race on the Stage
- Representing Race
- The History \& Significance of Race in America
- Honors African Americans, Equality and the Law: Weapon or Tool?
- Honors Ethnicity and the Immigrant Experience in the U.S.
- Honors Immigration and the American Dream
- Honors Politics of Identity in America
- Honors Race \& Ethnicity in American Cinema
- Honors Race \& Identity in Judaism
- Honors Race \& Poverty in the Americas
- Honors Race, Identity and Experience in American Art
- Honors Race in the Ancient Mediterranean
- Honors Representing Race
- Honors: The History \& Significance of Race in America


## Science \& Technology (GS)

Requirement: Two 3-credit hour courses.
GenEd Science \& Technology courses present scientific process in context, helping students understand how scientific phenomena and/or technological change affects human life and the planet.

Science \& Technology courses are intended to teach students how to:

- Understand and describe the scientific process;
- Understand the sequential nature of science and technology;
- Recognize, use and appreciate scientific or technological thinking for solving problems that are part of everyday life;
- Understand and communicate how technology encourages the process of discovery in science and related disciplines; and
- Retrieve, organize, and analyze data associated with a scientific or technological model.


## Science \& Technology Courses

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

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

- Brain Matters
- Chemistry of Wine
- Cyberspace \& Society
- Digital World 2020
- Disasters: Geology vs. Hollywood
- DNA: Friend or Foe
- Evolution \& Extinctions
- Geology of the National Parks
- Green vs. Gray: Improving and Sustaining Urban Ecosystems
- How Things Work: The Physics of Everyday Life
- Nature Has No Reverse
- Powering the Future
- Sustainable Design
- Sustainable Environments
- Technology Transformations
- The Bionic Human
- The Environment
- The Science of Sound
- The Universe As We Know It
- Honors Bionic Human
- Honors Cyberspace \& Society
- Honors DNA: Friend or Foe
- Honors Geology of the National Parks
- Honors Powering the Future
- Honors: The Environment

Waiver: Students considering undergraduate degrees with scientific, engineering or technical components may satisfy the GenEd Science \& Technology requirement through alternative coursework identified below.

A student will be waived from the GenEd Science \& Technology requirement upon completion of any of the following two course sequences:

- Botany 1111 - Horticulture 2114
- Biology 1011 - Biology 1012
- Biology 1111 - Biology 2112
- Biology 1911 - Biology 2912 (honors)
- Chemistry 1021/1023 - Chemistry 1022/1024
- Chemistry 1031/1033 - Chemistry 1032/1034
- Chemistry 1041/1043 - Chemistry 1042/1044
- Chemistry 1951/1953 - Chemistry 1952/1954 (honors)
- EES 1001 - EES 2011
- EES 1001 - EES 2015
- EES 1001 - EES 2021
- EES 1001 - EES 2022
- EES 1001 - EES 2061
- EES 2001 - EES 2011
- EES 2001 - EES 2015
- EES 2001 - EES 2021
- EES 2001 - EES 2022
- EES 2001 - EES 2061
- Kinesiology 1223 - Kinesiology 1224
- Physics 1001 - Physics 1004
- Physics 1021 - Physics 1022
- Physics 1061 - Physics 1062
- Physics 2021 - Physics 2022
- Physics 2921 - Physics 2922

Students who change their course of study prior to completing the second course of any of the specified two-course sequence, may complete their GenEd Science \& Technology requirement in two ways:

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


## List I

Botany 1111
Biology 1011
Biology 1111
Biology 1911 (honors)
Chemistry 1021/1023

Chemistry 1031/1033
Chemistry 1041/1043
Chemistry 1951/1953 (honors)
EES 1001
EES 2001
Kinesiology 1223
Physics 1001
Physics 1021
Physics 1061
Physics 2021
Physics 2921 (honors)

## List II

Horticulture 2114
Biology 1012
Biology 2112
Biology 2912 (honors)
Chemistry 1022/1024
Chemistry 1032/1034
Chemistry 1042/1044
Chemistry 1952/1954 (honors)
EES 2011
EES 2015
EES 2021
EES 2022
EES 2061
Kinesiology 1224
Physics 1004
Physics 1022
Physics 1062
Physics 2022
Physics 2922 (honors)
Consult an academic advisor for more information.

## U.S. Society (GU)

Requirement: One 3-credit hour course.
GenEd U.S. Society courses strengthen students' understanding of the history, society, culture and political systems of the United States.

They are intended to teach students how to:

- Access and analyze historical, analytical, and cultural materials;
- Develop observations and conclusions about selected themes in U.S. society and culture;
- Construct interpretations using evidence and critical analysis;
- Communicate and defend interpretations; and
- Analyze the ways difference and heterogeneity have shaped the culture and society of the U.S.


## U.S. Society Courses

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

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

In addition, a single GenEd course may be offered by more than one department. GenEd courses offered by more than one department will have the same course number and the same course title. A student may not take the same course from multiple departments and earn credit toward graduation. However, if a student wishes to replace her/his grade in a GenEd course, $\mathrm{s} /$ he may replace the grade with any course bearing the same course number and the same course title regardless of department.

- American Military Culture
- American Revolutions
- Contemporary American Social Movements
- Dissent in America
- Doing Justice
- Education in the Global City
- First Person America
- Founding Philadelphia
- Gender in America
- Higher Education and American Life: Mirror to a Nation
- Justice in America
- Landscape of American Thought
- Law and American Society
- Living for Change: Autobiographies of Women in Radical Social Movements
- People, Places, and the Environment
- Religion in Philadelphia
- Sounds of a Revolution
- Sport \& Leisure in American Society
- The American Economy
- The Making of American Society: Melting Pot or Culture Wars?
- Urban Dynamics: Global, Regional, and Local Connections
- Honors: Contemporary American Social Movements
- Honors: Dissent in America
- Honors: Doing Justice
- Honors: First Person America
- Honors: Justice in America
- Honors: Landscape of American Thought
- Honors: Law and American Society
- Honors: Living for Change: Autobiographies of Women in Radical Social Movements
- Honors: Religion in Philadelphia
- Honors: Sounds of a Revolution


## Writing Intensive Courses

For most professionals - doctors, accountants, social workers, educators, policy-makers, performers, etc. - writing is an important part of work-life, and writing well often paves the way to professional success. But the kinds of writing that are valued in the professions are typically different from the kinds of writing that students use in school. The writing-intensive course program at Temple University is designed to provide students with a window into the types of writing they may be expected to produce after graduation. To this end, departments and programs have designated specific writing-intensive courses that are part of the major; in these writing courses, students study, write and revise texts that are similar to what they will encounter in their post-Temple careers.

All undergraduate students must complete at least two writing-intensive courses for a total of at least six credits. The writing-intensive course credits are counted as part of the major; they are not General Education (GenEd) or elective credits.*

The specific courses that are required for particular majors can be found within this Bulletin (see Academic Programs for approved courses). Writing-intensive courses are identified by the last two digits of the course number: courses numbered xx96, xx97, and xx98 are writing-intensive. These courses can also be identified by the Course Attribute of "WI."

The writing-intensive courses must be completed at Temple University. Students may not transfer in credits to satisfy this requirement. Students who have problems completing their writing-intensive course requirements should contact their advisors.

A complete list of all approved writing-intensive courses appears on the web site of the Office of the Senior Vice Provost for Undergraduate Studies. Click here to view the list. Not all courses are offered every semester. Students must complete the writing-intensive courses that are specified by their major. For more information about the writing-intensive course program, please visit the program web site: Www.temple.edu/wi
(*Go to www.temple.edu/vpus/resources/core/writingintensive.html for information on writingintensive courses for the Core Curriculum.)

## UNIVERSITY COLLEGE

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215-204-8873
The University College offers the following program and certificates:

- Certificates in National Park Service Management
- Certificate in Sustainability
- ProRanger Philadelphia Program

For more information about the certificate and program, click on the links to the left.
For information about the University College, go to www.temple.edu/provost/about/portfolio/university-college.html.

## ProRanger Philadelphia Program

The ProRanger Philadelphia program is an academic and technical skills training and internship program that is cooperatively administered by the National Park Service and Temple University. The program was established to recruit, train and employ law enforcement park rangers for the National Park Service. Upon graduating from Temple University and successfully completing the ProRanger Philadelphia program, participants are placed in a permanent career tenure law enforcement park ranger position with the National Park Service.

Upon acceptance into the ProRanger Philadelphia program, a ProRanger trainee will become part of an experiential learning cohort made up of at least 12 and no more than 20 fellow trainees. During the summer periods between the freshman/sophomore and sophomore/junior years, the ProRanger Philadelphia trainee will be assigned to an internship at a National Park Service site. Trainees will also participate in a three-credit academic course that accompanies the internship and includes reflective experiences of the cohort group. During the period between the junior/senior year, the ProRanger trainee will be enrolled in the Seasonal Law Enforcement Training Program (SLETP) at Temple University.

In addition to the experiential components, students will complete four academic courses that include: 1) a three-credit course that studies the mission and functions of the National Park Service and the role of law enforcement in National Parks; 2) a communications/leadership course chosen from an array of options; 3) an ethics course chosen from an array of options; 4) a content area course chosen from an array of options.

While the primary duties of the ProRanger Philadelphia graduate is protecting people and property, ProRanger Philadelphia trainees do not have to be Criminal Justice majors, and students from any academic major or background may apply. More importantly, a ProRanger Philadelphia trainee will have an aptitude for working with people with diverse backgrounds, have an interest in the outdoors, history and the environment, and have a high standard of ethical behavior.

Please see www.temple.edu/proranger for more information about becoming a ProRanger.

## Certificate in National Park Service Management

The University College, in consultation with the National Park Service, has developed a certificate program in National Park Service Management that will provide extensive opportunities for academic study, training and development, and for internship placement as preparation for a career in National Park Service (NPS) law enforcement and in other areas related to park service management. The certificate program is open to students enrolled in bachelor's degree programs who are part of the ProRanger Philadelphia program. The certificate requires a minimum of 21 credits. In addition to the experiential and internship components that require reflective exercises and essays, students will complete other academic courses that explore the mission and functions of the NPS, law enforcement, communications and leadership, and ethics.

## Requirements for the Certificate in National Park Service Management

| First Summer |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Required Credits | Optional Credits |
| ProRanger Program | 1085 | ProRanger Internship 1 |  | up to 9 |
| ProRanger Program | 1577 | Introduction to the ProRanger Program | 3 |  |
|  |  |  |  |  |
| Second or Third Year |  |  |  |  |
| History | 2214 | History of the National Park Service | 3 |  |
|  |  |  |  |  |
| Second Year Summer |  |  |  |  |
| ProRanger Program | 2085 | ProRanger Internship 2 |  | up to 9 |
|  |  |  |  |  |
| Any Semester: Choose one from the following: |  |  | 3 |  |
| Anthropology | 3175 | Heritage Management in Archaeology |  |  |
| Business Administration | 3102* | Business Society and Ethics |  |  |
| Business Administration | 3902* | Honors Business Society and Ethics |  |  |
| Earth \& Environmental Science | 0854 | Geology of the National Parks |  |  |
| Earth \& Environmental Science | 0954 | Honors Geology of the National Parks |  |  |
| Environmental Studies | 2157 | Environmental Ethics |  |  |
| Philosophy | 2157 | Environmental Ethics |  |  |
| Environmental Studies | 3001 | Earth Ethics |  |  |


| Religion | 3001 | Earth Ethics |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Philosophy | 2596 | Philosophical Perspectives on the Environment |  |  |
| Tourism \& Hospitality Management | 4212* | Law and Ethics in Sport and Recreation |  |  |
| Tourism \& Hospitality Management | 4221* | Current \& Ethical Issues in Recreation \& Leisure |  |  |
|  |  |  |  |  |
| Any Semester: Choose one from the following: |  |  | 3 |  |
| Adult \& Organizational Development | 0836 | Interpersonal Communication: Critical Competencies for Professional \& Personal Success |  |  |
| Adult \& Organizational Development | 2214 | Conflict and Communication |  |  |
| Adult \& Organizational Development | 2218 | Leadership and Communication |  |  |
| Business Administration | 2196* | Business Communications |  |  |
| Strategic Communication | 1111 | Public Speaking |  |  |
| Strategic Communication | 2662 | Leading Groups and Team Building |  |  |
| Strategic Communication | 2696 | Diverse Communication and Leadership |  |  |
|  |  |  |  |  |
| Any Semester: Choose one from the following: |  |  | 3 |  |
| Criminal Justice | 0812 | Criminal Behavior |  |  |
| Criminal Justice | 0912 | Honors Criminal Behavior |  |  |
| Criminal Justice | 1001 | Introduction to Criminal Justice |  |  |
| Criminal Justice | 2401 | Nature of Crime |  |  |
| Criminal Justice | 2101 | Introduction to Law Enforcement |  |  |
| Public Health | 2207 | Principles of Emergency Management: A Public Health Perspective |  |  |
| Psychology | 2401 | Foundations of Social Psychology |  |  |
|  |  |  |  |  |
| Third Year Summer |  |  |  |  |
| ProRanger Program | 3587** | Seasonal Law Enforcement Professional Development Program | 6 |  |
|  |  |  |  |  |
| Third Year Summer |  |  |  |  |
| ProRanger Program | 3085 | ProRanger Internship 3 |  | up to 3 |
|  |  |  |  |  |
| Total possible credits: |  |  | 21 (minimum) | 42 (maximum) |

* Some courses may not be available to all students. Students should check prerequisites and other requirements when planning their course of study for the certificate.
** In order to enroll in the Seasonal Law Enforcement Professional Development Program (ProRanger 3587), students must meet specific admissions requirements which include a federal background investigation, criminal history check, psychological and physical fitness testing, drug screening tests and an interview. Students should see www.temple.edu/proranger for course
eligibility criteria and the course syllabus and student handbook for other special conditions. Students may not enroll in any other courses while enrolled in ProRanger 3587.


## Post-Baccalaureate Certificate in National Park Service Management

The University College, in consultation with the National Park Service, has developed a certificate program in National Park Service Management that will provide extensive opportunities for academic study, training and development, and for internship placement as preparation for a career in National Park Service (NPS) law enforcement and in other areas related to park service management. The certificate program is open to post-baccalaureate students who are part of the ProRanger Philadelphia program. The certificate requires a minimum of 24 credits. In addition to the experiential and internship components that require reflective exercises and essays, students will complete other academic courses that explore the mission and functions of the NPS, law enforcement, communications and leadership, and ethics.

Requirements for the Post-Baccalaureate Certificate in National Park Service Management

| First Summer |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Required Credits | Optional Credits |
| ProRanger Program | 1085 | ProRanger Internship 1 | 3 |  |
| ProRanger Program | 1577 | Introduction to the ProRanger Program | 3 |  |
|  |  |  |  |  |
| Second or Third Year |  |  |  |  |
| History | 2214 | History of the National Park Service | 3 |  |
|  |  |  |  |  |
| Second Year Summer |  |  |  |  |
| ProRanger Program | 2085 | ProRanger Internship 2 |  | up to 9 |
|  |  |  |  |  |
| Any Semester: Choose one from the following: |  |  | 3 |  |
| Anthropology | 3175 | Heritage Management in Archaeology |  |  |
| Business Administration | 3102* | Business Society and Ethics |  |  |
| Business Administration | 3902* | Honors Business Society and Ethics |  |  |
| Earth \& Environmental Science | 0854 | Geology of the National Parks |  |  |
| Earth \& Environmental Science | 0954 | Honors Geology of the National Parks |  |  |
| Environmental Studies | 2157 | Environmental Ethics |  |  |
| Philosophy | 2157 | Environmental Ethics |  |  |
| Environmental Studies | 3001 | Earth Ethics |  |  |
| Religion | 3001 | Earth Ethics |  |  |
| Philosophy | 2596 | Philosophical Perspectives on the Environment |  |  |
| Tourism \& Hospitality Management | 4212* | Law and Ethics in Sport and Recreation |  |  |
| Tourism \& Hospitality Management | 4221* | Current \& Ethical Issues in Recreation \& Leisure |  |  |
|  |  |  |  |  |


| Any Semester: Choose one from the following: |  |  | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Adult \& Organizational Development | 0836 | Interpersonal Communication: Critical Competencies for Professional \& Personal Success |  |  |
| Adult \& Organizational Development | 2214 | Conflict and Communication |  |  |
| Adult \& Organizational Development | 2218 | Leadership and Communication |  |  |
| Business Administration | 2196* | Business Communications |  |  |
| Strategic Communication | 1111 | Public Speaking |  |  |
| Strategic Communication | 2662 | Leading Groups and Team Building |  |  |
| Strategic Communication | 2696 | Diverse Communication and Leadership |  |  |
|  |  |  |  |  |
| Any Semester: Choose one from the following: |  |  | 3 |  |
| Criminal Justice | 0812 | Criminal Behavior |  |  |
| Criminal Justice | 0912 | Honors Criminal Behavior |  |  |
| Criminal Justice | 1001 | Introduction to Criminal Justice |  |  |
| Criminal Justice | 2401 | Nature of Crime |  |  |
| Criminal Justice | 2101 | Introduction to Law Enforcement |  |  |
| Public Health | 2207 | Principles of Emergency Management: A Public Health Perspective |  |  |
| Psychology | 2401 | Foundations of Social Psychology |  |  |
|  |  |  |  |  |
| Third Year Summer |  |  |  |  |
| ProRanger Program | 3587** | Seasonal Law Enforcement Professional <br> Development Program | 6 |  |
|  |  |  |  |  |
| Third Year Summer |  |  |  |  |
| ProRanger Program | 3085 | ProRanger Internship 3 |  | up to 3 |
|  |  |  |  |  |
| Total possible credits: |  |  | 24 (minimum) | 42 (maximum) |

* Some courses may not be available to all students. Students should check prerequisites and other requirements when planning their course of study for the certificate.
** In order to enroll in the Seasonal Law Enforcement Professional Development Program (ProRanger 3587), students must meet specific admissions requirements which include a federal background investigation, criminal history check, psychological and physical fitness testing, drug screening tests and an interview. Students should see www.temple.edu/proranger for course eligibility criteria and the course syllabus and student handbook for other special conditions. Students may not enroll in any other courses while enrolled in ProRanger 3587.


## Certificate in Sustainability

## sustainabilitycertificate@temple.edu

The University College is offering an undergraduate Certificate in Sustainability. This twelve credit interdisciplinary certificate will provide an opportunity for students to further their knowledge and skills to contribute to sustainable systems from the viewpoint of different disciplines, to help them become effective leaders and agents of change for sustainability, and to make them more competitive in the changing job market as some sectors move to a green collar economy.

The certificate is available to all undergraduate degree seeking students to complete as part of their studies. Consult a school academic advisor about how the required classes fit into academic and career plans. This credit certificate may be conferred upon a student upon satisfactory completion of the required credits with a minimum cumulative GPA of 2.0.

## Certificate Requirements

1. The undergraduate Certificate in Sustainability will require four (4) courses and a minimum of twelve (12) credit hours.
2. The courses will be selected among courses in four different departments in at least three different schools and must be outside of the student's own major.
3. General Education courses can be included in the array of courses, but can constitute no more than one of the four courses toward the certificate. If a student chooses a General Education course to count toward the certificate, this same course cannot count toward the General Education requirement in a specific category.
4. The certificate requires that three of the four courses be at the 2000 level or higher. 5. The certificate courses in sustainability can satisfy other minors and/or certificates.

## Approved Courses

Students will select courses from an existing array of courses in various disciplines. The symbol (F) or (S) after the course number indicates that the class is offered ONLY in the semester indicated: ( F ) = offered only in fall semester; $(\mathrm{S})=$ offered only in spring semester.

| School / Subject | Course \# | Course Title |
| :--- | :--- | :--- |
| Art, Tyler School of |  |  |
| Architecture | $1001(\mathrm{~S})$ | Introduction to Design and the Environment |
| Art History | 2753 | Art and Environment in the American Culture |
| Business and Management, Fox School of |  |  |
| Human Resource Management | $2511(\mathrm{~S})$ | Corporate Sustainability: People, Profits and <br> Planet |
| Legal Studies | $3511(\mathrm{~F})$ | Environmental Law, Sustainability and Public <br> Policy |
| Marketing | $2511(\mathrm{~S})$ | Marketing for the Sustainable Enterprise |
| Communications and Theater, School of |  |  |
| Broadcasting, Telecommunications \& Mass <br> Media | $3473(\mathrm{~S})$ | Media and the Environment |
| Engineering, College of |  | The Environment |
| Civil Engineering / <br> Environmental Engineering Technology | $0845 / 0945$ |  |


| Civil Engineering | 3711 | Environmental Engineering |
| :---: | :---: | :---: |
| Civil Engineering | 4531 (S) | Life Cycle Assessment and Carbon Footprinting |
| Mechanical Engineering | 4575 (F) | Renewable and Alternative Energy |
| Environmental Design, School of |  |  |
| Community \& Regional Planning | 0807 | People, Places, and the Environment |
| Community \& Regional Planning | 1017 (F) | Introduction to Community and Regional Planning |
| Community \& Regional Planning | 2114 (S) | Urban Form and Design |
| Community \& Regional Planning | 2166 (F) | Land Use Planning |
| Community \& Regional Planning | 2213 | Environmental Planning |
| Community \& Regional Planning | 2251 (F) | Sustainable Food Systems Planning |
| Community \& Regional Planning | 3155 (F) | Ecological Planning and Development |
| Community \& Regional Planning | 3255 (S) | Sustainability in Suburban Communities |
| Community \& Regional Planning | 3256 (S) | Sustainable Community Design and Development |
| Botany (LA-HORT) | 1112 (S) | Plant Ecology |
| Horticulture (LA-HORT) | 2334 (S) | Food Crops I |
| Landscape Architecture (LA-HORT) | 0841 | Sustainable Design |
| Landscape Architecture (LA-HORT) | 1013 (F) | Natural and the Built Environment |
| Landscape Architecture (LA-HORT) | 2758 | Summer Field Ecology |
| Health Professions and Social Work, College of |  |  |
| Public Health | 2102 | Environmental Health |
| Liberal Arts, College of |  |  |
| Anthropology / Geography \& Urban Studies | 0814 | Human Ecology |
| Asian Studies / Environmental Studies / Geography \& Urban Studies | 3052 (F) | Environmental Problems in Asia |
| Asian Studies / Environmental Studies / Religion | 3001/3904 (F) | Earth Ethics |
| Economics / Environmental Studies | 3596 | Energy, Ecology and Economy |
| Environmental Studies | 3025 (F) | Environmental Law and Regulation |
| Environmental Studies / Geography \& Urban Studies | 0842 | Sustainable Environments |
| Environmental Studies / Geography \& Urban Studies | 1051 | Environment and Society |
| Environmental Studies / Geography \& Urban Studies | 1052 | Introduction to the Physical Environment |
| Environmental Studies / Geography \& Urban Studies | 2051 (F) | Urban Environment |
| Environmental Studies / Geography \& Urban Studies | 3051 | Environmental Policy Issues |
| Environmental Studies / Geography \& Urban Studies | 3097 | Environment and Development |
| Environmental Studies / Geography \& Urban Studies | 4056 | Political Ecology |
| Environmental Studies / History | 3214 | North American Environmental History |
| Environmental Studies / Philosophy | 2157 (S) | Environmental Ethics |
| Environmental Studies / Philosophy | 2596 (F) | Philosophical Perspectives on the Environment |
| Environmental Studies / Political Science | 3265 (S) | International Environmental Policy |
| Science and Technology, College of |  |  |
| Biology | 2227 (S) | Principles of Ecology |
| Biology | 3307 (F) | Conservation Biology |


| Biology | $3316(\mathrm{~F})$ | Tropical Marine Biology |
| :--- | :--- | :--- |
| Biology | $3321(\mathrm{~F})$ | Plant Community Ecology |
| Biology | $4327(\mathrm{~F})$ | Biological Impacts of Global Climate Change |
| Earth \& Environmental Science | 0842 | Sustainable Environments |
| Earth \& Environmental Science | 2096 | Climate Change: Oceans to Atmosphere |
| Physics | $0839 / 0939$ | Powering the Future |

# DIVISION OF UNIVERSITY STUDIES 

Division of University Studies
Dr. Peter R. Jones, Senior Vice Provost for Undergraduate Studies
Neal Conley, Director, Academic Advising
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www.temple.edu/arc

## Introductory Information

Recognizing that not all students can or should declare an academic major upon entering college, University Studies is the academic home for students who have not yet decided on a major and students in transition between majors.

## Goals and Objectives

University Studies, formed in 1998, serves any Temple student who has not chosen a collegiate home or declared a major or who needs assistance while changing from one college to another. University Studies is not a degree-granting college. Rather it is an academic unit that exists to help students explore academic options and to gain admission to a degree-granting school or college at Temple. Students can remain in University Studies until completion of 60 credits, or approximately their first two years at the university.

## Admissions

Transfer students with more than 60 credits cannot be admitted to Temple as an undeclared student in the Division of University Studies. Students admitted to Temple as a University Studies student can remain in the division until they select a school/college major or upon completion of 60 credits.

## Financial Aid and Scholarships

Division of University Studies Sophomore Scholarship - The DUS Sophomore Scholarship is awarded each fall to a current or former University Studies student who will be entering the sophomore year with a declared major. Students should be rising sophomores with a cumulative GPA of 3.5 or higher and a minimum of 30 completed credits. For more information and for an application, go to www.temple.edu/arc.

## Special Programs

The Deciding Student Wing is a living/learning community for students who want to live in an environment promoting academic and career exploration. Undeclared students in University Studies are eligible to reside on the Deciding Student Wing, a floor with suite-style housing. Benefits include a resident peer mentor, freshman seminar, workshops and social events.

## Honor Societies, Awards for Achievement

## Academic Distinctions

Eligibility for the University Studies' Distinguished Honors list is determined by the semester grade point average (GPA) corresponding to cut-off points that will yield the top $16 \%$ of GPAs based on the five previous fall and spring semesters for each school or college. Students must have 12 graded credits (A to F grades) in order to be eligible for dean's list for the fall or the spring semesters.

Students who begin in the fall as part-time (i.e., registered for fewer than 12 credits) and continue as part-time in the spring will be eligible for dean's list in the spring if they accumulate at least 12 graded credits (A to F grades) over the fall and spring semesters and meet the GPA criteria listed on the chart for the school or college. If a student is enrolled part-time in the fall but full-time in the spring, eligibility for dean's list will be based on spring semester grades.

The cut-offs for 2013-2014 are calculated and published in the summer at the below web site: http://www.temple.edu/bulletin/Academic_policies/policies_part2/policies_part2.shtm\#dean

## Special Facilities

The Academic Resource Center houses a computer lab where students can access major and career oriented online resources as well as Self-Service Banner.

## Academic Advising

The Academic Resource Center
1810 Liacouras Walk, Suite 101
215-204-2500
dus@temple.edu

## Goal and Objectives

Students enrolled in University Studies use the advising services of the Academic Resource Center, an academic support program established in 1997 to meet the needs of deciding students. Any student at Temple, whether enrolled in University Studies or not, is welcome and encouraged to use the services of the Academic Resource Center.

Academic advisors are important sources of information on University policies and procedures, the General Education curriculum (GenEd) requirements, and degree programs. While students must assume primary responsibility for knowing the requirements for their degree and for acquiring information about their academic status, academic advisors are a valuable resource. Advisors introduce students to the various sources of information available on academic programs, enabling students to be well-informed partners in their own education.

At the Academic Resource Center, a staff of professional and peer advisors works closely with students from the time they arrive at Temple through their successful transitions into schools/colleges and declared majors. Advisors meet with students on walk-in and appointment bases in both individual and group advising sessions.

Students are strongly encouraged to meet regularly with academic advisors to discuss academic plans, course selection, and registration. Students not eligible for online registration are required to see an advisor for course selection and registration.

Academic advisors attempt to avoid errors when advising students about their program requirements, but schools and colleges cannot assume liability for errors in advising. Therefore, students must assume primary responsibility for knowing the requirements for their degree and for acquiring current information about their academic status.

## Services Provided through the Advising Office:

- Individualized advising geared towards helping students declare majors and complete the intra-university transfer process (transferring from one Temple school/college to another)
- Making Major Decisions, a self-directed Blackboard course focused on major exploration and decision making
- The Major Exploration Academy, a four-step, non-credit program in which a dedicated academic advisor helps guide students toward selecting a major through self-reflection activities, the completion of major and career worksheets, and investigating career options
- University Seminar 1002: First Year Seminar II, a one-credit course designed to help undeclared students explore possible career and major paths at Temple
- Workshops on academic planning and choosing a major
- Assistance with accessing online information regarding Temple schools/colleges and majors


## Special Advising Policies and Procedures

Enrollment in the Division of University Studies: Beginning fall 2002 and after, undergraduates matriculated in the Division of University Studies as undeclared majors and who entered University Studies as either freshmen, transfer students, or intra-university transfers from another Temple school or college prior to the completion of 45 credits, can remain in University Studies up to the completion of 60 credits. Students entering University Studies having completed between 45-59 credits can remain in University Studies up to two academic-year semesters if enrolled full-time or until completion of 60 credits if attending part-time.

University Studies students can declare majors throughout the year in accordance with the declaration of major standards set forth by the individual schools and colleges and the intrauniversity transfer guidelines established by the University. University Studies students can also request a change in status from undecided to an academic program within a college during their New Student Orientation visit.

Note: University Studies students must meet the University's minimum standard for academic progress to remain enrolled in the Division of University Studies.

## Academic Policies \& Regulations

Please see the Undergraduate Bulletin's Academic Policies section. Students are responsible for complying with all University-wide academic policies that apply to their individual academic status. Additional and unique policies or exceptions for the Division of University Studies appear below.

Academic Course Load - Academic overloads during the fall and spring semesters, students who want to take 19 or more semester hours, need special approval of the Director of Academic Advising.

Dean's List - Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria are placed on the Distinguished Honors list. See the Dean's List policy for specific GPA and credit-hour requirements.

Program Performance - Students who are placed on Academic Warning or Probation will be enrolled in the online Back on Track course and will be required to complete this intervention before registering for the upcoming semester. These students will also be required to meet with their advisor to discuss and develop alternative academic plans as well as discuss strategies for improving their academic performance.

Transfer between Colleges within the University: Intra-University Transfer into the Division of University Studies - Students currently enrolled in other schools or colleges who are reconsidering their choice of major or who wish to explore other academic options may process an intra-university transfer request to enter University Studies as an undeclared major. All students interested in transferring into the Division of University Studies must meet with an academic advisor to discuss this transfer.

Grievances - Students can bring grievances to the Director of Academic Advising. Grievances regarding instructors and grades are referred to the grievance protocol for the school/college offering the course.

## General College Graduation Requirements

The Division of University Studies is not a degree-granting college. It is an academic unit which exists to help students explore academic programs.

Individual Program Requirements

- The total number of credit hours needed to graduate may be greater for some students based on initial placement exams, transfer evaluations, individual curricular choices (including declaration of major and students credit totals at time major is declared), and academic progress.
- Certain courses fulfill multiple requirements. Consult your advisor to plan your curriculum more effectively.
- Students must fulfill the necessary prerequisites for any given course or course sequence. See the Prerequisite and Co-requisite Policy in the University-wide Academic Policies section of this Bulletin.


## Division of University Studies: Undeclared Option

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Recognizing that not all students can or should declare an academic major upon entering college, Temple University established University Studies - the academic home for students who have not yet decided on a school/college or major. University Studies is not a degree-granting college. Rather, it is an academic unit that exists to help students explore academic options. All students must declare a major in one of Temple's degree-granting undergraduate schools and colleges upon completion of 60 credits, including any credits transferred from other institutions.

University Studies offers undeclared students a variety of services and programs to help them select an appropriate major. Students can use online resources in our Academic Information Center to research majors and careers and can participate in student success and academic exploration workshops held throughout the year. Upon declaring a major, students are required to fulfill the school/college and department requirements of that program.

## University Studies does not grant degrees and students cannot graduate with an

 "undeclared" curriculum designation.
## Suggested First-Year Program for the Undecided Student

This sample program allows students to satisfy General Education requirements while exploring academic interests and majors.

| Year 1 - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing (Depends on placement exam; some students may be required to take English 0701 or 0711) | 4 | GW |
| GenEd | 08xx or 09xx | Select an appropriate GenEd Quantitative Literacy course (Depends on placement exam and potential choice of major) | 4 | GQ |
| GenEd | 08xx or 09xx | Select an appropriate GenEd Human Behavior course | 3 | GB |
| GenEd | 08xx or 09xx | Select an appropriate GenEd U.S. Society course | 3 | GU |
| University Seminar | 1001 | First Year Seminar I | 1 |  |
| Total |  |  | 15 |  |
| (Note: Entering students, particularly freshmen, are encouraged to enroll in a learning community. See Learning Communities and University Seminars for more information. |  |  |  |  |
|  |  |  |  |  |
| Year 1 - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I (Note: Non-native speakers can opt for an ESL version of this course) | 3 | GY |
| GenEd | 08xx or 09xx | Select an appropriate GenEd Arts course | 3-4 | GA |
| GenEd | 08xx or 09xx | Select an appropriate GenEd Race \& Diversity course | 3 | GD |
| GenEd | 08xx or 09xx | Select an appropriate GenEd Science \& Technology course | 3 | GS |
| GenEd <br> or <br> Major Exploration | 08xx or 09xx | Select an appropriate GenEd World Society course or <br> Consider a class in potential choice of major | $3$ $3$ | GG |
| Total |  |  | 15-16 |  |

## INTERCOLLEGIAL PROGRAMS

Intercollegial programs at Temple University include a national honor society and a growing number of interdisciplinary academic programs that involve students and departments in more than one of the university's schools and colleges. These programs provide students with opportunities to cross the boundaries of traditional academic disciplines, combine a variety of perspectives, and take advantage of faculty expertise in different departments and colleges. They are designed to accommodate students' interests and prepare students for success in a variety of career fields. The schools and colleges collaborating in these societies and programs are indicated in each description. Each college's degree requirements are described in the college
sections of this Bulletin. Students should consult the contact person for an intercollegial society or program for more information about both collegial policies and requirements, and the society or program itself.

## Special Programs

## Phi Beta Kappa

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

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

## Digital Media Technologies

Dr. Justin Y. Shi, Advisor<br>Wachman Hall, room 1036<br>215-204-6437<br>shi@temple.edu<br>Dr. Patrick Murphy, Advisor<br>Annenberg Hall, room 205<br>215-204-3876<br>murphy.p@temple.edu

The Digital Media Technologies Minor is a 21-23 semester hour interdisciplinary minor offered through the Department of Media Studies and Production (MSP) within the School of Media and Communication and the Computer and Information Sciences (CIS) Department within the College of Science and Technology. It is designed to expand students' knowledge of the information age and to empower them to understand how to communicate using emerging media and computer technologies. The ability to tell stories through emerging digital media technologies will be critically and analytically explored as students examine the science of those technologies. The algorithms of communicating via emergent technologies will be at the core of this minor. This program addresses serious gaps in the current curriculum because current students of media have little understanding of the science of digital media and fast evolving interactive web-based information sharing technologies.

The minor is available to undergraduate students in Media Studies and Production, Computer \& Information Science, as well as other departments and colleges. Upon completion of the minor, students should be able to demonstrate the following competencies:

- Utilization of the hardware, software and technologies for integrating content for computers, the Internet, and mobile devices;
- Critical analysis of decisions made regarding the use of technology specifically in the social and ethical arenas;
- Understand the impact of current and emerging technologies locally and globally;
- Design and implementation of content for various media digitally;
- Ability to evaluate the science of technology as it impacts communications;
- Develop and refine presentation, analytical, problem solving and writing skills.


## Transfer credits are not accepted for credit for the minor.

Students must receive the permission of their advisor before starting in this program. Minor credit is not given for MSP grades below C. Students must maintain at least a 2.00 grade point average in the program for successful completion of the minor. Students with averages under 2.00 for more than two semesters will be dropped from the program. Students with averages under 2.00 may not begin the program.

Requirements for the minor in Digital Media Technologies are as follows: Required (14 credits)

| Subject | Course \# | Course Title | Hours |
| :--- | :--- | :--- | :---: |
| MSP | 1701 | Introduction to Media Technology | 3 |
| CIS | 1052 | Introduction to Web Technology and Programming | 4 |
| CIS | 1056 | Advanced Web Technology and Programming | 4 |
| MSP | 2741 | Introduction to Internet Studies and Web Authoring | 3 |

Electives: Select Two (7 credits)*

| Subject | Course \# | Course Title | Hours |
| :--- | :--- | :--- | :---: |
| MSP | 4741 | Cybermedia Workshop | 4 |
| MSP | 4221 | Information Technology Policy | 3 |
| MSP | 4252 | Law and Ethics of Digital Media | 4 |
| MSP | 4541 | Mobile Media | 3 |
| MSP | 4614 | Creating a Media Business | 4 |
| CIS | $2000+$ | CIS 2000+ level course * | $3-4$ |
| Total |  |  | $\mathbf{2 1 - 2 3}$ |

## *Other requirements:

- For MSP students, at least one (1) CIS elective is required.
- For CIS students, at least one (1) MSP elective is required.
- For students of other backgrounds, at least one (1) MSP and one (1) CIS elective are required.
- All prerequisites must be completed or permission by instructor received to enroll in minor courses.
- Example CIS Elective: CIS 2305 (Mobile Computing Technologies). This course accepts CIS 1052-1056 sequence as prerequisites.
- Permitted Substitute Elective: Biology 3333
- For students taking the Digital Media Technologies minor, 5 courses applied toward completion of minor requirements must be distinct from the major requirements. As such, additional electives will be accepted in place of courses that are listed for both the major and the minor. For MSP majors taking this minor, MSP 2701 or 2751 will be accepted in place of the required MSP 1701.


## Environmental Programs

Dr. Michele Masucci, Director for B.A.<br>Gladfelter Hall, Room 309<br>215-204-5918<br>envtstud@temple.edu<br>www.temple.edu/gus<br>Dr. Laura Toran, Director for B.S.<br>Beury Hall, Room 223<br>215-204-2352<br>ltoran@temple.edu

Students will be equipped with the scholarly background and intellectual skills to understand a wide range of pressing environmental issues, and they will come to appreciate the physical, economic, political, demographic, and ethical factors that define those issues. Among the many environmental problems central to our program are groundwater contamination, suburban sprawl, river basin management, environmental justice, and the greening of abandoned urban spaces. Our graduates find employment with government environmental agencies, citizens' organizations, consulting firms, and corporate environmental affairs departments.

The College of Liberal Arts offers the Bachelor of Arts in Environmental Studies and the College of Science and Technology offers the Bachelor of Science in Environmental Science. A minor also is offered through the College of Liberal Arts.

## Bachelor of Arts Requirements for Environmental Studies

Please see the College of Liberal Arts Bulletin page for details on the requirements for the Bachelor of Arts degree in Environmental Studies. You may also go to www.temple.edu/bulletin/Academic_programs/schools_colleges/cla/programs/environ_studies/cl a_environ_studies.shtm to view the course requirements.

## Bachelor of Science Requirements for Environmental Science

Please see the College of Science and Technology Bulletin page for details on the requirements for the Bachelor of Science degree in Environmental Science. You may also go to
www.temple.edu/bulletin/Academic_programs/schools_colleges/cst/programs/env_science/cst_e nv_sci.shtm to view the course requirements.

## Requirements for the Minor in Environmental Studies in CLA

Please see the College of Liberal Arts Bulletin page for details on the requirements for the minor in Environmental Studies in CLA. You may also go
to www.temple.edu/bulletin/Academic_programs/schools_colleges/cla/programs/environ_studies /cla_environ_studies.shtm\#minor to view the course requirements.

## List of Environmental Studies Electives

| Subject | Course \# | Course Title |
| :---: | :---: | :---: |
| Natural Science Electives |  |  |
| Biology | 2233 | Mammalian Anatomy |
| Biology | 2241 | Invertebrate Biology |
| Biology | 3196 | Experimental Marine Biology |
| Biology | 3245 | Marine Ecology |
| Biology | 3316 | Tropical Marine Biology |
| Biology | 3336 | Freshwater Ecology |
| Biology | 4327 | Biological Impacts of Global Climate Change |
| Earth \& Environmental Science | 2096 | Climate Change: Oceans to Atmosphere |
| Earth \& Environmental Science | 2021 | Facies Models |
| Earth \& Environmental Science | 2061 | Introduction to Geochemistry |
| Social Science/Policy Electives |  |  |
| Environmental Studies/Anthropology | 3175 | Heritage Management in Archaeology |
| Environmental Studies/Anthropology | 4117 | Seminar in Environmental Archaeology |
| Environmental Studies/Anthropology | 4796 | Biocultural Adaptations in Human Populations |
| Community \& Regional Planning | 1027 | History \& Practice of Community \& Regional Planning |
| Community \& Regional Planning | 2014 | Planning Policy \& Law |
| Community \& Regional Planning | 2114 | Urban Form \& Design |
| Community \& Regional Planning | 2213 | Environmental Planning |
| Community \& Regional Planning | 2524 | Fundamentals of Geographic Information Systems |
| Community \& Regional Planning | 3256 | Sustainable Community Design \& Development |
| Economics | 1101 | Macroeconomic Principles |
| Economics | 3512 | Public Finance |
| Economics | 3513 | Economics of State \& Local Governments |
| Environmental Engineering Technology | 4761 | Environmental Regulations |
| Environmental Studies | 3025 | Environmental Law \& Regulation |
| Asian Studies/Environmental Studies/GUS | 3052 | Environmental Problems in Asia |
| Environmental Studies/GUS | 2051 | The Urban Environment |
| Environmental Studies/GUS | 3051 | Environmental Policy Issues |
| Environmental Studies/GUS | 3054 | Energy, Resources, \& Conservation |
| Environmental Studies/GUS | 3062 | Fundamentals of Geographic Information Systems |
| Environmental Studies/GUS | 3097 | Environment \& Development |
| Environmental Studies/GUS | 4015 | The Geographic Basis of Land Use Planning |
| Environmental Studies/GUS | 4051 | Geography of Hazards |
| Environmental Studies/GUS | 4056 | Political Ecology |
| Environmental Studies/GUS | 4071 | Medical Geography |


| Environmental Studies/GUS | 4096 | Problems of Environmental Quality |
| :--- | :--- | :--- |
| History/Environmental Studies | 3214 | North American Environmental History |
| History/Environmental Studies | 2334 | Social History of American Medicine |
| Horticulture | 2353 | Food Crops I |
| Horticulture | 3514 | Food Crops II |
| Horticulture | 3253 | Health \& Environmental Writing |
| Journalism | 2144 | Landscape Architecture Design Studio II |
| Landscape Architecture | 2157 | Environmental Ethics |
| Philosophy/Environmental Studies | 2596 | Philosophical Perspectives on the Environment |
| Philosophy/Environmental Studies | 3152 | U.S. Environmental Policy |
| Political Science/Environmental Studies | 3265 | International Environmental Policy |
| Political Science/Environmental Studies | 2102 | Environmental Health |
| Public Health | 3001 | Earth Ethics |
| Religion/Environmental Studies | 3511 | Sociology of the Environment |
| Religion/Asian Studies/Environmental Studies | 3904 | Honors Earth Ethics |
| Sociology/Environmental Studies |  |  |
| Topic Electives | 3170 | Methods in Archaeology |
| Environmental Studies/Anthropology | 3189 | Field Session in Archaeology |
| Environmental Studies/Anthropology | 4896 | Environmental Physiology |
| Environmental Studies/Anthropology | 1112 | Plant Ecology |
| Botany | 3000 | Special Topics in Environmental Studies |
| Environmental Studies | 4082 | Independent Study: Environmental Studies |
| Environmental Studies | 4085 | Internship: Environmental Studies |
| Environmental Studies | 2114 | Soils |
| Horticulture | Summer Field Ecology |  |
| Landscape Architecture |  |  |

## Mathematical Economics

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Dr. Dimitrios Diamantaras, Advisor
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The Departments of Economics and Mathematics offer the Mathematical Economics program as a platform for systematic concentration in the mathematical approach to economics. Economics has progressed in the last several decades by making extensive use of mathematical techniques. As a result, students who wish to pursue graduate study in economics, finance, accounting and other disciplines that make an extensive use of economics need a thorough grounding in both economics and mathematics. The Mathematical Economics curriculum provides this grounding with a broad selection of courses that cover all important areas of economics and the mathematical tools required for a critical, deep mastery of these areas. This program is especially recommended for those students who intend to pursue graduate studies in Economics.

## Bachelor of Arts

## Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Math 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement: Economics 3596, Economics 3597, Economics 3598, Mathematics 3096, Mathematics 3098 or Mathematics 4096.
- Students must complete the General Education requirements. The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.

2. College Requirements

- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 45 Upper-Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- Two (2) Upper-Level (2000+) Liberal Art courses.
- Second (2nd) Level of a Foreign Language (1002).

3. Major Requirements for Bachelor of Arts (61-62 s.h.)

- One (1) Computer \& Information Science course is required (4 s.h.): CIS 1053, 1057 or 1068.
- Ten (10) Mathematics courses are required (33-34 s.h.): Mathematics 1041 or 1941, 1042 or 1942, 2043, 2101, 3031, 3032, 3043 and three (3) Mathematics electives at the 3000 level or above. Mathematics 2111 can fulfill one of the Mathematics electives, but it must be taken prior to Mathematics 3098 and 3141.
- Eight (8) Economics courses are required (24 s.h.): Economics 1102 or 1902, 3501, 3502, 3503 , 3598 , two (2) economics electives at the 3000 level or above and one (1) additional elective from the following list: Economics 3504 or 3521.

| Year 1 - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| CIS | $1053$ | Programming in Matlab or | 4 |  |
| CIS | \|1057 | Computer Programming in C or | 4 |  |
| CIS | 1068 | Program Design \& Abstraction | 4 |  |
| Mathematics | $\begin{aligned} & 1041 \\ & 1941 \end{aligned}$ | $\begin{aligned} & \text { Calculus I } \\ & \text { or } \\ & \text { Honors Calculus I } \end{aligned}$ | $\begin{aligned} & 4 \\ & 4 \\ & 4 \end{aligned}$ |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 1 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Economics | $\begin{aligned} & 1102 \\ & 1902 \end{aligned}$ | ```Microeconomic Principles or Honors Microeconomic Principles``` | $\begin{aligned} & 3 \\ & 3 \end{aligned}$ |  |
| Mathematics | $\begin{aligned} & 1042 \\ & 1942 \end{aligned}$ |  | 4 <br> 4 |  |
| General Education / Elective Credits |  |  | 9 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 2 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Economics | 3501 | Intermediate Microeconomic Analysis | 3 |  |
| Mathematics | 2043 | Calculus III | 4 |  |
| General Education / Elective Credits |  |  | 9 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 2 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Economics | 3502 | Intermediate Macroeconomic Analysis | 3 |  |
| Mathematics |  | 3000+ Mathematics Elective or Math 2111 | 3 |  |
| General Education / Elective Credits |  |  | 9 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 3 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |


| Economics |  | 3000+ Economics Elective, with permission from advisor | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Mathematics | 2101 | Linear Algebra | 3 |  |
| Mathematics | 3031 | Probability Theory I | 3 |  |
| General Education / Elective Credits |  |  | 6 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 3-Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Economics | $\begin{aligned} & 3504 \\ & 3521 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Mathematical Economics } \\ & \text { or } \\ & \text { Economics of Risk \& Uncertainty } \\ & \hline \end{aligned}$ | $\begin{aligned} & 3 \\ & 3 \end{aligned}$ |  |
| Mathematics | 3032 | Mathematical Statistics | 3 |  |
| Mathematics |  | 3000+ Mathematics Elective | 3 |  |
| General Education / Elective Credits |  |  | 6 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 4 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Economics | 3503 | Introduction to Econometrics | 3 |  |
| Mathematics | 3043 | Numerical Analysis I (F) | 3-4 |  |
| General Education / Elective Credits |  |  | 10-9 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 4 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Economics | 3598 | Economics Writing Seminar | 3 | WI |
| Economics |  | 3000+ Economics Elective, with permission from advisor | 3 |  |
| Mathematics |  | 3000+ Mathematics Elective | 3 |  |
| General Education / Elective Credits |  |  | 6 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Credits in Coursework for B.A. in Mathematical Economics |  |  | 61-62 |  |
| General Education / Elective Credits |  |  | 62-61 |  |
| Total Credits for B.A. Degree |  |  | 123 |  |

(F) - Fall only course.
*Mathematics 2111 can be substituted for a 3000+ Mathematics elective. It must be taken prior to Mathematics 3098 or Math 3141.

Note: One of the Mathematics electives must be a writing-intensive course in order to satisfy the University requirement that each student must fulfill two writing-intensive courses within the major.

## Distinction in Major

For distinction in Mathematical Economics a student must have an overall GPA of 3.25 or higher. A student must also have a GPA of 3.50 or higher in the 3000+ Mathematics courses, and a GPA of 3.60 or higher in the 3000+ Economics courses.

## TEMPLE UNIVERSITY JAPAN PROGRAMS

The Temple University Japan Campus (TUJ), located in Tokyo, offers the following programs, which are not offered at any other Temple campus:

- Associate in Arts in General Program
- Bachelor of Arts in General Program
- Bachelor of Arts in International Affairs
- Bachelor of Science in International Business Studies
- Bachelor of Arts in Japanese
- Bachelor of Arts in Psychological Studies
- Bachelor of Science in Tourism \& Hospitality Management (2+2 Program)

For more information about the TUJ programs, click on the links to the left.
For more information about TUJ, go to the TUJ web site: www.tuj.ac.jp/newsite/main/undergrad/index.html

## General Program

## Suggested Semester-by-Semester Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802 or 0812 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx | Quantitative Literacy | 4 | GQ |
| GenEd | 08xx | Science \& Technology I | 3 | GS |
| Foreign Language | 1001 | Foreign Language (first level) | 4 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 | Mosaic: Humanities Seminar I | 3 | GY |
| Foreign Language | 1002 | Foreign Language (second level) | 4 |  |
| GenEd | 08xx | Science \& Technology II | 3 | GS |


| Major Elective | 1xxx | Track Concentration Department | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Major Elective | 1xxx | Track Non-Concentration Department | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Foreign Language/ GenEd | 0800+ | Foreign Language (third level) or GenEd World Society or Internationally Focused Course from Approved List | 3-4 | GG |
| Intellectual Heritage | 0852 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx | U.S. Society | 3 | GU |
| GenEd | 08xx | Human Behavior | 3 | GB |
| Major Elective | 1xxx | Track Concentration Department | 3 |  |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx | Arts | 3-4 | GA |
| GenEd | 08xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx | World Society | 3 | GG |
| Major Elective | 2000+ | Track Non-Concentration Department 2 | 3 |  |
| Any | 0800-4999 | One Elective in any School or College | 3-4 |  |
| Subtotal |  |  | 15-17 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ CLA/CST course | 3 |  |
| Major Elective | 2000+ | Track Non-Concentration Department 3 | 3 |  |
| Major Elective | 2000+ | Track Concentration Department | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ CLA/CST course | 3 |  |
| Major Elective | 2000+ | Track Non-Concentration Department X | 3 |  |
| Major Elective | 2000+ | Track Concentration Department | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST course | 3 |  |
| Major Elective | 2000+ | Outside Track (SS for HU or HU for SS) | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Major Elective | 2000+ | Track Non-Concentration Department X | 3 |  |
| Major Elective | 2000+/96/97/98 | Track Concentration Department WI | 3 | WI |
| Major Elective | 2000+ | Outside Track (SS for HU or HU for SS) | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |


| Subtotal |  |  |  | $\mathbf{1 5}$ |
| :--- | :--- | :--- | :---: | :---: |
|  |  |  |  |  |
| Senior Year - 2nd Semester | Course \# | Course Title | Hours | Attribute |
| Subject | $2000+/ 96 / 97 / 98$ | Track Non-Concentration Department X WI | 3 | WI |
| Major Elective | Track Non-Concentration Department X | 3 |  |  |
| Major Elective | $2000+$ | One 2000+ CLA/CST course | 3 |  |
| CLA/CST | $2000+$ | Outside Track (SS for HU or HU for SS) | 3 |  |
| Major Elective | $2000+$ | One Elective in Any School or College | 3 |  |
| Any |  |  | $\mathbf{1 5}$ |  |
| Subtotal |  |  |  |  |
|  |  | $\mathbf{1 2 3}$ |  |  |
| Minimum Degree Total |  |  |  |  |

## International Affairs

## Suggested Semester-by-Semester Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802 or 0812 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx | Quantitative Literacy | 4 | GQ |
| GenEd | 08xx | Science \& Technology I | 3 | GS |
| Foreign Language | 1001 | Foreign Language (first level) | 4 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 | Mosaic: Humanities Seminar I | 3 | GY |
| Foreign Language | 1002 | Foreign Language (second level) | 4 |  |
| GenEd | 08xx | Science \& Technology II | 3 | GS |
| Political Science | 1201 | Foreign Governments and Politics | 3 |  |
| Political Science | 1301 | International Politics | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Foreign Language or <br> Japanese | $\begin{array}{\|c} \hline 2001 \\ \text { or } \\ 2701 \\ \hline \end{array}$ | Foreign Language (third level) or <br> TUJ - Japanese Intermediate I | $\begin{aligned} & 3 \\ & 4 \\ & \hline \end{aligned}$ |  |
| Intellectual Heritage | 0852 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx | U.S. Society | 3 | GU |
| GenEd | 08xx | Human Behavior | 3 | GB |
| History | 1702 | World History Modern | 3 |  |
| Subtotal |  |  | 15-16 |  |

## Sophomore Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| GenEd | 08 xx | Arts | $3-4$ | GA |
| GenEd | 08 xx | Race \& Diversity | 3 | GD |
| GenEd | 08 xx | World Society | 3 | GG |
| Foreign Language <br> or | 2002 <br> or <br> Japanese | Foreign Language (fourth level) <br> or <br> TUJ - Japanese Intermediate II | 3 |  |
| CLA | Interdisciplinary Elective 1 | 4 |  |  |
| Subtotal | $2000+$ |  | 3 |  |

Junior Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Economics | 1103 | Global Economics Issues | 3 |  |  |
| Political Science | $2000+$ | Political Science Requirement (PSR) 1 | 3 |  |  |
| CLA | $2000+$ | East Asia Area Requirement 1 | 3 |  |  |
| History | 3229 | Superpower America | 3 |  |  |
| Political Science | $2000+$ | Political Science Requirement (PSR) 2 | 3 |  |  |
| Subtotal |  |  |  |  |  |
|  |  |  |  |  |  |
| Junior Year - 2nd Semester | Course $\#$ | $2000+$ | Course Title | $\mathbf{1 5}$ |  |
| Subject | $3000+$ | Interdisciplinary Elective 2 | Hours | Attribute |  |
| CLA | International Affairs Major Internship | 3 |  |  |  |
| CLA | Non-East Asia/Non-USA Requirement 1 | 3 |  |  |  |
| CLA | Humanities Distribution Elective 1 | 3 |  |  |  |
| CLA HUM | $2000+$ | East Asia Area Requirement 2 | 3 |  |  |
| CLA | $2000+$ |  | $\mathbf{1 5}$ |  |  |
| Subtotal |  |  |  |  |  |

Senior Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| CLA | $2000+$ | East Asia Area Requirement 3 | 3 |  |
| CLA/CST | $0800-4999$ | One CLA/CST Course | 3 |  |
| CLA | $2000+$ | Non-East Asia/Non-USA Requirement 2 | 3 |  |
| CLA HUM | $2000+$ | Humanities Distribution Elective 2 | 3 |  |
| Political Science | $4 \times 96,4 \times 97$, or $4 \times 98$ | Political Science 4000+ Writing Intensive | 3 | WI |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

Senior Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Asian Studies | $4 \times 96,4 \times 97$, or 4x98 | Asian Studies 4000+ Writing Intensive | 3 | WI |
| Political Science | 4320 | Seminar in International Politics | 3 |  |
| CLA/CST | $0800-4999$ | One CLA/CST Course | 3 |  |
| Any | $0800-4999$ | One Elective in Any College/School | 3 |  |
| Amy | $0800-4999$ | One Elective in Any College/School | 3 |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |
|  |  |  |  |  |
| Minimum Degree Total |  | $\mathbf{1 2 3}$ |  |  |

## International Business Studies (College of Liberal Arts)

Temple University, Japan Campus (TUJ), located in Tokyo, offers a Bachelor of Science in International Business Studies (IBS). TUJ offers a truly international experience - inside and outside the classroom, as well as among students and faculty. This program will prepare students for a challenging career anywhere in the world.

The IBS program challenges students to integrate international business with language studies, an understanding of world affairs and hands-on internship experience. Students develop the global mindset that multinational firms need in the 21st century.

IBS students work on teams with people of similar backgrounds and with those who are often quite different in how they approach life and their studies. TUJ encourages students not only to be multilingual, but also to understand how to navigate across cultures and borders. The IBS program teaches them to think critically, form a well-reasoned opinion, and then capably express that opinion. This is accomplished through class participation, visits to local businesses, and by bringing savvy international business people in the classroom. With those tools, TUJ graduates move confidently into the world of international business and launch productive, fulfilling and viable global careers.

The Bachelor of Science in International Business Studies will be conferred upon a student after the completion of 123 credits across the following requirement categories.

## Summary of Requirements for the Degree

## 1. University and College of Liberal Arts (CLA) requirements

- All Temple students must take a minimum of two writing-intensive courses as part of the major.
- Students must complete the General Education curriculum
- Students must follow CLA requirements as specified at:
www.temple.edu/bulletin/Academic_programs/schools_colleges/cla/intro/gradreq/cla_gra dreq.shtm


## 2. Lower Division Business courses (12 s.h.)

- Human Resource Management 1101: Leadership and Organizational Management
- Accounting 2101: Financial Accounting
- Marketing 2101: Marketing Management
- Accounting 2102: Managerial Accounting


## 3. International Business Studies major requirements (12 s.h.)

Two of the following courses (6 s.h.):

- TUJ International Business Studies 3101: Introduction to Global Finance
- TUJ International Business Studies 3102: Global Operations and Supply Chain Management
- TUJ International Business Studies 3501: Marketing in a Global Environment

International Business Studies Writing Intensive Requirements (6 s.h.):

- TUJ International Business Studies 4197: Global Business Overview
- TUJ International Business Studies 4596: IBS Integrated Capstone


## 4. Other required general courses (43 s.h.)

- Mathematics 1021: College Algebra
- Mathematics 1031: Differential \& Integral Calculus
- Mathematics 2031: Probability \& Statistics
- Economics 1101: Macroeconomics
- Economics 1102: Microeconomics
- Economics 3563 or 3564: International Trade or International Monetary Economics
- Economics 3538: Managerial Economics
- Economics 3581: Co-op Experience in Economics
- English 2007: Writing for Business and Industry (former number: 2596)
- Organizational Studies 3000: Topics in Organizational Studies: TUJ International Business Studies section
- Political Science 2321: Politics of the Global Economy
- Political Science 2000-Level Elective
- Asian Studies 2511: Introduction to Asian Business
- Liberal Arts 2020: Special Topics in Liberal Arts II: Corporate Interdisciplinary Seminar


## 5. Language Requirements (14-16 s.h.)

- Foreign Language 1001, Foreign Language (first level)
- Foreign Language 1002, Foreign Language (second level)
- Foreign Language 2000+, Foreign Language (third level)
- Foreign Language 2000+, Foreign Language (fourth level)


## 6. College of Liberal Arts (CLA) or College of Science and Technology (CST) Electives (9 s.h.)

- Three (3) of any CLA/CST courses at 2000+ level or higher


## Suggested Semester-by-Semester Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

[^0]| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| English | 0802 or 0812 | Analytical Reading \& Writing | 4 | GW |
| Mathematics | 1021 | College Algebra | 4 |  |
| Foreign Language | 1001 | Foreign Language (first level) | 4 |  |
| GenEd | 08xx | Science \& Technology I | 3 | GS |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 | Mosaic: Humanities Seminar I | 3 | GY |
| Foreign Language | 1002 | Foreign Language (second level) | 4 |  |
| GenEd | 08xx | Science \& Technology II | 3 | GS |
| Economics | 1101 | Macroeconomic Principles | 3 |  |
| Mathematics | 1031 | Differential and Integral Calculus | 4 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Foreign Language | 2000+ | Foreign Language (third level) | 3-4 |  |
| Intellectual Heritage | 0852 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx | U.S. Society | 3 | GU |
| GenEd | 08xx | Human Behavior | 3 | GB |
| Mathematics | 2031 | Probability and Statistics | 3 |  |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx | Arts | 3-4 | GA |
| GenEd | 08xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx | World Society | 3 | GG |
| Accounting | 2101 | Financial Accounting | 3 |  |
| Foreign Language | 2000+ | Foreign Language (fourth level) | 3-4 |  |
| Subtotal |  |  | 15-17 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 2007 | Writing for Business and Industry | 3 |  |
| Human Resource Management | 1101 | Leadership and Organizational Management | 3 |  |
| Marketing | 2101 | Marketing Management | 3 |  |
| Economics | 1102 | Microeconomic Principles | 3 |  |
| Accounting | 2102 | Managerial Accounting | 3 |  |
| Liberal Arts | 2020 | Special Topics in Liberal Arts II: Corporate Interdisciplinary Seminar | 2 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Economics | 3581 | Co-op Experience in Economics | 3 |  |


| Organizational Studies | 3000 | Topics in Organizational Studies: TUJ International Business Studies section | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Political Science | 2000+ | One Political Science course at 2000 level or higher * | 3 |  |
| Choose two from the following: |  |  | 6 |  |
| TUJ International Business Studies | 3101 or 3102 or 3501 | ```Introduction to Global Finance or Global Operations & Supply Chain Management or Marketing in a Global Environment``` |  |  |
| Subtotal |  |  | 15 |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| TUJ International Business Studies | 4596 | Integrated Capstone | 3 | WI |
| CLA/CST | 2000+ | Any CLA/CST course at 2000 level or higher | 3 |  |
| Economics | $\begin{gathered} 3563 \\ \text { or } \\ 3564 \end{gathered}$ | ```International Trade or International Monetary Economics``` | 3 |  |
| Asian Studies | 2511 | Introduction to Asian Business | 3 |  |
| Political Science | 2321 | Politics of the Global Economy | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| TUJ International Business Studies | 4197 | Global Business Overview | 3 | WI |
| Economics | 3538 | Managerial Economics | 3 |  |
| CLA/CST | 2000+ | Any CLA/CST course at 2000 level or higher | 3 |  |
| CLA/CST | 2000+ | Any CLA/CST course at 2000 level or higher | 3 |  |
| Subtotal |  |  | 12 |  |
|  |  |  |  |  |
| Minimum Degree Total |  |  | 123 |  |

*Through a consultation with an academic advisor or the major coordinator.

## Japanese

The Japanese major program at Temple University Japan Campus is a unique undergraduate degree program designed to offer a comprehensive four-year Japanese language curriculum in a JSL (Japanese as a Second Language) setting. It aims to achieve advanced and well-balanced proficiency in Japanese so that students will be well-equipped with linguistic skills and fully prepared to examine socio-cultural aspects of Japan and Japanese literature.

The Bachelor of Arts in Japanese will be conferred upon the student after the completion of 123 credits across the following requirements categories:

- 36 credit hours of General Education coursework
- 43 credit hours (14 courses) required for major; major courses must be passed with at least a C-
- 44 elective credit hours


## Summary of Requirements for the Degree

## 1. University requirements

- All Temple students must take a minimum of two writing-intensive courses as part of the major.
- Students must complete the General Education curriculum (36 s.h.)


## 2. Major requirements (minimum 43 credits)

- Language requirements (16 credits): Japanese 2702, 3001, 3002, 4001 and 4002
- Language Skills (12 credits): Choose 4 courses from the following: Japanese 2003, 2301, 2631, 3000, 3003, 3010, 3096, 3631, 4003
- Area Studies electives and Writing Intensive (12 credits): In consultation with the Major Coordinator, choose 4 content courses in other related disciplines that focus exclusively on Japan, one of them being a writing-intensive (WI) course taught in English.
- Capstone (3 credits): Japanese 4196, 4296, or 4396


## Suggested Semester-by-Semester Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Japanese | 1001 | Japanese Elements I | 4 | LC |
| English | 0802 or 0812 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx | Quantitative Literacy | 4 | GQ |
| GenEd | 08xx | Human Behavior | 3 | GB |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Japanese | 1002 | Japanese Elements II | 4 | LC |
| Japanese | 1301 | Kanji I | 3 |  |
| Intellectual Heritage | 0851 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx | U.S. Society | 3 | GU |
| Subtotal |  |  | 16 |  |

Sophomore Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Japanese | 2701 | Japanese Intermediate I | 4 | LC |
| Japanese | 2301 | Kanji II | 3 |  |
| Intellectual Heritage | 0852 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | Science \& Technology II | 3 | GS |  |
| GenEd | World Society | 3 | GG |  |
| Subtotal |  | $\mathbf{1 6}$ |  |  |

Sophomore Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Japanese | 2702 | Japanese Intermediate II | 4 |  |
| Japanese | 1003 | Oral Intensive Japanese I | 3 |  |
| CLA | $2000+$ | Area Studies Elective 1 (Social Science) | 3 |  |
| GenEd | Race \& Diversity | 3 | GD |  |
| GenEd | Arxx |  | $3-4$ | GA |
| Subtotal | $08 x x$ |  | $\mathbf{1 6 - 1 7}$ |  |

Junior Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Japanese | 3001 | Japanese Advanced I | 3 |  |
| Japanese | 2631 | Structure of Japanese Language I | 3 |  |
| CLA | $2000+$ | Area Studies Elective 2 <br> (Writing Intensive taught in English) | 3 | WI |
| CLA | Upper Level CLA Elective | 3 |  |  |
| CLA | $2000+$ | Any CLA Elective | 3 |  |
| Subtotal | $0800-4999$ |  | $\mathbf{1 5}$ |  |

## Junior Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Japanese | 3002 | Japanese Advanced II | 3 |  |
| Japanese | 3096 | Intermediate Writing in Japanese | 3 | WI |
| CLA | $2000+$ | Area Studies Elective 3 (Social Science) | 3 |  |
| CLA | Any CLA Elective | 3 |  |  |
| CLA | Any CLA Elective | 3 |  |  |
| Subtotal |  | $\mathbf{1 5}$ |  |  |

## Senior Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :---: |
| Japanese | 4001 | Japanese Advanced III | 3 |  |
| Japanese | 4003 | Advanced Oral Japanese | 3 |  |
| CLA | $2000+$ | Area Studies Elective 4 | 3 |  |
| CLA | Any CLA Elective | 3 |  |  |
| CLA | Any CLA Elective | 3 |  |  |
| Subtotal | $0800-4999$ |  | $\mathbf{1 5}$ |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester | Course $\#$ | Course Title | Hours | Attribute |
| Subject | Japanese Advanced IV | 3 |  |  |
| Japanese |  |  |  |  |


| Japanese | $4000+$ Writing Intensive | Capstone: Seminar in Japanese and Japan | 3 | WI |
| :--- | :--- | :--- | :---: | :---: |
| CLA | $0800-4999$ | Any CLA Elective | 3 |  |
| Any | $0800-4999$ | One Elective in Any School or College | 3 |  |
| Any | $0800-4999$ | One Elective in Any School or College | 3 |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |
|  |  |  |  |  |
| Minimum Degree Total |  |  |  |  |

## Psychological Studies

## Suggested Semester-by-Semester Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

Freshman Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| English | 0802 or 0812 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx | Quantitative Literacy | 4 | GQ |
| GenEd | 08xx | Science \& Technology I | 3 | GS |
| Foreign Language | 1001 | Foreign Language (first level) | 4 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx | Science \& Technology II | 3 | GS |
| Foreign Language | 1002 | Foreign Language (second level) | 4 |  |
| Psychology | 1071 | Psychology as a Natural Science | 3 |  |
| Biology | 1001 | Human Biology | 4 |  |
| Subtotal |  |  | 17 |  |

Sophomore Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Foreign Language/ GenEd | 0800+ | Foreign Language (third level) or GenEd World Society course or Internationally Focused Course from Approved List | 3-4 | GG |
| Intellectual Heritage | 0852 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx | U.S. Society | 3 | GU |
| GenEd | 08xx | Human Behavior | 3 | GB |
| Psychology | 1061 | Psychology as a Social Science | 3 |  |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx | Arts | 3-4 | GA |
| GenEd | 08xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx | World Society | 3 | GG |


| Psychology | 2000-level | Foundations \#1 | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Psychology | 1167 | Foundations in Statistical Methods | 3 |  |
| Subtotal |  |  | 15-16 |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Humanities/CST course | 3 |  |
| Psychology | 2000-level | Foundations \#2 | 3 |  |
| Psychology | 2168 | Inferential Methods in Psychology | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST course | 3 |  |
| Psychology | 2196 | Scientific Thinking in Psychology | 4 | WI |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Humanities/CST course | 3 |  |
| Psychology | 2000-level | Foundations \#3 | 3 |  |
| Psychology | 3000-3620 | Advanced Psychology \#1 (Gender or Culture) | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST course | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Any | 0800-4999 | One Elective in Any School or College | 3 |  |
| Psychology | $\begin{gathered} 3785 \\ \text { or } \\ 3791 \end{gathered}$ | Psychology Internship <br> or <br> Collaborative Research I | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Psychology | 4x96 | Capstone | 4 | WI |
| CLA/CST | 0800-4999 | Any CLA/CST Course | 3 |  |
| Psychology | 3000-3625 | Advanced Psychology \#2 | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 1-2 |  |
| Subtotal |  |  | 14-16 |  |
|  |  |  |  |  |
| Minimum Degree Total |  |  | 123 |  |

## FOX SCHOOL OF BUSINESS \& MANAGEMENT

Founded 1918

M. Moshe Porat, Dean<br>362 Alter Hall<br>1801 Liacouras Walk<br>215-204-7676<br>www.fox.temple.edu

## Accreditation

Established in 1918, the Fox School of Business and Management at Temple University has a distinguished tradition of preparing business leaders, professionals and entrepreneurs for successful careers. Today, it is the largest, most comprehensive business school in the greater Philadelphia region, and among the largest in the world with 6,500 students, 175 full-time faculty and more than 59,000 alumni. Accredited by AACSB International - Association to Advance Collegiate Schools of Business - the Fox School offers BBA, MBA, Executive MBA, International MBA, Online MBA, MBA/MS, MS and PhD programs on campuses throughout the region and around the world.

## Vision

With nearly a hundred years of history behind us, our vision is to be a top public urban business school in the country, and among the leading business schools in the world.

## Values

We transform lives by creating and sharing knowledge, while instilling values that prepare leaders for tomorrow's world. Our vision and values guide our teaching, research and school management.

- Excellence: We value excellence in teaching, research, and school management.
- Creativity: We value innovation and creative thinking.
- An entrepreneurial culture: We value effective decision-making and entrepreneurial implementation of ideas.
- Ethical behavior and respect for others: We value ethical practice and respect for diverse perspectives.
- Community Engagement: We value building partnerships with all stakeholders and the community we serve.


## Mission Statement

Transform lives through education. Russell Conwell's mission was to provide a gateway to opportunity for talented and determined students, including those with lesser financial means.

We build on this mission, making sure our students acquire the skills they will need in the global marketplace.

We are committed to the following:

- Providing quality, student-centered business education.
- Engaging in relevant research and advanced doctoral training and expanding the frontiers of knowledge and business education.
- Extending our education, research and outreach efforts to be responsive to the driving forces of our economy including globalization, sustainability, ethics, entrepreneurship, innovation, and technology.
- Integrating leading-edge information technology into teaching, learning, research, and school management necessary for managing in an increasingly competitive, dynamic, global economy.
- Providing the best professional development and career management opportunities for our students, faculty, and staff with special efforts to facilitate development of ethical values, social networking skills, and leadership.
- Linking, through our curriculum, research and outreach to the dominant and growth industries in our region: financial services, healthcare, pharmaceuticals/biotechnology, information technology, and tourism.
- Engaging our diverse stakeholders to improve our school and serve our community.


## Learning Goals and Assurance of Learning

The four main learning goals for the Bachelor of Business Administration Program seek to assure students will:

- Understand critical business concepts.
- Apply critical thinking to business problems.
- Demonstrate effective oral and written communication.
- Understand the ethical, legal, and social responsibilities of individuals and organizations.

Specific learning objectives include:

- Understand critical business concepts
o Apply a core body of discipline-specific knowledge to business situations.
o Recognize the competitive and operational role of organizational information systems.
o Apply quantitative analysis and interpretation to business problems.
- Apply critical thinking to business problems
o Interpret an enterprise-wide case study and recommend solutions.
o Use cross-disciplinary knowledge to identify problems and their causes, generate alternative solutions, and arrive at reasoned conclusions.
o Use information technology to analyze and implement business decisions.
- Demonstrate effective oral and written communication
o Formulate reasoned arguments orally.
o Formulate reasoned arguments in written communication.
o Apply team-work and communication skills to present and support conclusions.
- Understand the ethical, legal, and social responsibilities of individuals and organizations.
o Understand ethical issues.
o Assess the impact of managers and employees as agents, including the impact of their decisions on the organization, its stockholders, its employees, its customers and the community-at-large.
o Apply stakeholder analysis to social and business issues and consider and evaluate possible conflicts of interests

For more information, please visit: http://sbm.temple.edu/ugrad/learning goals.html

## Special Facilities \& Programs

## Center for Student Professional Development (CSPD)

## http://fox.temple.edu/cspd

The Center for Student Professional Development (CSPD) is a vital link between the Fox School and the business community. Utilizing a unique "professional development model," CSPD ensures all undergraduates develop the requisite professional skills that will help them locate meaningful internship and permanent jobs with regional and national companies. The center provides:

- one-on-one coaching sessions
- group workshops
- on-campus recruiting
- leadership training
- numerous networking events with employers.

Being successful requires a balance of good academic performance, an understanding of the markets and industry expectations, and experience gained through active involvement in Student Professional Organizations. In addition, the CSPD staff teaches Business Administration 2101, a course designed to help students develop the basic professional tools that they will need to find internships and permanent jobs.

## Internship Programs

The Center for Student Professional Development and Student Professional Organizations work in partnership with employers to connect students with a wide variety of internship positions, both full and part-time. For more information on internship opportunities, please contact the
student professional organization for your major or the Center for Student Professional Development at 215-204-2371.

## Honors Program

The Fox School of Business and Management offers a stimulating Honors Program for students who demonstrate exceptional ability and achievement in their studies. High school students with SAT scores of at least 1350 (Math and Critical Reading/Writing average) and rank in the top $10 \%$ of their class are automatically reviewed for admission at the time of application to the University. College students with at least a 3.70 grade point average are encouraged to apply. The program consists of a nine-course academic component and completion of a yearly leadership component and students earn an Honors Certificate upon completion of the program. All students must first be accepted to the University Honors Program. For more information on this program, please visit the web site at www.fox.temple.edu/honors.

Students admitted to the Honors Program may apply to join the Research Scholars program prior to the start of their junior year. Research Scholars work with faculty mentors on research projects in their chosen field. The research culminates in a senior thesis that students present during the spring of their senior year. Special scholarships are available for the two-year Research Scholars program.

Students who enter the Fox Honors Program are expected to join the Business Honors Student Association as well as the student organization in their major. For more information about the Fox Honors Program and the Research Scholars Program, please contact Dr. Jonathan Scott, Academic Director, Fox Honors Program, Alter Hall LL30, or Charles Allen, Administrative Director, at 215-204-4101 or visit the web site at www.fox.temple.edu/honors.

## Honorary Societies, Awards, \& Student Associations

## Beta Gamma Sigma

The Gamma Chapter of Beta Gamma Sigma, the international honorary business society, was installed in the Fox School of Business and Management in March 1935. Membership is limited to seniors and juniors who are in the upper 10 percent of their class. The members of Beta Gamma Sigma are elected on the basis of high scholarship. Eligible students will be notified by mail in March and invited to attend a special induction ceremony in April. Please contact Charles Allen at 215-204-8122 for more information.

## Alpha Mu Alpha

A national marketing honorary society, established by the American Marketing Association in 1981, to recognize and reward the scholastic achievement of marketing students as well as academic excellence in the discipline and science of marketing. To be invited to join Alpha Mu Alpha, marketing majors are required to have $90+$ credit hours and be in the top $15 \%$ of their class based on GPA. Inductions are made for graduating students in Spring and Fall. For more
information, please contact the AMA Faculty Advisor, Mary Conran at mary.conran@temple.edu.

## Beta Alpha Psi

This national honorary fraternity was established for students of accountancy, finance, and information systems. For more information, please contact the officers of Beta Alpha Psi at 215-204-8889, www.fox.temple.edu/cms_career/student-professional-organizations/beta-alpha-psi/.

## Financial Management Association/National Honor Society

This national honorary society strives to provide opportunities to enhance the professional development of its members. For more information, contact the FMA executive officers at 215-204-6673, or go to The Fox School | Financial Management Association web site at www.fox.temple.edu/cms_career/student-professional-organizations/financial-managementassociation/.

## Gamma Iota Sigma

This is an international Risk Management, Insurance, and Actuarial Science fraternity. The purpose of the Sigma Chapter of Gamma Iota Sigma is to encourage, establish, and enhance the professionalism of students in the Risk Management, Healthcare Risk Management, and Actuarial Science programs. Contact Dr. R.B. Drennan in the Risk, Insurance, and Healthcare Management Department at 215-204-8894 or contact the GIS Officers at 215-204-9368.

## Student Organizations

www.fox.temple.edu/org/
As part of the student's overall professional development, all Fox students are strongly encouraged to participate in student organizations, professional associations, and academic fraternities. All major areas of concentration in the undergraduate curriculum have an associated organization. Freshmen and sophomores can utilize the organizations to find out more about the major fields of study available to them. The student organizations provide an opportunity for students to meet one another outside the classroom as well as to meet practicing professionals from industry and government. Many organizations have an array of social activities that range from fund raising and community service projects to evening gatherings.

The Fox School of Business and Management has the following student professional organizations: Accounting Professional Society, Ascend, Association of Computing Machinery, American Marketing Association, Association of Management Information Systems, Beta Alpha Psi, Business Honors Student Association, Entrepreneurial Student Association/SIFE, Financial Management Association/National Honor Society, Gamma Iota Sigma, International Business Association, National Association for Black Accountants, Omicron Delta Epsilon, Phi Alpha Delta Pre-Law Fraternity, Phi Beta Lambda Business Fraternity, Rho Epsilon, the Society for

Human Resource Management, Students for Responsible Business, Temple Economics Society, Toastmasters, and Upsilon Pi Epsilon.

Please contact the College Council Officers at 215-204-6660 for more information about student organizations on the Main Campus. At the Ambler Campus, please call Kate Rickards at 267-468-8366.

## Fox School of Business \& Management College Council (FSBMCC)

The college council is comprised of the presidents from each of the recognized Fox student organizations, associations, and fraternities. The council's role is to assist the individual student organizations in recruiting members, obtaining funding, sponsoring activities, identifying outside speakers, and communicating with students. The college council sponsors volunteer opportunities, student organization fairs, and social events for all Fox students. The council also works closely with the dean's office and the Center for Student Professional Development to identify issues that are of concern to students and the student organizations. To contact the Main Campus college council, please call 215-204-6660. At the Ambler Campus, please call 267-4688366.

## Academic Advising

## Center for Undergraduate Advising

www.fox.temple.edu/cms academics/dept/advising/
The Center for Undergraduate Advising provides advising at three campuses: Main, Ambler, and TUCC.

The Main Campus office is open every weekday. The Ambler and Center City offices are open on selected days and evenings. Please see our web site for current office hours and staff: www.fox.temple.edu/cms_academics/dept/advising/.

Main Campus advising includes an intentional focus on the developmental trajectory of first and second year students through the Freshman/Sophomore unit. This unit focuses on the transition to college life, major exploration within Fox, successful completion of the lower-division foundation requirements, and retention. Main Campus upper class students are assigned to an academic advisor based on their declared major. The Junior/Senior unit assists students in preparing for graduation and the transition to the business world by articulating curriculum requirements and departmental expectations.

Students are expected to know University Policies and their program requirements as defined in their Bulletin and on their DARS report, which can be accessed via TUportal by clicking on the Student Tools tab and then selecting Degree Audit in the Records channel. Advisors will help students with program questions and will provide information to help students define their academic goals and plan the academic course sequence to meet these goals. Advisors will also
refer students to additional academic resources and university support services as needed. Students will find additional resources for planning their program in the Fox Undergraduate Advising web site: www.fox.temple.edu/cms_academics/dept/advising/ or the Fox Undergraduate Advising Blackboard community.

## Peer Advising

The Center for Undergraduate Advising at the Fox School of Business and Management provides peer advising on Main Campus to Fox students. Peer advisors are an integral part of the Center for Undergraduate Advising. They provide the perspective of an upper class student in the college and assist business students in making the transition into Temple by sharing their strategies for academic success and knowledge of campus resources. To learn more about peer advising, please visit our web site: http://community.mis.temple.edu/peeradvisors/.

## Office of the Ombudsperson

The Fox School of Business and Management Ombudsperson will assist students in resolving problems and conflicts that might arise from the classroom, acting as mediator between faculty and students while promoting alternatives to more formal processes. The ombudsperson supports effective communication, cooperation, equity and civility in academic and work environments through coaching individuals, facilitating communication between persons and departments, providing information on university policy, and where needed, recommending appropriate institutional action or change.

The grievance procedures can be reviewed online at www.fox.temple.edu/cms academics/dept/advising/students/grievance-procedures/ or contact the Center for Undergraduate Advising at foxombud@temple.edu or 215-204-7672 for further information.

## Academic Policies \& Regulations

The university policies and regulations apply to all undergraduate students and provide a framework within which schools and colleges may specify further conditions or variations appropriate to students in their courses or programs. Policies specific to FSBM are as follows:

## Anticipation of Graduation

Students must submit an application for graduation using the University online graduation application in Self Service Banner prior to the Continuing Student Registration period for their final semester. The Fox School of Business and Management requires students to submit an electronic "Request for Graduation Review" prior to registration for their final semester. Current graduation information is available from the advising web site at www.fox.temple.edu/cms_academics/dept/advising/graduation/overview/.

## Courses Inapplicable to Graduation Requirements

Semester hours earned in SRAP or ELECT, Preparatory Mathematics (formerly Mathematics 0001 or 0015), and lower-division (under 3000) Military Science courses do not yield academic credit toward the minimum total of 124.

## Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List policy for specific GPA and credit-hour requirements.

## Probation and Drop

Students in the Fox School of Business and Management are bound by the university policy on Academic Standing. The university policy can be found at http://policies.temple.edu/getdoc.asp?policy no=02.10.11.

## Grade Point Average Requirement for Graduation

Fox students are required to attain a $2.0(2.0=\mathrm{C})$ average in all of their Temple coursework and in their major in order to graduate from the Fox School of Business and Management. Some courses may have specific higher minimum grade requirements for degree applicability. Please check current course descriptions and the section pertaining to your major for this information. Major GPA calculators are available at www.fox.temple.edu/advising/gpa/.

## Life Experience

The Fox School of Business and Management does not offer credits for life experiences. Please see Credit for Prior Learning under the Academic Policies section of this Bulletin for information about advanced placement or CLEP examinations.

## Leave of Absence/Re-enrollment/Reinstatement

Fox students who wish to voluntarily withdraw from the university for one or two semesters (fall and/or spring) are strongly encouraged to apply for a Leave of Absence (LOA). If approved, these students remain eligible for the same requirements as when they declared their major and will have access to Temple e-mail, university library systems, and priority and self registration for the approved semester of return. By contrast, students who leave the university without any notice and without an approved LOA must apply to be re-enrolled and, if allowed to return, must follow the most recent university curricular requirements in place for the semester of their return. If no LOA was filed, before students return, they must indicate any course(s) taken since leaving Temple and provide a copy of an official transcript from each institution attended. Students who received a medical withdrawal may be asked to provide medical documentation clearing them to
return to school and to schedule an interview with an advisor before a re-enrollment decision can be made. Any existing holds must be cleared prior to re-enrollment.

Leave of Absence and Re-enrollment forms are available online: www.fox.temple.edu/cms_academics/dept/advising/forms/. Further details can be viewed at: http://policies.temple.edu/getdoc.asp?policy_no=02.10.16

Students who were dismissed for academic reasons should see the university policy on Academic Standing.

## Repeating Courses

University policy restricts the number of times students can enroll in the same course to three times. Permission is required to register for the third attempt of the same course. Students should work closely with an academic advisor to review their options when required to repeat a course. Students who fail to complete a "College Graduation Requirement" in three attempts will be required to change their program to one outside the Fox School of Business and Management. Students who fail to complete a required major course listed in the Programs of Study will be required to change to a different major. Please see Repeating a Course under the Academic Policies section of this Bulletin for more information.

## Residence Requirement

A minimum of 30 of the last 45 semester hours must be completed in the Fox School of Business and Management at Temple University in order to receive a degree. In addition, a minimum of $50 \%$ of the business courses and the majority of the requirements of a major must be completed at Temple University. See the Academic Residency Requirements policy at www.temple.edu/bulletin/policies/policies_part1.htm\#acad_res_req.

## Transfer Credits

Business courses taken at colleges or universities which are not members of The Association to Advance Collegiate Schools of Business ((AACSB; www.aacsb.edu/) will be accepted for transfer business credits only if they are equivalent to Economics 1101, Economics 1102, Accounting 2101, Accounting 2102, Risk Management \& Insurance 2101, Legal Studies 1101, Legal Studies 1102, Management Information Systems 2101, Statistics 1001, 1102, 2101, 2102, 2103. Marketing 2101 and Human Resource Management (formerly Human Resource Administration) 1101 will be accepted for transfer if they were taken during the fall 1994 semester or later. Human Resource Management 2501 will be accepted for transfer if taken during the spring 2005 semester or later. Specific articulation agreements with local colleges may expand on this list. Current articulation agreements can be viewed at www.temple.edu/vpus/transfer/agreements.htm.

Additional business credits are accepted from colleges that are members of the AACSB. It should be understood that it is possible for a student to transfer in a large number of credits,
which, while accepted by the university, may exceed the maximum number of elective credits applicable to the degree.

## Permission to take Courses at Another Institution

Consistent with the University Policy, www.temple.edu/bulletin/policies/policies_part4.htm\#another_inst, students will not receive transfer credit for courses taken at another institution while they are matriculated at Temple University unless prior permission has been obtained. Completed permission forms with supporting documentation should be submitted to the Fox School of Business and Management advising offices. Please refer to the above section on transfer credits. Students should allow approximately two weeks for processing once permission forms and documentation have been submitted.

## Non-Degree Seeking Student Policy

Students not formally admitted to Temple University may take undergraduate courses numbered under 3000 in the Fox School of Business and Management. Undergraduate courses numbered above 3000 are open to visiting students who have completed a minimum of 60 credits, have met course prerequisites, and have written permission from their home institution. Students who have a baccalaureate degree and the prerequisites for the course desired may also enroll in advanced courses.

## University Requirements

The General Education curriculum (GenEd) is required for all students. Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

## College Graduation Requirements

The degree of Bachelor of Business Administration (B.B.A.) may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 124 semester hours of credit with a minimum cumulative GPA of 2.0 overall and in the major. A minimum of 124 credit hours will be earned in the following four requirement categories:

University General Education (GenEd) Requirements
Fox School of Business \& Management lower- and upper-division requirements
Major requirements
Electives
Students must follow the program requirements in effect at the time the major is declared or changed. Program requirements include both the College Graduation Requirements listed here and the courses required for the major listed in the Programs of Study. Students not continuously
enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

## General Education Curriculum

Go to the General Education pages in this Bulletin for information on the GenEd curriculum.

## Fox School of Business \& Management Requirements

## Lower-Division Foundation Requirements

Note: 1000-level courses are normally taken in freshman year; 2000-level courses are normally taken in sophomore year.

| Subject | Course \# | Course Title | Hours |
| :---: | :---: | :---: | :---: |
| Economics | 1101 | Macroeconomic Principles | 3 |
| Economics | 1102 | Microeconomic Principles | 3 |
| Human Resource Management | 1101 | Leadership and Organizational Management | 3 |
| Legal Studies | 1101 | Legal Environment of Business | 3 |
| Statistics | 1001* | Pre-Calculus for Business | 3 |
| Statistics | 1102 | Calculus for Business | 3 |
| Statistics | 2103** | Business Statistics | 4 |
| Accounting | 2101 | Financial Accounting | 3 |
| Accounting | 2102*** | Managerial Accounting | 3 |
| Management Information Systems | 2101 | Information Systems in Organizations | 3 |
| Marketing | 2101 | Marketing Management | 3 |
| Business Administration | 2101 | Professional Development Strategies | 1 |
| Business Administration | 2196 | Business Communications | 3 |
| Risk Management \& Insurance | 2101 | Introduction to Risk Management | 3 |
| Subtotal |  |  | 41 |
|  |  |  |  |
| *Higher level courses may be recommended depending on the mathematics placement score or the student's intended major. Actuarial Science majors should refer to the math courses listed under the Actuarial Science major description. |  |  |  |
| ** Successful completion of this course will meet the Quantitative Literacy General Education requirement. |  |  |  |
| ***Accounting and Entrepreneurship majors must take Accounting 2521 (Cost Accounting) instead of Accounting 2102. |  |  |  |
| Note: In order to graduate, a grade of C- or better must be obtained in all FSBM lower-division requirements. |  |  |  |

## Upper-Division Foundation Requirements

Note: 3000-level courses are normally taken in the junior or senior year; 4000-level courses are taken in the senior year.

| Subject | Course \# | Course Title | Hours |
| :--- | :--- | :--- | :---: |
| Finance | $3101^{*}$ | Financial Management | 3 |
| Management Science/Operations Management | 3101 | Operations Management | 3 |
| Business Administration | 3102 | Business Society \& Ethics | 3 |
| Business Administration | 3103 | Integrative Business Applications | 3 |
| Business Administration | 4101 | Global Business Policies | 3 |
| International Business Administration | $3101^{* *}$ | Fundamentals of International Business | 3 |
| Subtotal |  |  | $\mathbf{1 8}$ |

* Actuarial Science majors must take Actuarial Science 2503 (Corporate Finance for Actuarial Science) instead of Finance 3101.
** Economics majors replace this course with Economics 3563 (International Trade) or Economics 3564 (International Monetary Economics). Consult your academic advisor.
** Finance and Real Estate majors replace this course with Finance 3551 (International Finance). Consult your academic advisor.
** Marketing majors replace this course with Marketing 3553 (International Marketing). Consult your academic advisor.
** Actuarial Science and Risk Management majors replace this course with Risk Management \& Insurance 3567
(International Risk Management). Consult your academic advisor.
** This course is waived for students who major in Accounting and Management Information Systems only if a second major or a minor is not completed. Consult your academic advisor.


## Summary of Graduation Requirements

| Credits for B.B.A. Degree | Hours |
| :--- | :---: |
| University General Education | 32 |
| Lower-Division Foundation Requirements | 41 |
| Upper-Division Foundation Requirements | 18 |
| Major Requirements | 18 |
| Electives | 15 |
| Total | $\mathbf{1 2 4}$ |

## Major Requirements

Major requirements are determined by the effective semester of their declaration and students should declare their majors upon the completion of 60 credits in consultation with their academic advisors. Major requirements include both the College Graduation Requirements listed above and the courses required for the major listed in the Programs of Study.

Twenty business courses (59 s.h.) are required as part of the lower- and upper-division foundation requirements for the B.B.A. program. In addition, a minimum of six business courses must be completed in the major. In completing the courses in the major, students will become
competent in understanding critical business concepts and the practice of ethical decisionmaking, and demonstrate both effective written and oral communication and the ability to apply critical thinking to business problems. Students who choose to pursue a dual major in business can double-count a maximum of one course toward both majors. All Fox students must take a minimum of two writing-intensive courses at Temple. One of these courses will be Business Administration 2196; the second will be a writing-intensive course in the major.

NOTE: Many upper-division foundation courses and major courses have prerequisites. Some prerequisites also include minimum grade requirements. Students are required to meet all prerequisites. Prerequisites will be strictly enforced and the school reserves the right to de-enroll students from courses when prerequisites have not been met. Course descriptions, including prerequisites, are found in the Course Catalog in Self-Service Banner, accessed through the TUportal.

## Electives

Free electives: Students who have satisfied all of the requirements for GenEd, the Fox School Foundation, and the major (listed above) will need additional credits to achieve the 124 credit minimum required for graduation. These credits may be taken in either business or non-business courses. Students are encouraged to explore completing a minor, a certificate, or a second major for these credits. Students who choose to pursue a dual major in business can double-count a maximum of one course toward both majors. Students who choose to pursue one or more minors may not double-count courses already used to meet the requirements for a major or different minor.

## Student Contact

Debbie Campbell
Senior Assistant Dean, Undergraduate Programs
Alter Hall 375
215-204-3919
dcampbell@temple.edu
Director, Center for Undergraduate Advising
Speakman Hall 102
215-204-7762
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## Faculty

Please see our faculty directory at www.fox.temple.edu/posts/people-category/cms-faculty/ and our staff directory at www.fox.temple.edu/posts/people-category/staff/.

## All Business Minors \& Certificates

108 Speakman Hall
1810 N. $13^{\text {th }}$ Street
Philadelphia, PA 19122
215-204-7672
www.fox.temple.edu/cms_academics/dept/advising/minors/
Many Temple University undergraduates are currently taking selected business courses to prepare themselves better for their careers after graduation. The Fox School of Business and Management offers a number of minor and certificate programs to facilitate this preparation. Some programs are open to all students in the university; others are restricted to a limited student population. Requirements for a minor or certificate must be completed prior to graduation and minors will be recorded on the student's official university transcript upon graduation. Courses cannot be used to meet minor or certificate requirements if already used to meet the requirements for a major or a different minor or certificate. Please visit our minor and certificate web site at www.fox.temple.edu/cms_academics/dept/advising/minors/ for further information.

## Minors

## The Business Minor

- Open to non-business students only.
- Quantitatively oriented - provides a good foundation for non-business students to facilitate the transition into an M.B.A. program.
o Completion of Math 1022, Statistics 1001, or calculus with a minimum grade of C- is a prerequisite for some courses in this minor.
- Eight courses (five of these must be taken at Temple University):
o Economics 1101, Economics 1102, Human Resource Management 1101, Accounting 2101, Accounting 2102, Marketing 2101, Risk Management \& Insurance 2101, Statistics 2101 or 2103 . One of the following courses can be
substituted for Statistics 2101/2103 if required for the student's program: Civil Engineering 3048, Psychology 1167 or 2168, Sociology 1167 or 3201.
- A grade point average of 2.0 in courses in the minor is required as well as a minimum grade of C - in each course.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- Visit the Fox School web site at www.fox.temple.edu/cms_academics/dept/advising/minors/ to declare or rescind this minor.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

## General Business Studies Minor

- Open to non-business students only.
- Less quantitative - provides a good foundation of business skills with the flexibility to explore selected areas of interest in business.
- Eight courses required (five of these must be taken at Temple University):
o Five courses required for foundation: Economics 1101, Human Resource Management 1101, Accounting 2101, Marketing 2101, Risk Management 2501;
o Three electives chosen from approved list: Accounting 2102 or 2902, Accounting 3511 or 3911; Business Administration 3102; Economics 1102 or 1902, Economics 3501, 3502, 3503, 3504, 3506 or 3596, 3507 or 3597, 3511, 3512, 3513, 3521, 3522, 3531, 3532, 3535, 3536, 3537, 3538, 3539, 3541, 3542, 3543, $3544,3545,3546,3547,3548,3563,3564,3571,3580,3582,3598,3682$, 3900; Healthcare Management 3501, 3502, 4596; Human Resource Management 2501, 2511, 3501, 3502, 3503, 3504, 3505, 3531, 3580; International Business Administration 2501, 2502, 2503; Legal Studies 0856 or 0956 if taken prior to fall 2010 (this course will not apply to both minor and GenEd requirement), 1101, 1102, 3502, 3503, 3504, 3509, 3511, 3512, or 3580; Management Information Systems 2101, 2501, 2502, 3536, 3537, 3538; Marketing 2511, 3501, 3503, 3504, 3505, 3508, 3580; Real Estate 3501, 3502; Risk Management \& Insurance 2101 or 2901; Statistics 2101 or 2901 or Statistics 2103 or 2903, 2521, 2522, 2523; Strategic Management 2501, 2502, 3501, 3511.
- A grade point average of 2.0 in courses in the minor is required.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- Visit the Fox School web site at www.fox.temple.edu/cms_academics/dept/advising/minors/ to declare or rescind this minor.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

## The Accounting Minor

- Open to business or non-business students.
- Understand basic business foundations, financial statements, and the accountant's role in the management of a company.
- Eight courses are prerequisites for the minor: Economics 1101, Economics 1102, Human Resource Management 1101, Accounting 2101, Accounting 2102 or 2521, Marketing 2101, Risk Management \& Insurance 2101, Statistics 2101 or 2103. One of the following courses can be substituted for Statistics 2101/2103 if required for the student's program: Civil Engineering 3048, Psychology 1167 or 2168, Sociology 1167 or 3201.
o Minimum grades of C- are required and are not calculated in the minor GPA.
- Four departmental courses are required (three of these must be taken at Temple University): Accounting 3511, 3512, plus two additional courses in accounting. Accounting 3531 and 3596 are recommended electives. If Accounting 2521 is taken instead of Accounting 2102 for the foundation, it cannot also be used as one of the required accounting electives.
o Minimum grades of C are required in accounting courses unless otherwise specified
- A grade point average of 2.0 in courses in the minor is required.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- Visit the Fox School web site at www.fox.temple.edu/cms_academics/dept/advising/minors/ to declare or rescind this minor.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

## The Business Analytics Minor

- Open to high-performing business students with a minimum GPA of 3.0
- Understand how to unlock the value buried in corporate data and create new business opportunities using cutting-edge tools and techniques in predictive modeling, forecasting, association mining, cluster analysis, decision trees, unstructured "big" data, sentiment analysis, and experimental design.
- Completion of Marketing 2101, MIS 2101, and Statistics 2103 with minimum grades of C are prerequisites to this minor.
- Five courses are required (three must be taken at Temple University.) Recommended sequence is listed below:
o MIS 2502* and Statistics 2521
o MIS 3505 and Statistics 2523
o Marketing 3508
- *MIS majors will substitute a course chosen from: MIS 3501, MIS 3536, MIS 3538, MIS 3581, Marketing 3502, Marketing 3504, Marketing 3509, Marketing 3511, Statistics 2512, or Statistics 2522.
- A grade point average of 2.0 in the minor is required as well as a minimum grade of C - in each course. A minimum grade of C is required in MIS 2502.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- Please visit the department web site at www.fox.temple.edu/cms_academics/dept/statistics/program/business-analytics-minor/ for more information.
- Visit the Fox School web site at www.fox.temple.edu/cms_academics/dept/advising/minors/ to declare or rescind this minor.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

## The Corporate Social Responsibility Minor

- Open to business or non-business students.
- Understand how to incorporate economics, the environment, and social responsibility into corporate decision-making. A placement with a community organization practicing sustainability is required as part of Business Administration 3531.
- Six courses required (five must be taken at Temple University):
o Three courses required for the foundation:
- Human Resource Management 2511 (spring only; must be completed prior to BA 3531.)
- Legal Studies 3511 (fall only; must be completed prior to BA 3531.)
- Business Administration 3531 (summer only. Students must contact Debbie Campbell (davery@temple.edu) in spring for permission. This course includes both field study and an academic component.)
o Choose three electives from: Business Administration 3102 (non-business students only), Economics 3596, Human Resource Management 3505, Marketing 2511 (summer only), Strategic Management 3511, Community \& Regional Planning 0807, Environmental Engineering Technology 0845 (or 0945), Geography \& Urban Studies 0842, or Landscape Architecture 0841.
- A cumulative grade point average of 2.0 in courses in the minor is required as well as a minimum grade of C - in each course.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- Visit the Fox School web site at www.fox.temple.edu/cms_academics/dept/advising/minors/ to declare or rescind this minor.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

## The Digital Marketing Minor

- Open to business students.
- Integrates marketing with digital technology and analytics and prepares students for new and emerging jobs related to analytics, blogging, search engine optimization, e-detailing, site design, Internet research, digital demographics, personalization, customer relationship management, information architecture, social media, e-commerce, and media design.
- Appropriate for all business students, but particularly relevant for students majoring in Marketing, Human Resource Management, Business Management, and MIS.
- Quantitative, critical thinking, and problem-solving skills required for success in this minor; a cumulative GPA of 3.0 is recommended.
- Completion of MIS 2101 or 2901 and Marketing 2101 with minimum grades of "C" and Marketing 3596 with a minimum grade of "C-" are prerequisites to this minor.
- Five courses required (four must be taken at Temple University): MIS 2501, 2502, 3538, Marketing 3507 and 3508.
o A supervised corporate internship is optional. Students approved for this option will register for MIS 3581 as a sixth course.
- Courses taken for this minor cannot be double-counted toward the major or another minor.
o MIS majors will complete MIS 3538, Marketing 3596, 3507, 3508 and one elective from: BTMM 1021, BTMM 1701, BTMM 1655, BTMM 2741, FMA 1171, FMA 1451, FMA 2452, JRN 1113, JRN 1114, JRN 3601, Graphic Arts \& Design (GAD) 2071, GAD 2073, GAD 2075, MKTG 3502, MKTG 3504, MKTG 3505, MKTG 3511, MIS 3501, MIS 3504, MIS 3536, MIS 3581, or Strategic Management 3501.
o Marketing majors will complete electives for the major other than Marketing 3507 and 3508 since these courses will not double-count for the major and minor.
- A cumulative grade point average of 2.0 in courses in the minor is required as well as a minimum grade of C - in each course unless otherwise specified.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- All interested students must meet with Dr. Michael Smith to declare or rescind this minor: msmith@temple.edu

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

## The Economics Minor

- Open to business students. Non-business students interested in an Economics minor should contact the College of Liberal Arts.
- Understand basic business foundations and learn how the impact of economics affects public and personal issues.
- Four departmental courses are required (three must be completed at Temple University): Economics 3501 or 3502, plus three* additional courses in economics chosen from the following list: 3503, 3504, 3506 or 3596, 3507 or 3597, 3511, 3512, 3513, 3521, 3522, 3531, 3532, 3535, 3536, 3537, 3538, 3539, 3541, 3542, 3543, 3544, 3545, 3546, 3547, 3548, 3563, 3564, 3571, 3580, 3582, 3598, 3682, 3900
o *If both Economics 3501 and 3502 are taken, one counts as one of these electives.
o *Business students who complete a required 3000 level economics elective as part of their BBA requirements may count this as one of the 3 electives. (This applies to freshmen admitted prior to fall 2008 and transfer students admitted prior to spring 2010.)
- A grade point average of 2.0 in courses in the minor is required as well as a minimum grade of C - in each course unless otherwise specified.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- Visit the Fox School web site at www.fox.temple.edu/cms_academics/dept/advising/minors/ to declare or rescind this minor.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

## The Entertainment Law and Business Minor

- Open only to business students
- Provide students with the appropriate knowledge and skills to progress into management careers within the entertainment sector.
- All students in the Fox School are required to take a Legal Studies course as part of their lower division Fox School foundation. In addition to the required introductory law course: Legal Studies 1101 or 1901 or 0856 or 0956 (see DARS), four courses are required:
o Legal Studies 1102, 3502, 3504, and 3509
- Three of the four courses required for the minor must be taken at Temple University. Residency excludes the required Legal Studies course that fills the lower division foundation requirement.
- A grade point average of 2.0 in courses in the minor is required as well as a minimum grade of C - in each course unless otherwise specified.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- Visit the Fox School web site at www.fox.temple.edu/cms_academics/dept/advising/minors/ to declare or rescind this minor.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

## The Entrepreneurship Minor

- Open to business or non-business students.
- Provides the basic business foundation to manage a successful entrepreneurial enterprise.
- Eight courses are prerequisites for the minor*: Economics 1101, Economics 1102, Human Resource Management 1101, Accounting 2101, Accounting 2102 or 2521, Marketing 2101, Risk Management \& Insurance 2101, Statistics 2101 or 2103. One of the following courses can be substituted for Statistics 2101/2103 if required for the student's program: Civil Engineering 3048, Psychology 1167 or 2168, Sociology 1167 or 3201.
o Minimum grades of C- are required and are not calculated in the minor GPA.
o *Eight course alternate prerequisites for the minor: Accounting 2101, Economics 1101, Human Resource Management 1101, Marketing 2101, Risk Management 2501 and three electives chosen from the menu of the General Business Studies minor (see above), not including the Strategic Management courses listed below for the minor. Minimum grades of C - are required and are not calculated in the minor GPA.
- Three departmental courses are required (two must be taken at Temple University): Strategic Management 3501, 3685 or 3503, 4596.
- A grade point average of 2.0 as well as a minimum grade of $C$ - in each course is required unless otherwise specified.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- Visit the Fox School web site at www.fox.temple.edu/cms_academics/dept/advising/minors/ to declare or rescind this minor.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

## The Finance Minor

- Open to business or non-business students.
- Provides in-depth understanding of financial principles and their application to financial issues faced by decision-makers in corporate, financial, and government sectors of the global economy.
- Students majoring in accounting, marketing, risk management, and real estate will enhance their marketable skills with this minor.
- Prerequisite courses required for non-business students: Accounting 2101, Accounting 2102 or 2521, Economics 1101, Economics 1102, Finance 3101, Statistics 1001, Statistics 1102, Statistics 2101 or 2103. One of the following courses can be substituted for Statistics 2101/2103 if required for student's program: Civil Engineering 3048, Psychology 1167 or 2168 , Sociology 1167 or 3201.
o Minimum grades of C- are required except for Finance 3101 that requires a minimum grade of C . These grades are not calculated in the minor GPA.
- Four departmental courses required (three of these must be taken at Temple University):
o Finance 3504 and 3507
o Two electives chosen from: Finance 3505, Finance 3509, Finance 3510, Finance 3512, Finance 3513, Finance 3551, or Finance 3571
- Minimum grades of C are required for the departmental courses.
- A grade point average of 2.0 in the minor is required.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- Visit the Fox School web site at www.fox.temple.edu/cms_academics/dept/advising/minors/ to declare or rescind this minor.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

## The Healthcare Management Minor

- Open to business or non-business students.
- Develop value-added skills for students who aim to understand the structure, policy, finance and strategy/operations issues of healthcare organizations.
- Three courses required (all three courses must be taken at Temple University):
o Healthcare Management 3501 - fall/spring
o Healthcare Management 3502 - spring only; completion of HCM 3501 with a minimum grade of C is required
o Healthcare Management 4596 - fall only; completion of both HCM 3501 \& 3502 with minimum grades of C are required
- Courses must be taken in sequence, not concurrently, so a minimum of three semesters is required to complete this minor.
- Economics 3507 is recommended but not required as an additional course.
- A grade point average of 2.0 in courses in the minor is required as well as a minimum grade of C in each course unless otherwise specified.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- Visit the Fox School web site at www.fox.temple.edu/cms_academics/dept/advising/minors/ to declare or rescind this minor. Contact hcm.minor@temple.edu for further information or assistance.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

## The Human Resource Minor for Legal Studies

- Open only to Legal Studies majors
- Provide Legal Studies majors who understand the legal aspects of business decisions with the additional understanding of management and human relations elements.
- Four courses required (three of these must be taken at Temple University):
o Human Resource Management 2501, 3501, 3512, 3513
- A grade point average of 2.0 in courses in the minor is required as well as a minimum grade of C - in each course unless otherwise specified.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- Visit the Fox School web site at www.fox.temple.edu/cms_academics/dept/advising/minors/ to declare or rescind this minor.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

## Information Technology Innovation \& Entrepreneurship Minor

- Open only to business students who have completed MIS 2101.
- Integrate two of the most important elements of the Fox School: the enabling role of IT and the drive of entrepreneurial thinking.
- Four courses required (all four must be taken at Temple University):
o Strategic Management 3501
o Management Information Systems 3536
o Two electives from: MIS 3504, MIS 2502, 3581, SGM 3503, or Marketing 3505 (Entrepreneurial Marketing). BTMM 4614 (Creating a Media Business) can be substituted for Marketing 3505.
- Fox school majors cannot double count courses they have already completed for their major or a different minor.
- Entrepreneurship majors can take the ITIE minor but they cannot double count courses already taken for their major or a different minor. A different course will need to be substituted for the required SGM 3501 for the minor. Students are encouraged to find a relevant course appropriate to their interest. This substitution will need to be approved in advance by the department and Senior Assistant Dean for Undergraduate Programs
- MIS majors can take the ITIE minor but they cannot double count courses already taken for their major. They are encouraged to take the non-MIS courses for the electives.
o A grade point average of 2.0 in courses in the minor is required as well as a minimum grade of C in each course unless otherwise specified.
o Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
o Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
o Visit the MIS departmental web site at http://community.mis.temple.edu/programs/minor-in-itie/ for more information and to declare or rescind this minor.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

## The Legal Studies Minor

- Open only to business students
- Provides students considering Law School with the training to read case law and statutes, do legal research, and make legal arguments. Those not interested in a legal career become versed in the legal implications of business and personal decisions faced daily as a manager, entrepreneur or consumer.
- All students in the Fox School are required to take a Legal Studies course as part of their lower division Fox School foundation (Legal Studies 1101 or 1901 or 0856 or 0956 - see DARS). Four additional courses are required:
o Legal Studies 1102 and 3562
o Two electives chosen from: Legal Studies 3502, 3503, 3504, 3505, 3506, 3507, 3508, 3509, 3511, 3512, or Real Estate 3502
- Three of the four courses required for the minor must be taken at Temple University. Residency excludes the required Legal Studies course that fills the lower division foundation requirement.
- A grade point average of 2.0 in courses in the minor is required as well as a minimum grade of C - in each course unless otherwise specified.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- Visit the Fox School web site at www.fox.temple.edu/cms_academics/dept/advising/minors/ to declare or rescind this minor.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

## The Legal Studies Minor for Human Resource Managers

- Open only to Human Resource Management majors
- Prepare students for the legal issues that human resource professionals regularly address in the workplace.
- All students in the Fox School are required to take a Legal Studies course as part of their lower division Fox School foundation (Legal Studies 1101 or 1901 or 0856 or 0956 - see DARS). Four additional courses are required:
o Legal Studies 1102, 3503, 3505
o One elective chosen from Legal Studies 3000 level or Legal Studies 0856.
- Recommended electives include Legal Studies 0856, 3506, 3511, 3512 or 3562
- Three of the four courses required for the minor must be taken at Temple University. Residency excludes the required Legal Studies course that fills the lower division foundation requirement.
- A grade point average of 2.0 in courses in the minor is required as well as a minimum grade of C - in each course unless otherwise specified.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- Visit the Fox School web site at www.fox.temple.edu/cms_academics/dept/advising/minors/ to declare or rescind this minor.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

## The Management Information Systems (MIS) Minor

- Open to business or non-business students.
- Learn to identify, select and evaluate technology solutions for business problems, become a knowledgeable user of IT and become the person in the organization who can successfully interact with technology professionals.
- Nine courses are prerequisites for the minor*: Economics 1101, Economics 1102, Human Resource Management 1101, Accounting 2101, Accounting 2102 or 2521, MIS 2101, Marketing 2101, Risk Management \& Insurance 2101, Statistics 2101 or 2103. One of the following courses can be substituted for Statistics 2101/2103 if required for the student's program: Civil Engineering 3048, Psychology 1167 or 2168, Sociology 1167 or 3201.
o Minimum grades of C- are required and are not calculated in the minor GPA.
o *Nine course alternate prerequisites for the minor: Accounting 2101, Economics 1101, Human Resource Management 1101, MIS 2101, Marketing 2101, Risk Management 2501 and three electives chosen from the menu of the General Business Studies minor (see above), not including the MIS courses listed below for the minor. Minimum grades of C - are required and are not calculated in the minor GPA.
- Three departmental courses are required: MIS 2502 and 3504; Select one from: 2501, 3533, 3534, 3536, 3537, 3538, 3580, 3581.
- Note for all students admitted prior to fall 2008 and transfer students admitted prior to fall 2010, MIS 3504 is replaced by MIS 2101.
- A grade point average of 2.0 in courses in the minor is required as well as a minimum grade of C - in each course unless otherwise specified.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- Visit the MIS departmental web site at http://community.mis.temple.edu/programs/misminor/ for more information and to declare or rescind this minor.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

## The Marketing Minor

- Open only to business students.
- Explore a firm's value creation, customer acquisition, and development and retention processes, expanding career options especially for students with majors in Business Management, Entrepreneurship, Finance, Human Resources, International Business, Management Information Systems, and Real Estate.
- Four courses required beyond Marketing 2101 (all except 2101 must be taken at Temple University):
o Marketing 3511 and 3596; Select two from: 2511, 3501, 3502*, 3503, 3504, 3505, 3506*, 3507*, 3508*, 3509*, 3553, 3580.
- Courses marked with the * have a prerequisite of Marketing 3511 and are most appropriate for students who like to be challenged with quantitative methods and applications.
- Marketing courses taken toward the major requirements (including majors in Entrepreneurship and International Business) cannot be applied to the minor.
- A grade point average of 2.0 in the minor is required as well as a minimum grade of C in each course (including Marketing 2101).
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- Visit the Marketing department web site at www.fox.temple.edu/cms_academics/dept/marketing_and_supply_chain_management/pr ograms/undergraduate-academics/concentrations-in-marketing/ for more information on this minor.
- Visit the Fox School web site at www.fox.temple.edu/cms_academics/dept/advising/minors/ to declare or rescind this minor.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

## The Statistics Minor

- Open to business or non-business students.
- Become proficient in the ability to select, utilize, and apply quantitative and data analysis to your major field of study. Skilled users of data enhance their career opportunities.
- Marketing, HR, Finance, MIS, and Actuarial Science majors will benefit as well as students in all undergraduate business majors.
- Completion of Statistics 2103 is a prerequisite for the courses in the minor. (Please note that calculus is a prerequisite for Statistics 2103. Additional courses may be required to meet the calculus prerequisite.) One of the following courses can be substituted for Statistics 2103 if required for the student's program: Civil Engineering 3048, Psychology 1167 or 2168, Sociology 1167 or 3201. A minimum grade of C is required for this prerequisite.
- Four courses required (three of these must be completed at Temple University.) Choose from:
- Statistics 0827
- Statistics 2512
- Statistics 2521
- Statistics 2522
- Statistics 2523
- Statistics 3503
- A grade point average of 2.0 in the minor is required as well as a minimum grade of C- in each course.
- Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the minor must be completed prior to graduation; if completed, the minor will be recorded on the final transcript upon graduation.
- Visit the Fox School web site at www.fox.temple.edu/cms_academics/dept/advising/minors/ to declare or rescind this minor.

Interested students should discuss with their home college advisors how the courses in the minor will fit into their overall degree plan and are strongly encouraged to declare the minor early in their academic career.

## Certificates

## Business Basics Certificate

- Open only to non-matriculated students.
- Explore foundation courses that will apply toward B.B.A. if matriculate into this degree program.
- Five courses required (three of these must be taken at Temple University):
o Legal Studies 1101, English 0802, Human Resource Management 1101, Accounting 2101, Statistics 1001.
o Prior to enrolling in English and statistics, students must take a placement test and complete additional English or math review courses if need is indicated by placement test results.
- A minimum grade of $C$ in each course is required.
- The certificate will be awarded upon satisfactory completion of all required courses.


## Business Plus Certificate

- Open only to non-matriculated students.
- Explore foundation courses that will apply toward B.B.A. if matriculate into this degree program.
- Five courses required (three of these must be taken at Temple University):
o Economics 1101, Economics 1102, Marketing 2101, Accounting 2102, Risk Management \& Insurance 2101.
- A minimum grade of $C$ in each course is required.
- The certificate will be awarded upon satisfactory completion of all required courses.


## Certificate in Entrepreneurship

- Open only to students enrolled in the College of Engineering, the School of Media and Communication, or the College of Science and Technology.
- Designed to provide coursework to support alternative, entrepreneurial career paths for students across the university; to promote the entrepreneurial spirit by fostering opportunity recognition and resource acquisition that leads to innovation and invention; and to increase awareness of, and participation in, entrepreneurial opportunities available to all Temple students. This certificate will be jointly issued by the Fox School of Business and Management and its partner schools, and will appear on the student's transcript.
- Students must complete the following three-course sequence in the following order within five semesters of completing the first course:
o The appropriate "Entrepreneurial Thinking" or "Entrepreneurship" course for their specific subject:
- Engineering: Engineering 3033: Entrepreneurial Engineering
- Media \& Communication: Broadcasting, Telecommunications \& Mass Media 4614: Creating a Media Business
- Science \& Technology: College of Science \& Technology 4321: Entrepreneurial Thinking
o Strategic Management 3001: Fundamentals of Managing a Small Business (offered fall semester only)
o Strategic Management 3002: Business Plan Development (offered spring semester only)
- Courses cannot be used to meet certificate requirements if already used to meet the requirements for a major or a different minor or certificate.

Interested students should discuss with their home college advisors how the courses in the certificate will fit into their overall degree plan and are strongly encouraged to declare the certificate early in their academic career.

## Certificate in Leadership

- Open only to business students
- Develop enhanced skills needed for effective leadership: organizational communication, conflict management, and team building. Expertise and perspective developed through these courses enable graduates to think and act in ways that reflect sophisticated competencies (from interpersonal to technical) that will benefit the interests of multiple organizational stakeholders.
- Four courses required (three of these must be taken at Temple University. Students majoring in Human Resource Management or Business Management may not doublecount courses for both the major and certificate):
o HRM 3501: Power, Influence \& Negotiation
o HRM 3502: Leading People at Work (Honors students, substitute HRM 3902)
o HRM 3503: Communicating in Organizations
o one elective from: HRM 3504: Leadership in the $21^{\text {st }}$ Century OR HRM 3505: Sustainable Organizational Leadership*
- *HRM 3505 can count either toward the Leadership Certificate OR Temple's Sustainability Minor, but not both.
- A grade point average of 2.0 in courses in the certificate is required as well as a minimum grade of C- in each course unless otherwise specified.
- Courses cannot be used to meet certificate requirements if already used to meet the requirements for a major or a different minor or certificate.
- Courses for the certificate must be completed prior to graduation; if completed, the certificate will be recorded on the final transcript upon graduation.
- Visit the Fox School web site at www.fox.temple.edu/cms_academics/dept/advising/minors/ to declare or rescind this certificate.

The People First Certificate is no longer offered to new students. Previously enrolled students pursuing the People First Certificate must complete this certificate and graduate by May 2016, although this certificate does not appear on the final transcript. All students are strongly encouraged to complete the Leadership certificate instead.

Interested students should discuss with their advisors how the courses in the certificate will fit into their overall degree plan and are strongly encouraged to declare the certificate early in their academic career.

## Management Information Systems (MIS) Certificate

- Open to non-business students.
- Learn to identify, select and evaluate technology solutions for business problems, become a knowledgeable user of IT and become the person in the organization who can successfully interact with technology professionals.
- Three courses required (all must be taken at Temple University):
o MIS 2101 (this is a prerequisite for all other courses)
o MIS 2502 (this is a prerequisite for MIS 3504
o One elective from: $2501,3504,3534,3536,3537$
- A grade point average of 2.0 in courses in the certificate is required, including a minimum grade of C in each course.
- Courses cannot be used to meet certificate requirements if already used to meet the requirements for a major or a different minor or certificate.

Interested students should discuss with their home college advisors how the courses in the certificate will fit into their overall degree plan and are strongly encouraged to declare the certificate early in their academic career.

# Accounting 

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www.fox.temple.edu/cms_academics/dept/accounting/
The program provides students with a broad general education and intensive study within the major as preparation for professional careers in public accounting, industry, consulting, government, and not-for-profit institutions.

The curriculum in accounting is designed to acquaint students with the conceptual framework and theory of accounting, transactional analysis, asset management, liabilities, owners' equity, and financial reporting. Cost analysis and control, accounting information systems, taxation, consolidated financial statements, and foreign operations also are covered, along with auditing techniques and an understanding of the ethical and performance standards of the profession.

Accounting majors are encouraged to join a professional student organization: Beta Alpha Psi (BAP--National Honorary Fraternity), the Institute for Management Accountants - Temple Chapter (IMA-T), the National Association of Black Accountants (NABA), or Ascend.

## Students seeking the CPA designation after graduation:

Effective January 1, 2012 the education and experience required to become a licensed CPA in Pennsylvania changed. All candidates seeking the CPA designation after January 1, 2012 must complete 150 hours of college education (undergraduate or graduate courses, or a combination of both), including 36 hours in accounting and auditing, business law, finance or tax subjects acceptable to the Pennsylvania State Board of Accountancy. With this change, Pennsylvania conforms to the national education standard of 150 credit hours and one year of public accounting experience-in addition to the successful completion of the CPA Exam-before the granting of a CPA license.

For additional information regarding the PA CPA exam, please visit the following web sites: www.fox.temple.edu/cms_academics/dept/accounting/cpa-exam/overview/
www.picpa.org/Content/40441.aspx

## Master of Accountancy Program (MAcc) - new cycles begin each fall semester

Students can meet the new Pennsylvania requirements by completing a Bachelor's degree (e.g. the current accounting major in the Fox School's BBA) and the Fox School of Business Master of Accountancy degree (MAcc). Students enrolled in the Fox School's undergraduate accounting program will be eligible to apply for the MAcc after completing 90 semester-hour credits (that is, they can apply for admission to the MAcc at the completion of their junior year). Students can also meet the new requirements by completing 150 undergraduate credit hours.

For more information about the MAcc, please visit: www.fox.temple.edu/cms_academics/specialized-masters-program/concentrations/master-ofaccountancy/

## Summary of Requirements

## University Requirements

All new students starting in academic year 2013-2014 and beyond are required to complete the university's General Education (GenEd) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of reenrollment.

## College Requirements

Students must meet College Graduation Requirements including the requirements of the major listed below. Accounting students must attain a 2.0 GPA in the major and a 2.0 cumulative GPA in order to graduate. Use the major GPA calculator at www.fox.temple.edu/cms_academics/dept/advising/ to calculate the GPA in the major.

## Major Requirements for new students

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

## Suggested Sequence for new students

Requirements of Accounting Major

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Accounting | $2521 \wedge$ | Cost Accounting | 3 |  |
| Accounting | 3511 | Intermediate Accounting I | 3 |  |
| Accounting | 3512 | Intermediate Accounting II | 3 |  |
| Accounting | 3526 | Accounting Information Systems | 3 |  |
| Accounting | 3531 | Federal Taxes on Income | 3 |  |
| Accounting | 3533 | Advanced Accounting | 3 |  |
| Accounting | 3596 | Auditing | 3 | WI |
| Accounting | $4501 \wedge \wedge$ <br> or <br> (502^^ | Accounting Senior Seminar <br> or <br> Senior Seminar - Management Accounting | 3 |  |
| Subtotal |  |  | $\mathbf{2 4}$ |  |
|  |  |  |  |  |

A Accounting 2521 (Cost Accounting) replaces Accounting 2102 in the lower division foundation. This course is not calculated in the major GPA.
$\wedge \wedge$ One of the two major capstone courses is taken in the final semester, and all prerequisites must be met.

NOTE: All accounting majors are waived from the college requirement of International Business Administration 3101 unless they add a second major or a minor. Please see an academic advisor to review this waiver further.
Accounting majors should consider taking Legal Studies 3507 (Business Law for Accountants) as an elective to meet the course subject requirements for the CPA exam.

## Suggested Sequence of Accounting Major

Please note that this sequence is suggested only, ensuring prerequisites are met. Students' academic sequences may differ based on individual academic plans.

| Semester I - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 1001 | Pre-Calculus for Business | 3 |  |
| Economics | 1101 | Macroeconomic Principles | 3 |  |
| Human Resource Management | 1101 | Leadership \& Organizational Management | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester II - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 1102 | Calculus for Business | 3 |  |
| Economics | 1102 | Microeconomic Principles | 3 |  |
| Legal Studies | 1101 | Legal Environment of Business | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester III - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 2103 | Business Statistics <br> \{waives GenEd GQ requirement \} | 4 |  |
| Accounting | 2101 | Financial Accounting | 3 |  |
| Management Information Systems | 2101 | Information Systems in Organizations | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester IV - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Marketing | 2101 | Marketing Management | 3 |  |
| Business Administration | 2101 | Professional Development Strategies | 1 |  |
| Business Administration | 2196 | Business Communications | 3 | WI |
| Accounting | 2521 | Cost Accounting | 3 |  |
| Accounting | 3511 | Intermediate Accounting I | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |


| Semester V - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Risk Management \& Insurance | 2101 | Introduction to Risk Management | 3 |  |
| Finance | 3101 | Financial Management | 3 |  |
| Management Science/Operations <br> Management | 3101 | Operations Management | 3 |  |
| Business Administration | 3102 | Business Society \& Ethics | 3 |  |
| Accounting | 3526 | Accounting Information Systems | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester VI - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 3103 | Integrative Business Applications | 3 |  |
| Accounting | 3512 | Intermediate Accounting II | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Free Elective |  |  | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester VII - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 4101 | Global Business Policies | 3 |  |
| Accounting | 3531 | Federal Taxes on Income | 3 |  |
| Accounting | 3596 | Auditing | 3 | WI |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Free Elective |  |  | 4 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester VIII - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Accounting | $\begin{gathered} 4501 \\ \text { or } \\ 4502 \end{gathered}$ | ```Accounting Senior Seminar or Senior Seminar - Management Accounting``` | 3 |  |
| Accounting | 3533 | Advanced Accounting | 3 |  |
| Free Elective |  |  | 3 |  |
| Free Elective |  |  | 3 |  |
| Free Elective |  |  | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Total credits for the B.B.A. in Accounting: |  |  | 124 |  |

## Online BBA Program

The Accounting major is available as an online BBA degree completion program designed for new students ready to start their junior year in a business curriculum. Please visit the Online BBA web site (www.fox.temple.edu/cms_academics/undergraduate-2/online-bba/) for program and admission information.

## Accelerated 3 Year BBA

Motivated students can accelerate their BBA program to finish in 3 years. Please see the suggested sequence at www.fox.temple.edu/web_dev/accel_docs/3yearBBAinAccountingfinal.pdf.

## Minor

Students in any college who wish to understand basic business foundations, financial statements, and the accountant's role in the management of a company can pursue a minor in accounting. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor. Requirements (www.temple.edu/bulletin/Academic_programs/schools_colleges/fox/programs/business_minor/f ox_business_minor.shtm\#accounting) for the minor must be completed prior to graduation.

## Actuarial Science

## Department of Risk, Insurance \& Healthcare Management

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Located in the Department of Risk, Insurance, and Healthcare Management, Temple's Actuarial Science program provides students the opportunity to develop a strong foundation in mathematics and statistics while being exposed to a wide range of business disciplines.

Actuaries specialize in the evaluation of insurance and financial risks. They hold positions of responsibility with insurance companies, consulting firms, investment banks, government regulatory organizations, and government insurance programs. Actuaries must also pass a series of professional exams, administered by the Society of Actuaries and Casualty Actuarial Society, to receive the credential of Associate or Fellow. These professional exams are both quantitative and qualitative, demanding that the actuary demonstrate expertise in a variety of mathematical and business analytic applications. Coursework in Temple's Actuarial Science program help prepare students for several actuarial exams. Courses in our curriculum are also approved by the Society of Actuaries and Casualty Actuarial Society as satisfying VEE (Validation by Educational Experience) requirements.

Students should meet with the Program Director as soon as they enter the Actuarial Science program. In addition to their coursework and professional examinations, students are strongly encouraged to become active in the Sigma chapter of Gamma Iota Sigma, Temple's national
award-winning professional student organization in Risk Management, Insurance, and Actuarial Science. The organization hosts numerous guest speakers from the industry, sponsors a variety of career development seminars, and maintains a widely-distributed résumé book. For more information, please contact the GIS President, at 215-204-9368, or visit the web site at www.sigmachapter.org.

## Summary of Requirements

## University Requirements

All new students starting in academic year 2013-2014 and beyond are required to complete the university's General Education (GenEd) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of reenrollment.

## College Requirements

Students are strongly encouraged to take the professional actuarial exams immediately after completing the relevant coursework. Students must meet the College Graduation Requirements including the requirements of the major listed below. Students must attain a 2.0 cumulative GPA and 2.0 in the major to graduate with the actuarial science major. Use the major GPA calculator at www.fox.temple.edu/cms_academics/dept/advising/ to calculate the GPA in the major.

## Major Requirements for new students

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

## Suggested Sequence for new students

## Requirements of Actuarial Science Major

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Actuarial Science | 1501 | Introduction to Actuarial Science | 3 |  |
| Actuarial Science | 2502 | Theory of Interest | 3 |  |
| Actuarial Science | $2503^{*}$ | Corporate Finance for Actuarial Science | 3 |  |
| Actuarial Science | 3501 | Actuarial Modeling I | 3 |  |
| Actuarial Science | $3502^{* *}$ | Actuarial Modeling II | 3 |  |
| Actuarial Science | 3596 | Casualty Contingencies | 3 | WI |
| Risk Management \& Insurance | $3567 * * *$ | International Risk Management | 3 |  |
| Subtotal |  |  | $\mathbf{1 8}$ |  |

*Actuarial Science 2503 replaces Finance 3101 (Financial Management) in the upper division foundation. This course is not calculated in the major GPA.
**This is the major capstone, and all prerequisites must be met.
***Risk Management \& Insurance 3567 replaces International Business Administration 3101 (Fundamentals of International Business) in the upper division foundation. This course is not calculated in the major GPA.

Non-Business Required Courses

| Subject | Course \# | Course Title | Hours |
| :--- | :--- | :--- | :---: |
| Mathematics | $1041^{*}$ | Calculus I* | 4 |
| Mathematics | $1042^{*}$ | Calculus II* | 4 |
| Mathematics | 2043 | Calculus III | 4 |
| Actuarial Science | $2101^{* *}$ | Actuarial Probability \& Statistics** | 3 |
| Statistics | Intermediate Statistics** | 3 |  |
| Subtotal |  | $\mathbf{1 8}$ |  |

*Mathematics 1041 \& 1042 replace the Statistics 1001 \& 1102 requirements listed in the Fox School of Business \& Management foundation course requirements. Mathematics 1041 also satisfies the Quantitative Literacy (GQ) General Education requirement
**These courses replace Statistics 2103 in the Fox School of Business \& Management foundation course requirements.

## Suggested Sequence of Actuarial Science Major

Please note that this sequence is suggested only, ensuring prerequisites are met. Students' academic sequences may differ based on individual academic plans.

| Semester I - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 1041 | Calculus I \{waives GenEd GQ requirement $\}$ | 4 |  |
| Economics | 1101 | Macroeconomic Principles | 3 |  |
| Human Resource Management | 1101 | Leadership \& Organizational Management | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Semester II - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 1042 | Calculus II | 4 |  |
| Economics | 1102 | Microeconomic Principles | 3 |  |
| Legal Studies | 1101 | Legal Environment of Business | 3 |  |
| Actuarial Science | 1501 | Introduction to Actuarial Science | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester III - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 2043 | Calculus III | 4 |  |
| Accounting | 2101 | Financial Accounting | 3 |  |
| Risk Management \& Insurance | 2101 | Introduction to Risk Management | 3 |  |
| Actuarial Science | 2502 | Theory of Interest | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Subtotal |  |  | 16 |  |


| Semester IV - Spring |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Accounting | 2102 | Managerial Accounting | 3 |  |
| Management Information Systems | 2101 | Information Systems in Organizations | 3 |  |
| Business Administration | 2101 | Professional Development Strategies | 1 |  |
| Business Administration | 2196 | Business Communications | 3 | WI |
| Actuarial Science | 2101 | Actuarial Probability \& Statistics | 3 |  |
| Actuarial Science | 2503 | Corporate Finance for Actuarial Science | 3 |  |
| Subtotal |  |  | 16 |  |
| Semester V - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Marketing | 2101 | Marketing Management | 3 |  |
| Business Administration | 3102 | Business Society \& Ethics | 3 |  |
| Statistics | 2512 | Intermediate Statistics | 3 |  |
| Actuarial Science | 3501 | Actuarial Modeling I | 3 |  |
| Actuarial Science | 3596 | Casualty Contingencies | 3 | WI |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester VI - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Management Science/Operations Management | 3101 | Operations Management | 3 |  |
| Risk Management \& Insurance | 3567 | International Risk Management | 3 |  |
| Actuarial Science | 3502 | Actuarial Modeling II | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Free Elective |  | Free Elective (Actuarial Science 2504: Advanced Theory of Interest is recommended) | 3 |  |
| Subtotal |  |  | 15 |  |
| Semester VII - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 3103 | Integrative Business Applications | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Free Elective |  | Free Elective (Statistics 3503: <br> Intermediate Business Statistics is recommended) | 3 |  |
| Subtotal |  |  | 15 |  |
| Semester VIII - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 4101 | Global Business Policies | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |


| Free Elective |  | Free Elective (Actuarial Science 3503: <br> Actuarial Modeling III is <br> recommended) | 3 |  |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Free Elective |  |  | 2 |  |  |  |  |  |
| Subtotal |  | 14 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Total credits for the B.B.A. in Actuarial Science: |  |  |  |  |  |  | 124 |  |

## Business Management

101 Speakman Hall
1810 N. 13th Street
Philadelphia, PA 19122
215-204-7672
www.fox.temple.edu/cms_academics/dept/business-management/
The business management curriculum is designed for students who wish to follow a broad and general curriculum. Students are encouraged to join a student professional organization that meets their interests and also to pursue a minor or certificate program in addition to their major. Courses taken for the major will not also count for a minor or certificate.

## Summary of Requirements

## University Requirements

All new students starting in academic year 2013-2014 and beyond are required to complete the university's General Education (GenEd) curriculum. Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of re-enrollment.

College Requirements
Students must meet College Graduation Requirements, including the requirements of the major listed below. Business Management students must attain a 2.0 GPA in the major and a 2.0 cumulative GPA in order to graduate. Use the major GPA calculator at www.fox.temple.edu/cms_academics/dept/advising/ to calculate the GPA in the major.

## Major Requirements for new students

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

## Suggested Sequence for new students

## Requirements of Business Management

| Subject | Course \# | Course Title | Hours |
| :--- | :--- | :--- | :--- |


| Human Resource Management | 3501 | Power, Influence, \& Negotiation | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Human Resource Management | 3503 | Communicating in Organizations | 3 |  |
| Human Resource Management | 4597^* | Critical Skills for Effective Managers | 3 | W |
| Select three Major courses: |  |  | 9 |  |
| Economics | 3507 | Health Economics |  |  |
| Economics | 3511 | The Economics \& Management of Privatization |  |  |
| Economics | 3513 | Economics of State \& Local Governments |  |  |
| Economics | 3522 | Economic Theory of Networks |  |  |
| Economics | 3531 | History of Economic Theory |  |  |
| Economics | 3532 | Economic History of the United States |  |  |
| Economics | 3535 | Public Control of Business: Antitrust |  |  |
| Economics | 3536 | Economics of American Industry |  |  |
| Economics | 3537 | Comparative Economic Systems |  |  |
| Economics | 3541 | The Economics of Sports |  |  |
| Economics | 3546 | Women in the Economy |  |  |
| Economics | 3547 | Economics of Development \& Growth |  |  |
| Economics | 3548 | Behavioral Economics |  |  |
| Healthcare Management | 3501 | Introduction to Health Services Systems |  |  |
| Healthcare Management | 3502 | Healthcare Financing \& Information Technology |  |  |
| Human Resource Management | 2501 | Introduction to Human Resource Management |  |  |
| Human Resource Management | 3504 | Leadership in the 21st Century |  |  |
| Human Resource Management | 3505 | Sustainable Organizational Leadership |  |  |
| Legal Studies | 1102 | Law of Contracts |  |  |
| Legal Studies | 3502 | Law for the Entrepreneur |  |  |
| Legal Studies | 3503 | The Consumer \& the Law |  |  |
| Legal Studies | 3504 | Sports \& the Law |  |  |
| Legal Studies | 3505 | Constitutional Law |  |  |
| Legal Studies | 3506 | Law, Technology, \& E-Commerce |  |  |
| Legal Studies | 3508 | The Litigation Process |  |  |
| Legal Studies | 3509 | Entertainment Law |  |  |
| Legal Studies | 3511 | Environmental Law, Sustainability \& Public Policy |  |  |
| Legal Studies | 3512 | Law of Nonprofits |  |  |
| Marketing | 3501 | Integrated Marketing Communications |  |  |
| Marketing | 3503 | Promotion Management |  |  |
| Marketing | 3504 | Sales \& Sales Management |  |  |
| Real Estate | 3501 | Real Estate Fundamentals |  |  |
| Real Estate | 3502 | Real Estate Practice |  |  |
| Strategic Management | 2501 | Fundamentals of Asian Business |  |  |
| Strategic Management | 2502 | Fundamentals of Latin American Business |  |  |
| Strategic Management | 3501 | Entrepreneurial \& Innovative Thinking |  |  |
| Strategic Management | 3502 | Software Applications to Business Problems |  |  |
| Subtotal |  |  | 18 |  |
| 4 This major capstone is taken in the final semester and all prerequisites must be met. |  |  |  |  |
| *Students cannot receive academic credit towards graduation requirements for both Human Resource Management 3502 and Human Resource Management 4597. If a student takes both Human Resource Management 4597 and Human Resource Management 3502, one of the courses will be deducted from the overall credits applicable towards graduation requirements. |  |  |  |  |

## Suggested Sequence of the Business Management Major

Please note that this sequence is suggested only, ensuring prerequisites are met. Students' academic sequences may differ based on individual academic plans.

## Semester I - Fall

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Statistics | 1001 | Pre-Calculus for Business | 3 |  |
| Economics | 1101 | Macroeconomic Principles | 3 |  |
| Human Resource Management | 1101 | Leadership \& Organizational Management | 3 |  |
| English | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | $08 x x$ or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | $\mathbf{1 6}$ |  |

Semester II - Spring

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Statistics | 1102 | Calculus for Business | 3 |  |
| Economics | 1102 | Microeconomic Principles | 3 |  |
| Legal Studies | 1101 | Legal Environment of Business | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | $08 x x$ or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

Semester III - Fall

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Statistics | 2103 | Business Statistics <br> \{waives GenEd GQ requirement \} | 4 |  |
| Accounting | 2101 | Financial Accounting | 3 |  |
| Management Information <br> Systems | 2101 | Information Systems in Organizations | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | $\mathbf{1 6}$ |  |

Semester IV - Spring

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Accounting | 2102 | Managerial Accounting | 3 |  |
| Marketing | 2101 | Marketing Management | 3 |  |
| Business Administration | 2101 | Professional Development Strategies | 1 |  |
| Business Administration | 2196 | Business Communications | 3 | WI |
| Risk Management \& Insurance | 2101 | Introduction to Risk Management | 3 |  |


| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester V - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Finance | 3101 | Financial Management | 3 |  |
| Management Science/ Operations Management | 3101 | Operations Management | 3 |  |
| Business Administration | 3102 | Business Society \& Ethics | 3 |  |
| Human Resource Management | $\begin{aligned} & 3501 \\ & \text { or } \\ & 3503 \end{aligned}$ | Power, Influence, \& Negotiation or <br> Communicating in Organizations | 3 |  |
| Major Course |  | Select one Major course from requirements above | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester VI - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 3103 | Integrative Business Applications | 3 |  |
| International Business Administration | 3101 | Fundamentals of International Business | 3 |  |
| Human Resource Management | $\begin{aligned} & 3501 \\ & \text { or } \\ & 3503 \end{aligned}$ | Power, Influence, \& Negotiation or Communicating in Organizations | 3 |  |
| Major Course |  | Select one Major course from requirements above | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester VII - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 4101 | Global Business Policies | 3 |  |
| Major Course |  | Select one Major course from requirements above | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Free Elective |  |  | 4 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester VIII - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Human Resource Management | 4597 | Critical Skills for Effective Managers | 3 | WI |


| Free Elective |  |  | 3 |  |
| :--- | :--- | :--- | :---: | :---: |
| Free Elective |  |  | 3 |  |
| Free Elective |  |  | 3 |  |
| Free Elective |  |  | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Total credits for the B.B.A. in Business Management: | 124 |  |  |  |

## Online BBA Program

The Business Management major is available as an online BBA degree completion program designed for new students ready to start their junior year in a business curriculum. Please see our web site at www.fox.temple.edu/cms_academics/undergraduate-2/online-bba/ for program and admission information.

## Accelerated 3 Year BBA

Motivated students can accelerate their BBA program to finish in 3 years. Please see the suggested sequence at www.fox.temple.edu/web_dev/accel_docs/Fox3yearBBAinBusinessManagement.pdf.

## 4+1 Master of Education Degree (M.Ed.)

The 4+1 Master of Education (M.Ed.) program is designed for students who are interested in pursuing a Master of Education while completing the Bachelor of Business Administration (B.B.A.) in Business Management program requirements. After completion of the programs, students earn a B.B.A. degree and an M.Ed. in Business, Computers \& Information Technology Education (BCITE) or Marketing Education (ME), and a Commonwealth of Pennsylvania Instructional I Teaching Certificate in BCITE or ME. There is an application process. The deadline to apply is June 15th for the fall admittance. For more information please contact Dr. D. James Gilmour.

Dr. D. James Gilmour, Program Advisor
Ritter Hall 348
215-204-6197
jgilmour@temple.edu

## Economics

Dr. Michael Bognanno, Chair
Dr. William Holmes, Advisor
Office: Ritter Annex 804

Economics is the study of how we allocate resources among alternative uses to satisfy our wants. Virtually all of the public and personal issues which confront us today have an important economic component. For this reason, the economic way of thinking plays a valuable role in helping us make sense of the complex world in which we live. In addition, the study of economics is excellent preparation for a wide range of careers. Economics majors with bachelor's degrees are well prepared to be managers in both the public and private sectors. Training in economics also provides a solid basis for professional study in law, business, public administration, and the health sciences.

The Temple Economics Society is the student professional organization for economics majors and is open to all students interested in economics. Economics majors may also become members of Omicron Delta Epsilon (ODE), the National Honor Society, if they meet the admissions requirements of the organization. For more information, please contact Dr. William Holmes at wholmes@temple.edu or phone 215-204-8175.

## Summary of Requirements

## University Requirements

All new students starting in academic year 2013-2014 and beyond are required to complete the university's General Education (GenEd) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of reenrollment.

## College Requirements

In addition to completing the economics courses required of all students in the Fox School of Business and Management, majors in economics must fulfill the additional requirements listed below as well as meet College Graduation Requirements. Students must attain at least a 2.0 GPA in their major and 2.0 GPA overall in order to graduate. Use the major GPA calculator at www.fox.temple.edu/cms_academics/dept/advising/ to calculate the GPA in the major.

## Major Requirements for new students

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

## Suggested Sequence for new students

## Requirements of Economics Major

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Economics | 3501 | Intermediate Microeconomic Analysis | 3 |  |
| Economics | 3502 | Intermediate Macroeconomic Analysis | 3 |  |
| Economics | 3598^ | Economics Writing Seminar | 3 | WI |
|  |  |  |  |  |
| Select one: |  |  | 3 |  |
| Economics | 3563^^ | International Trade |  |  |
| Economics | 3564^^ | International Monetary Economics |  |  |
|  |  |  |  |  |
| Select three | onomics el | ctives from the following: | 9 |  |
| Economics | 3503 | Introduction to Econometrics |  |  |
| Economics | 3504 | Mathematical Economics |  |  |
| Economics | 3506 | Energy, Ecology, and Economy (no credit if Economics 3596 is taken) |  |  |
| Economics | 3507 | Health Economics (no credit if Economics 3597 is taken) |  |  |
| Economics | 3511 | The Economics \& Management of Privatization |  |  |
| Economics | 3512 | Public Finance |  |  |
| Economics | 3513 | Economics of State \& Local Governments |  |  |
| Economics | 3521 | Economics of Risk \& Uncertainty |  |  |
| Economics | 3522 | Economic Theory of Networks |  |  |
| Economics | 3531 | History of Economic Theory |  |  |
| Economics | 3532 | Economic History of the United States |  |  |
| Economics | 3535 | Public Control of Business: Antitrust |  |  |
| Economics | 3536 | Economics of American Industry |  |  |
| Economics | 3537 | Comparative Economic Systems |  |  |
| Economics | 3538 | Managerial Economics |  |  |
| Economics | 3539 | Economics of Socialist Countries |  |  |
| Economics | 3541 | The Economics of Sports |  |  |
| Economics | 3542 | Economics of the Arts and Culture |  |  |
| Economics | 3543 | Law and Economics |  |  |
| Economics | 3544 | Computer-Based Modeling |  |  |
| Economics | 3545 | Economics of Labor Markets |  |  |
| Economics | 3546 | Women in the Economy |  |  |
| Economics | 3547 | Economics of Development \& Growth |  |  |
| Economics | 3548 | Behavioral Economics (no credit if Economics 3696 is taken) |  |  |
| Economics | 3563 | International Trade <br> (if not taken to meet requirement above) |  |  |
| Economics | 3564 | International Monetary Economics (if not taken to meet requirement above) |  |  |
| Economics | 3571 | Money and Banking |  |  |
| Economics | 3580 | Special Topics |  |  |
| Economics | 3582 | Independent Study |  |  |
| Economics | 3596 | Energy, Ecology, and Economy (no credit if Economics 3506 is taken) |  | WI |
| Economics | 3597 | Health Economics (no credit if Economics 3507 is taken) |  | WI |
| Economics | 3682 | Independent Study |  |  |


| Economics | 3900 | Honors Topics in Economics |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Economics | 3999 | Honors Thesis I |  |  |
| Economics | 4999 | Honors Thesis II |  |  |
| Subtotal |  |  | $\mathbf{2 1}$ |  |
|  |  |  |  |  |
| This major capstone is usually taken in the final semester, and all prerequisites must be met. |  |  |  |  |
| ^ Economics 3563 or 3564 replaces International Business 3101 (Fundamentals of International Business) in the <br> upper division foundation. This course is not calculated in the major GPA. |  |  |  |  |
| NOTE: Courses in Economics not included above can be taken as free electives for the degree. |  |  |  |  |

## Suggested Sequence of Economics Major

Please note that this sequence is suggested only, ensuring prerequisites are met. Students' academic sequences may differ based on individual academic plans.

| Semester I - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 1001 | Pre-Calculus for Business | 3 |  |
| Economics | 1101 | Macroeconomic Principles | 3 |  |
| Human Resource Management | 1101 | Leadership \& Organizational Management | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester II - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 1102 | Calculus for Business | 3 |  |
| Economics | 1102 | Microeconomic Principles | 3 |  |
| Legal Studies | 1101 | Legal Environment of Business | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3-4 |  |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Semester III - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 2103 | Business Statistics <br> \{waives GenEd GQ requirement | 4 |  |
| Accounting | 2101 | Financial Accounting | 3 |  |
| Management Information Systems | 2101 | Information Systems in Organizations | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester IV - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Accounting | 2102 | Managerial Accounting | 3 |  |
| Marketing | 2101 | Marketing Management | 3 |  |
| Business Administration | 2101 | Professional Development Strategies | 1 |  |


| Business Administration | 2196 | Business Communications | 3 | WI |
| :---: | :---: | :---: | :---: | :---: |
| Risk Management \& Insurance | 2101 | Introduction to Risk Management | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester V - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Finance | 3101 | Financial Management | 3 |  |
| Management Science / Operations Management | 3101 | Operations Management | 3 |  |
| Business Administration | 3102 | Business Society \& Ethics | 3 |  |
| Economics | $\begin{aligned} & 3501 \\ & \text { or } \\ & 3502 \end{aligned}$ | ```Intermediate Microeconomic Analysis or Intermediate Macroeconomic Analysis``` | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester VI - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 3103 | Integrative Business Applications | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Economics | $\begin{array}{\|l\|} \hline 3501 \\ \text { or } \\ 3502 \\ \hline \end{array}$ | ```Intermediate Microeconomic Analysis or Intermediate Macroeconomic Analysis``` | 3 |  |
| Economics | $\begin{array}{\|l\|} \hline 3563 \\ \text { or } \\ 3564 \\ \hline \end{array}$ | International Trade <br> or <br> International Monetary Economics | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester VII - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 4101 | Global Business Policies | 3 |  |
| Economics | $35 x x^{+}$ | choose from courses listed above | 3 |  |
| Economics | $35 x x^{+}$ | choose from courses listed above | 3 |  |
| Free Elective |  |  | 3 |  |
| Free Elective |  |  | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester VIII - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Economics | 3598 | Economics Writing Seminar | 3 | WI |
| Economics | $35 x x^{+}$ | choose from courses listed above | 3 |  |
| Free Elective |  |  | 3-4 |  |
| Free Elective |  |  | 3 |  |
| Free Elective |  |  | 3 |  |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Total credits for the B.B.A. in Economics: |  |  | 124 |  |

## Accelerated 3 Year BBA

Motivated students can accelerate their BBA program to finish in 3 years. Please see the suggested sequence at www.cla.temple.edu/economics/undergraduate/three-year-bba-grid/.

## Minor

Students in any college who wish to understand basic business foundations and how the impact of economics affects public and personal issues may want to minor in Economics. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor. Please see the requirements for this minor on the Business Minors \& Certificates page.

## Entrepreneurship

Arvind Parkhe, Chair
215-204-6618
aparkhe@temple.edu
www.fox.temple.edu/cms_academics/dept/strategic-management/
Robert McNamee, Academic Director
Innovation and Entrepreneurship Institute (IEI)
robert.mcnamee@temple.edu
www.fox.temple.edu/mcm_people/robert-mcnamee/
Entrepreneurs are creative problem-solvers that are driven to have a big impact on the world. Many of Temple University's Entrepreneurship students start new businesses during or after college, but many more go on to work in exciting jobs with companies that realize the importance of innovation and the value of students that can think outside the box, recognize opportunities, and get the job done.

For students interested in Entrepreneurship, we offer several options ranging from our major, minor, and certificate (see below) to a Living Learning Community (Innovate and Create), a General Education course, Strategic Management 0827 (Creativity and Organizational Innovation), and numerous free workshops and competitions that are open to students from across Temple University. Please check Innovation \& Entrepreneurship Institute’s web site (www.fox.temple.edu/cms research/institutes-and-centers/innovation-entrepreneurshipinstitute/) for details on all our programs.

Temple's Entrepreneurship programs are consistently ranked among the top in the nation (2012 Princeton Review: \#8 undergraduate; \#13 graduate). Through these programs you will learn how to be more creative, to recognize and generate innovations in all their forms, to understand the ecosystems and value chains of industries in order to identify opportunities for new businesses or products, and you will be given the knowledge and tools necessary to launch and manage your
own business or successfully propose new business ideas and change initiatives in any companies you work for or with.

The Entrepreneurship major is a good choice for students who:

- Would like to start a new business
- Want to have a positive social impact with a social venture
- Anticipate doing consulting or doing freelance work
- Plan to assume responsibilities in a family business
- Want to be a creative and productive member of an innovative, high-growth business

The program is designed with a balance of theory and practice and our courses are taught by world-leading researchers, successful serial entrepreneurs, experienced venture capital executives, and senior innovation managers. Course work is closely tied to the applied programs of the Innovation \& Entrepreneurship Institute (IEI) like the Be Your Own Boss Bowl (BYOBB) and other competitions (e.g., our capstone course focuses on coaching students on finalizing an idea for a new business and writing a business plan that can be submitted to the BYOBB for a chance to win over $\$ 100 \mathrm{k}$ in prizes).

We want our Entrepreneurship majors to have experience when they graduate. Thus, our program includes a required internship course, and we expect all Entrepreneurship majors be active members in the Entrepreneurial Student Association (ESA; www.fox.temple.edu/cms_career/student-professional-organizations/entrepreneurial-studentsassociation/) where they can work on a variety of interesting projects with local companies and the community. More information on our internship program can be found at www.fox.temple.edu/cms_research/institutes-and-centers/innovation-entrepreneurship-institute/academics/undergraduate-program/entrepreneurial internships/ (including internships available to all Temple students) and information regarding the ESA (including how to join and meeting times) can be found www.fox.temple.edu/cms_research/institutes-and-centers/innovation-entrepreneurship-institute/student-organizations/overview/.

## Summary of Requirements

## University Requirements

All new students starting in the 2013-2014 academic year and beyond are required to complete the university's General Education (GenEd) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of reenrollment.

## College Requirements

Students must meet College Graduation Requirements, including the requirements of the major listed below. Students must attain an overall GPA of 2.0 or higher in the major and must maintain a 2.0 GPA overall in order to graduate as an entrepreneurship major. Students pursuing the entrepreneurship major are expected to participate in the Entrepreneurial Student

Association. Use the major GPA calculator at www.fox.temple.edu/cms_academics/dept/advising/ to calculate the GPA in the major.

## Major Requirements for new students

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

## Suggested Sequence for new students

Requirements of Entrepreneurship Major

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Accounting | $2521^{*}$ | Cost Accounting | 3 |  |
| Strategic Management | 3501 | Entrepreneurial \& Innovative Thinking | 3 |  |
| Strategic Management | 3503 | Managing New \& Small Enterprises | 3 |  |
| Strategic Management | $3685^{* *}$ | Internship in Entrepreneurship | 3 |  |
| Strategic Management | $4596^{* * *}$ | Senior Entrepreneurship Seminar | 3 | WI |
| Choose one: |  |  | 3 |  |
| Marketing | 3505 | Entrepreneurial Marketing |  |  |
| Marketing | 3511 | Marketing Research |  |  |
| Choose one: |  |  | 3 |  |
| Strategic Management | 3511 | Seminar on Social Entrepreneurship |  |  |
| Strategic Management | 3521 | Financing New Enterprises |  |  |
| Strategic Management | $3580^{\wedge}$ | Special Topics in Strategic Management |  |  |
| Strategic Management | $3582^{\wedge \wedge}$ | Independent Study |  |  |
| Strategic Management | $3682^{\wedge \wedge}$ | Independent Study |  |  |
| International Business Administration | 3596 | Global Strategic Management |  | WI |
| Human Resource Management | 3501 | Power, Influence \& Negotiation |  |  |
| Management Information Systems | 3536 | Information Systems Innovation |  |  |
| Management Information Systems | 3538 | Social Media Innovation |  |  |
| Subtotal |  |  | 21 |  |

* Accounting 2521 (Cost Accounting) replaces Accounting 2102 (Managerial Accounting) in the lower division foundation requirements for Entrepreneurship majors. This course is not calculated in the major GPA. Entrepreneurship majors are not required to take Accounting 2102. Those who have already completed Accounting 2102 will need to take Accounting 2521.
** This course should be taken prior to the final semester.
*** This major capstone is taken in the final semester, and all prerequisites must be met.
Approval of the Academic Director of the IEI or department chair required. Short-term Study Abroad is approved to fulfill this requirement. Entrepreneurship students who wish to enroll in this course should be aware that this is a competitive program, and if accepted, requires a research project that is Entrepreneurship related (study.abroad@temple.edu).
$\wedge \wedge$ Independent Study projects will be identified or created by the IEI. Approval of the Academic Director of the IEI or department chair required.


## NOTES

1. Students pursuing a double major in business can double-count a maximum of one course toward both majors.
2. Students pursuing a minor may not double count courses for the major and minor.

## Suggested Sequence of the Entrepreneurship Major

Please note that this sequence is suggested only, ensuring prerequisites are met. Students' academic sequences may differ based on individual academic plans.

| Semester I |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 1001 | Pre-Calculus for Business | 3 |  |
| Economics | 1101 | Macroeconomic Principles | 3 |  |
| Human Resource Management | 1101 | Leadership \& Organizational <br> Management | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester II |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 1102 | Calculus for Business | 3 |  |
| Economics | 1102 | Microeconomic Principles | 3 |  |
| Legal Studies | 1101 | Legal Environment of Business | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester III |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 2103 | $\begin{aligned} & \hline \begin{array}{l} \text { Business Statistics } \\ \text { \{waives GenEd GQ } \\ \text { requirement }\} \end{array} \\ & \hline \end{aligned}$ | 4 |  |
| Accounting | 2101 | Financial Accounting | 3 |  |
| Management Information Systems | 2101 | Information Systems in Organizations | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester IV |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Accounting | 2521 | Cost Accounting | 3 |  |


| Marketing | 2101 | Marketing Management | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Business Administration | 2101 | Professional Development Strategies | 1 |  |
| Business Administration | 2196 | Business Communications | 3 | WI |
| Risk Management \& Insurance | 2101 | Introduction to Risk Management | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester V |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Finance | 3101 | Financial Management | 3 |  |
| Management Science/Operations Management | 3101 | Operations Management | 3 |  |
| Business Administration | 3102 | Business Society \& Ethics | 3 |  |
| International Business Administration | 3101 | Fundamentals of International Business | 3 |  |
| Strategic Management | 3501 | Entrepreneurial \& Innovative Thinking | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester VI |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 3103 | Integrative Business Applications | 3 |  |
| Strategic Management | 3503 | Managing New \& Small Enterprises | 3 |  |
| Marketing | $\begin{gathered} 3505 \\ \text { or } \\ 3511 \end{gathered}$ | Entrepreneurial Marketing <br> or <br> Marketing Research | 3 |  |
| Strategic Management <br> International Business Administration <br> Human Resource Management <br> Management Information Systems | $3511 / 3521 / 3580 / 3582 / 3682$ <br> 3596 <br> 3501 <br> $3536 / 3538$ <br> $08 x x$ or $09 x x$ | Select one | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester VII |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 4101 | Global Business Policies | 3 |  |
| Strategic Management | 3685 | Internship in Entrepreneurship | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Free Elective |  |  | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester VIII |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Strategic Management | 4596 | Senior Entrepreneurship Seminar | 3 | WI |


| Free Elective |  |  | 4 |  |
| :--- | :--- | :--- | :---: | :---: |
| Free Elective |  |  | 3 |  |
| Free Elective |  |  | 3 |  |
| Free Elective |  |  | 3 |  |
| Subtotal |  |  | $\mathbf{1 6}$ |  |
|  |  |  |  |  |
| Total credits for the B.B.A. in Entrepreneurship: |  |  |  |  |

## Accelerated 3 Year BBA

Motivated students can accelerate their BBA program to finish in 3 years. Please see the suggested sequence at
www.fox.temple.edu/web_dev/accel_docs/3yearBBAinEntrepreurship.pdf.

## Minors

## Entrepreneurship Minor

Students in any college who wish to understand how to innovate, pursue opportunities, and turn their ideas into reality by creating and managing a successful entrepreneurial or innovative business or social venture can pursue a minor in entrepreneurship.

Requirements for the minor must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor.

## Information Technology Innovation and Entrepreneurship Minor

The Fox School Information Technology Innovation and Entrepreneurship (ITIE) minor integrates two of the most important elements of the Fox School: the enabling role of IT and the drive of entrepreneurial thinking. It is offered as a joint venture between the departments of Strategic Management and Management Information Systems.

## Who Should Minor In ITIE?

The minor is appropriate for all Fox School majors but particularly relevant for students in marketing, finance, human resources, and MIS who are interested in applying IT in an entrepreneurial manner. Students who minor in ITIE will be well suited to work for corporations who want to drive new IT enabled innovative projects and for technology enabled start-ups.

Requirements for the minor must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor. For more information about this minor, please visit:
http://community.mis.temple.edu/programs/minor-in-itie/.

## Certificate

## Requirements for the Certificate in Entrepreneurship (Non-Business Majors)

The nine-credit, three course undergraduate Certificate in Entrepreneurship is designed to provide coursework to support alternative, entrepreneurial career paths for students across the university; to promote the entrepreneurial spirit by fostering opportunity recognition and resource acquisition that leads to innovation and invention; and to increase awareness of, and participation in, entrepreneurial opportunities available to all Temple students. This certificate will be jointly issued by the Fox School of Business and Management and its partner schools, and will appear on the student's transcript.

The requirements for this certificate must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.

## Finance

Ronald Anderson, Chair
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215-204-8279
ron.anderson@temple.edu
Jonathan Scott, Undergraduate Finance Program Director
Office: Alter Hall 419
215-204-7605
jonathan.scott@temple.edu
Howard Keen, Undergraduate Coordinator
Office: Alter Hall 429
215-204-5990
hkeen@temple.edu
Edward Boyer, Faculty Advisor
Office: Alter Hall 436
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Financial analyst, equity or bond trader, wealth management, credit analyst, treasury analyst, risk analysis... Some of the most rewarding and challenging careers in domestic and international corporate community demand a background in finance. A Finance Major from the Fox School prepares students for exciting and challenging careers in all areas of finance, a hands-on
curriculum, a broad and deep range of electives, and an impressive array of networking opportunities.

Finance majors follow many career paths including: (1) financial analyst in a corporation dealing with activities such as merger and acquisitions, initial public offerings, capital budgeting proposals, treasury operations; (2) bank analyst, reviewing and overseeing loans to business and individuals, and relationship manager who deals directly with customers; (3) wealth and investment managers helping large organizations and individuals effectively allocate their capital into appropriate investment vehicles; and (4) analyst with federal, state and local governments or non-profit organizations to efficiently raise and deploy capital across a broad spectrum of projects, provide pension fund support, and support of day-to-day cash management.

We strongly encourage Finance majors to become involved in the Financial Management Association, Temple University Investment Association and the Owl Fund. These student organizations offer our majors the opportunity to meet business leaders in the financial industry, attend career development seminars, learn and gain real-life experience in the investment work, and gain an invaluable network to Temple alumni.

## Summary of Requirements

## University Requirements

All new students starting in the 2013-2014 academic year and beyond are required to complete the university's General Education (GenEd) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of reenrollment.

## College Requirements

Students must meet College Graduation Requirements, including the requirements of the major listed below. Students must attain an overall GPA of 2.0 and a 2.0 GPA in the major to graduate as a Finance major. Use the major GPA calculator at www.fox.temple.edu/cms_academics/dept/advising/ to calculate the GPA in the major.

## Major Requirements for new students

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

## Suggested Sequence for new students

Requirements of Finance Major

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Finance | 3504 | Intermediate Corporate Finance | 3 |  |
| Finance | 3507 | Investments | 3 |  |


| Finance | 3551^ | International Finance | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Finance | $\begin{aligned} & 3596 \wedge \wedge \\ & \text { or } \\ & 4596 \wedge \wedge \wedge \end{aligned}$ | Owl Fund Seminar II <br> or <br> Seminar in Financial Management | 3 | WI |
| Select two of the following: |  |  | 6 |  |
| Finance | 3505 | Management of Financial Institutions |  |  |
| Finance | 3506 | Derivatives \& Financial Risk Management |  |  |
| Finance | 3508 | Money \& Fixed Income Markets |  |  |
| Finance | 3509* | Real Estate Investment \& Finance |  |  |
| Finance | 3512 | Financial Modeling |  |  |
| Finance | 3513 | Financial Statement Analysis |  |  |
| Finance | 3571** | Owl Fund Seminar I |  |  |
| Finance | 3581 | Field Experience in Finance |  |  |
| Subtotal |  |  | 18 |  |
| /Finance 3551 replaces International Business 3101 (Fundamentals of International Business) in the upper division foundation. This course is not calculated in the major GPA. |  |  |  |  |
| $\wedge$ This major capstone may be taken in lieu of Finance 4596 with permission of the instructor and successful completion of Finance 3571 (Owl Fund Seminar I). |  |  |  |  |
| \^^ This major capstone is taken in the final semester, and all prerequisites must be met. |  |  |  |  |
| *Finance 3509 may not be taken as a Finance elective if double majoring in Real Estate. |  |  |  |  |
| **Finance 3571 requires permission of the instructor, and all prerequisites must be met. |  |  |  |  |

## Suggested Sequence of Finance Major

Please note that this sequence is suggested only, ensuring prerequisites are met. Students' academic sequences may differ based on individual academic plans.

| Semester I - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 1001 | Pre-Calculus for Business | 3 |  |
| Economics | 1101 | Macroeconomic Principles | 3 |  |
| Human Resource Management | 1101 | Leadership \& Organizational Management | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester II - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 1102 | Calculus for Business | 3 |  |
| Economics | 1102 | Microeconomic Principles | 3 |  |
| Legal Studies | 1101 | Legal Environment of Business | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3-4 |  |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Semester III - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |


| Statistics | 2103 | Business Statistics <br> \{waives GenEd GQ requirement $\}$ | 4 |  |
| :---: | :---: | :---: | :---: | :---: |
| Accounting | 2101 | Financial Accounting | 3 |  |
| Management Information Systems | 2101 | Information Systems in Organizations | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester IV - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Accounting | 2102 | Managerial Accounting | 3 |  |
| Business Administration | 2101 | Professional Development Strategies | 1 |  |
| Business Administration | 2196 | Business Communications | 3 | WI |
| Risk Management \& Insurance | 2101 | Introduction to Risk Management | 3 |  |
| Finance | 3101 | Financial Management | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester V - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Marketing | 2101 | Marketing Management | 3 |  |
| Management Science/Operations Management | 3101 | Operations Management | 3 |  |
| Business Administration | 3102 | Business Society \& Ethics | 3 |  |
| Finance | $\begin{gathered} 3504 \\ \text { or } \\ 3507 \end{gathered}$ | Intermediate Corporate Finance or Investments | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester VI - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 3103 | Integrative Business Applications | 3 |  |
| Finance | $\begin{gathered} 3504 \\ \text { or } \\ 3507 \end{gathered}$ | Intermediate Corporate Finance <br> or <br> Investments | 3 |  |
| Finance | $3505 / 3506 / 3508 /$ <br> $3509 / 3512 / 3513 /$ <br> $3571 / 3581$ | Select one | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Free Elective |  |  | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester VII - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 4101 | Global Business Policies | 3 |  |
| Finance | $3505 / 3506 / 3508 /$ <br> $3509 / 3512 / 3513 /$ <br> $3571 / 3581$ | Select one | 3 |  |
| Finance | 3551 | International Finance | 3 |  |



## Accelerated 3 Year BBA

Motivated students can accelerate their BBA program to finish in 3 years. Please see the suggested sequence at www.fox.temple.edu/cms_academics/dept/finance/undergraduate/financemajor/.

## Minor

The four-course minor is designed for students interested in obtaining a deeper understanding of the principles of finance and their application to various financial issues facing decision-makers in corporate, financial, and government sectors of the economy. Students majoring in accounting, marketing, real estate, and risk management can benefit from minoring in finance.

Requirements for the minor must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor.

## Human Resource Management

Dr. Deanna Geddes, Chair
Alter Hall 353
215-204-8195
geddes@temple.edu
HRM Department Office
Alter Hall 333
215-204-8099
www.fox.temple.edu/cms_academics/dept/human-resource-management-welcome

The Human Resource Management (HRM) major prepares students for careers in human resource (HR) management and general management. Increasingly, organizations are hiring well-trained professionals to recruit, develop, manage, and retain their most valuable business asset - human capital. The Human Resource Management department prepares students with the knowledge and skills needed for the strategic and interpersonal management of company employees.

Typical first jobs for Human Resource Management majors include corporate recruiter, employee relations specialist, compensation analyst, corporate trainer, HR generalist, and management trainee. Typical jobs held five-ten years out include HR director, staffing manager, compensation manager, training manager, and employee relations director.

Human Resource Management majors are expected to become involved in the Society for Human Resource Management (SHRM). Guest speakers, networking events, internships and coops, and other career development activities and are just a few benefits of joining. There are two student SHRM chapters, one at Main Campus and the other at Ambler. The Main Campus chapter office is located in Alter Hall 333C. For more information, contact Andrea BrooksLopez at 215-204-4226, ablopez@temple.edu or the SHRM office at 215-204-1626. For Ambler, contact Ken Riemer at riemertr@aol.com or the SHRM Main office.

In addition to SHRM, the HRM Department also invites all majors to join our student chapter of Net Impact or Student Professional Sales Organizations (PSO). For information on Net Impact go to their web site (http://tunetimpact.com/) or contact faculty advisor Lynne Andersson at 215-204-5088, landerss@temple.edu. For more information on PSO, go to their web site (www.temple-pso.org) or contact faculty advisor Tony Petrucci at 215-204-8138, petrucci@temple.edu.

## Summary of Requirements

## University Requirements

All new students starting in the 2013-2014 academic year and beyond are required to complete the university's General Education (GenEd) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of reenrollment.

## College Requirements

Students must meet College Graduation Requirements, including the requirements of the major listed below. Human resource management students must attain a 2.0 GPA in the major and a 2.0 cumulative GPA in order to graduate. Use the major GPA calculator at www.fox.temple.edu/cms_academics/dept/advising/ to calculate the GPA in the major.

## Major Requirements for new students

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of

Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

## Suggested Sequence for new students

Requirements of the Human Resource Management Major

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Human Resource Management | 2501 | Introduction to Human Resource Management | 3 |  |
| Human Resource Management | 3511 | Compensation Management | 3 |  |
| Human Resource Management | 3512 | Human Resource Management \& Public Policy | 3 |  |
| Human Resource Management | 4596* | Organizational Staffing \& Career Management | 3 | WI |
|  |  |  |  |  |
| Select two additional 3500+ level Human Resource Management courses from this list: |  |  | 6 |  |
| Human Resource Management | 3501** | Power, Influence \& Negotiation |  |  |
| Human Resource Management | 3502** | Leading People at Work |  |  |
| Human Resource Management | 3503** | Communicating in Organizations |  |  |
| Human Resource Management | $\begin{aligned} & \hline 3504^{* *} \\ & \text { or } \\ & 3505^{* *} \\ & \hline \end{aligned}$ | ```Leadership in the 21st Century or Sustainable Organizational Leadership``` |  |  |
| Human Resource Management | 3506 | HR Metrics: Using Data, Scorecards \& Dashboards to Drive Business Performance |  |  |
| Human Resource Management | 3513 | Labor Relations: Strategy \& Practice |  |  |
| Human Resource Management | 3531 or 3581 | ```HR on the Ground or Co-op Experience in Human Resource Management``` |  |  |
| Human Resource Management | 3565 | International Human Resource Management |  |  |
| Human Resource Management | 3580*** | Special Topics - Human Resource Management (topics may change) |  |  |
|  |  |  |  |  |
| Subtotal |  |  | 18 |  |
| *This major capstone is taken in the final semester, and all prerequisites must be met. |  |  |  |  |
| ** These courses make up the Fox Leadership Certificate which will appear on your official transcripts similar to a Minor. However, they cannot be double counted for HRM major requirements if applied toward the Leadership Certificate. |  |  |  |  |
| ***This course may be offered multiple semesters with different topics. It can be applied once toward the major. It can be used as a free elective if completed with a different topic. |  |  |  |  |

## Suggested Sequence of the Human Resource Management Major

Please note that this sequence is suggested only, ensuring prerequisites are met. Students' academic sequences may differ based on individual academic plans.

| Semester I - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 1001 | Pre-Calculus for Business | 3 |  |
| Economics | 1101 | Macroeconomic Principles | 3 |  |
| Human Resource Mgmt. | 1101 | Leadership \& Organizational Management | 3 |  |
| English | $\begin{aligned} & 0802,0812 \text { or } \\ & 0902 \end{aligned}$ | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester II - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 1102 | Calculus for Business | 3 |  |
| Economics | 1102 | Microeconomic Principles | 3 |  |
| Legal Studies | 1101 | Legal Environment of Business | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester III - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 2103 | Business Statistics \{waives GenEd GQ requirement \} | 4 |  |
| Accounting | 2101 | Financial Accounting | 3 |  |
| Management Information Systems | 2101 | Information Systems in Organizations | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester IV - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Accounting | 2102 | Managerial Accounting | 3 |  |
| Business Administration | 2101 | Professional Development Strategies | 1 |  |
| Business Administration | 2196 | Business Communications | 3 | WI |
| Marketing | 2101 | Marketing Management | 3 |  |
| Risk Management \& Insurance | 2101 | Introduction to Risk Management | 3 |  |
| Human Resource Mgmt. | 2501 | Introduction to Human Resource Management | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester V - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Finance | 3101 | Financial Management | 3 |  |


| Management Science / Operations Management | 3101 | Operations Management | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Business Administration | 3102 | Business Society \& Ethics | 3 |  |
| Human Resource Mgmt. | $\begin{gathered} 3511 \\ \text { or } \\ 3512 \\ \hline \end{gathered}$ | ```Compensation Management or Human Resource Management \& Public Policy``` | 3 |  |
| Select one of the following: |  |  | 3 |  |
| Human Resource Mgmt. Human Resource Mgmt. Human Resource Mgmt. Human Resource Mgmt. <br> Human Resource Mgmt. Human Resource Mgmt. Human Resource Mgmt. Human Resource Mgmt. Human Resource Mgmt. | 3501 3502 3503 3504 or 3505 3506 3513 3531 or 3581 3565 3580 | Power, Influence \& Negotiation <br> Leading People at Work <br> Communicating in Organizations <br> Leadership in the 21st Century or Sustainable Org. <br> Leadership <br> HR Metrics <br> Labor Relations: Strategy \& Practice <br> HR on the Ground or Co-op Experience in HRM International Human Resource Management <br> Special Topics - Human Resource Management |  |  |
| Subtotal |  |  | 15 |  |
| Semester VI - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 3103 | Integrative Business Applications | 3 |  |
| International Business Administration | 3101 | Fundamentals of International Business | 3 |  |
| Human Resource Mgmt. | $\begin{array}{\|c} \hline 3511 \\ \text { or } \\ 3512 \\ \hline \end{array}$ | Compensation Management <br> or <br> Human Resource Management \& Public Policy | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester VII - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 4101 | Global Business Policies | 3 |  |
| Select one of the following: |  |  | 3 |  |
| Human Resource Mgmt. Human Resource Mgmt. Human Resource Mgmt. Human Resource Mgmt. <br> Human Resource Mgmt. Human Resource Mgmt. Human Resource Mgmt. Human Resource Mgmt. Human Resource Mgmt. | 3501 <br> 3502 <br> 3503 <br> 3504 or 3505 <br> 3506 <br> 3513 <br> 3531 or 3581 <br> 3565 <br> 3580 | Power, Influence \& Negotiation <br> Leading People at Work <br> Communicating in Organizations <br> Leadership in the 21st Century or Sustainable Org. <br> Leadership <br> HR Metrics <br> Labor Relations: Strategy \& Practice <br> HR on the Ground or Co-op Experience in HRM International Human Resource Management <br> Special Topics - Human Resource Management |  |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Free Elective |  |  | 4 |  |
| Free Elective |  |  | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester VIII - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |


| Human Resource Mgmt. | 4596 | Organizational Staffing \& Career Management | 3 | WI |
| :--- | :--- | :--- | :---: | :---: |
| GenEd | $08 x x$ or 09xx | GenEd Breadth Course | 3 |  |
| Free Elective |  |  | 3 |  |
| Free Elective |  |  | 3 |  |
| Free Elective |  |  | 3 |  |
| Subtotal |  | 15 |  |  |
|  |  |  |  |  |
| Total credits for the B.B.A. in Human Resource Management: | $\mathbf{1 2 4}$ |  |  |  |

## Accelerated 3 Year BBA

Motivated students can accelerate their BBA program to finish in 3 years. Please see the suggested sequence at www.fox.temple.edu/web_dev/accel_docs/Fox3yearBBAinHRM.pdf.

## Minors

## Legal Studies Minor for Human Resource Managers

Human Resource Management majors only
The legal aspects of managing people at all levels of business and nonprofit organizations come into play in a wide variety of human resources policies and decisions as well as the ramifications of decisions about the business itself. Compliance with local, state and federal laws and regulations also creates the need for HR practitioners to consider the legal ramifications of hiring, training, coaching, disciplining and terminating individual employees. Larger organizational issues such as layoffs, restructuring, outsourcing, benefits and retirement programs and decisions must also be made in compliance with the law.

Requirements for this minor must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor.

## Human Resource Minor for Legal Studies

Legal Studies majors only.
Law permeates most aspects of our business lives and few decisions lack legal repercussions. In a business setting, the law regulates such things as who businesses can hire and fire, the liability for people injured on a business premises and labor/management relations. On the other hand, organizations are hiring non-lawyer professionals to manage the most important asset of business, its human talent. Those employees are usually trained in human resource management. In practice, lawyers and human resource managers work hand in hand to deal with employee problems and statutory regulations dealing with compliance issues. A major in law with a minor in human resource management is a natural fit. Students will learn the legal repercussions of a business decision while also being exposed to the management and human side of that decision with practical exposure to those issues.

Requirements for this minor must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor.

## Certificate in Leadership

The Fox Certificate in Leadership responds to workplace demands for effective leadership development. Corporate executives and numerous studies for years indicate the need for business school graduates to move beyond their technical competence as they step into leadership roles. In today's environment, a leadership mind-set with enhanced skills in organizational communication, conflict management, and team building gives individuals and organizations a competitive advantage. Expertise and perspective developed through the Leadership Certificate courses enable graduates to think and act in ways that reflect sophisticated competencies (from interpersonal to technical) and that benefit the interests of multiple organizational stakeholders.

Requirements for this certificate must be completed prior to graduation. Courses cannot be used to meet certificate requirements if already used to meet the requirements for a major or a different minor or certificate.

## RMI \& HRM Focus

The Risk Management and Insurance (RMI) Department and Human Resource Management (HRM) Department offer several complimentary courses for students interested in a career in employee benefits and/or human resource management. These courses allow students to broaden their career options by taking advantage of the cross-training offered by these departments.

- HRM major with a RMI focus: Students take Risk Management \& Insurance 3501 (Life and Health Insurance and Employee Benefits) and Risk Management \& Insurance 3503 (Retirement Plans)
- RMI major with a HRM focus: Students take Human Resource Management 2501
(Introduction to Human Resource Management) and Human Resource Management 3511 (Compensation Management)
- Dual HRM/RMI major. Students fulfill all requirements for both majors.


## International Business Administration

Arvind Parkhe, Chair
215-204-6618
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Nicolas Dahan, Academic Director, IB Program
ndahan@temple.edu
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www.fox.temple.edu/cms_academics/dept/international-business-administration/
A major in International Business Administration is a great choice for students who:

- Want to have productive and enriching interactions with foreigners
- Want to be able to assess and hedge risks of doing business abroad for their employer
- Will pursue international business opportunities (e.g. international procurement, foreign clients) for their employer
- Want to become familiar with the practical techniques required by international trade
- Would like to pursue a professional career that requires frequent travel abroad

The U.S. News \& World Report has ranked the Fox School of Business and Management's undergraduate International Business (IB) major in the Top 10 in the nation for 5 consecutive years.

A major in International Business Administration combines coursework in international business (IB), area studies, and foreign language. This educational experience is designed to equip students with the knowledge and global perspectives required to thrive in the global workforce of the twenty-first century. The IB major prepares students to understand the different challenges businesses face when they operate in an international environment. As the world is globalizing several emerging markets such as China, India, and Brazil have become important players in the international arena in the past two decades. The IB program emphasizes learning to do business in these emerging markets through elective courses such as Fundamentals of Asian Business, Fundamentals of Latin American Business, and Special Topics in IB.

Since an understanding of language and cultural differences plays an important role in international interactions, there is additional emphasis given to learning a second language. Students are required to demonstrate proficiency in a second language at the fourth semester level through coursework or examination. In addition, a cultural, historical, and geographic area of understanding is also essential. Students are encouraged to acquire this background through completion of a Certificate of Specialization in Spanish and Latin American Studies for Business, or Asian Business and Society facilitated by IGMS/CIBER, or elective courses offered by the College of Liberal Arts. See Spanish and Latin American Studies for Business and Asian Business and Society Certificate Program for information.

To further round out a students' education, study abroad is strongly recommended. Students are provided opportunities to spend a summer, a semester or a year abroad in various countries where the university has established business programs. See Temple CIBER, Study Abroad for information.

International Business Administration majors are strongly encouraged to study abroad, earn an Area Studies and Language Certificate, and become actively involved in the International Business Association. This student organization hosts the Global Lecture Series with guest speakers from international business disciplines, networking events, and career development
activities. This organization is open to all FSBM majors. For more information, contact the International Business Association officers at 215-204-8185.

## Summary of Requirements

## University Requirements

All new students starting in the 2013-2014 academic year and beyond are required to complete the university's General Education (GenEd) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of reenrollment.

## College Requirements

Students must meet College Graduation Requirements, including the requirements of the major listed below. Students must maintain a 2.0 GPA overall and a 2.0 GPA in the major to graduate as an International Business major. Use the major GPA calculator at www.fox.temple.edu/cms_academics/dept/advising/ to calculate the GPA in the major.

## Major Requirements for new students

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

## Suggested Sequence for new students

## Requirements of International Business Administration Major

Undergraduate students may earn a Bachelor of Business Administration (B.B.A.) degree in International Business Administration (IB). Students are strongly encouraged to pursue one of two complementary tracks to enhance their professional marketability by specializing in a functional area of business and/or pursuing area studies expertise.

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :---: |
| Foreign Language requirement | All students must be proficient in two <br> languages |  |  |  |
| International Business Administration | 3596 | Global Strategic Management | 3 | WI |
| International Business Administration | $4587^{* *}$ | International Business Practicum | 3 |  |
| International Business | 3563 | International Trade | 3 |  |
| Administration/Economics* | 3553 | International Marketing | 3 |  |
| International Business |  |  |  |  |
| Administration/Marketing* |  |  |  |  |
|  |  |  | 6 |  |
| Select two: | International Business Administration*** <br> or | or <br> or | Fundamentals of Asian Business <br> or |  |


| Asian Studies*** | 2511 | Introduction to Asian Business |  |  |
| :--- | :--- | :--- | :--- | :--- |
| International Business Administration**** <br> or <br> Latin American Studies**** | 2502 | Fundamentals of Latin American <br> Business |  |  |
| International Business Administration | 2503 | Business in the European Union (Temple <br> Rome) |  |  |
| International Business Administration | 3580 | Special Topics in International Business: <br> Doing Business in Emerging Markets <br> (Destination Ghana, Destination India, <br> Destination Vietnam) |  |  |
| Subtotal |  |  | $\mathbf{1 8}$ |  |
|  |  |  |  |  |
| These courses are cross-listed. |  |  |  |  |
| ** This major capstone is taken in the final semester, and all prerequisites must be met. |  |  |  |  |
| *** This course is cross-listed in International Business and Asian Studies |  |  |  |  |
| **** This course is cross-listed in International Business and Latin American Studies |  |  |  |  |
| NOTE: <br> International Business Administration 2501/Asian Studies 2511 is offered in spring, fall, and occasionally summer. |  |  |  |  |
| International Business Administration/Latin American Studies 2502 is offered spring, fall, and occasionally summer. |  |  |  |  |
| International Business Administration 2503 is offered only in Rome. |  |  |  |  |
| International Business Administration 3580 is offered in Spring and occasionally summer. |  |  |  |  |

## Suggested Sequence of International Business Administration Major

Please note that this sequence is suggested only, ensuring prerequisites are met. Students' academic sequences may differ based on individual academic plans.

| Semester I - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 1001 | Pre-Calculus for Business | 3 |  |
| Economics | 1101 | Macroeconomic Principles | 3 |  |
| Human Resource Management | 1101 | Leadership \& Organizational Management | 3 |  |
| English | $\begin{aligned} & 0802,0812 \text { or } \\ & 0902 \end{aligned}$ | Analytical Reading \& Writing | 4 | GW |
| Foreign Language or <br> Free Elective |  |  | 3-4 |  |
| Subtotal |  |  | 16-17 |  |
|  |  |  |  |  |
| Semester II - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 1102 | Calculus for Business | 3 |  |
| Economics | 1102 | Microeconomic Principles | 3 |  |
| Legal Studies | 1101 | Legal Environment of Business | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Foreign Language or <br> Free Elective |  |  | 3-4 |  |
| Subtotal |  |  | 15-16 |  |


| Semester III - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 2103 | Business Statistics \{waives GenEd GQ requirement\} | 4 |  |
| Accounting | 2101 | Financial Accounting | 3 |  |
| Management Information Systems | 2101 | Information Systems in Organizations | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Foreign Language or <br> Free Elective |  |  | 3 |  |
| Subtotal |  |  | 16 |  |
| Semester IV - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Accounting | 2102 | Managerial Accounting | 3 |  |
| Marketing | 2101 | Marketing Management | 3 |  |
| Business Administration | 2101 | Professional Development Strategies | 1 |  |
| Business Administration | 2196 | Business Communications | 3 | WI |
| Risk Management \& Insurance | 2101 | Introduction to Risk Management | 3 |  |
| Foreign Language or <br> Free Elective |  |  | 3 |  |
| Subtotal |  |  | 16 |  |
| Semester V - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Finance | 3101 | Financial Management | 3 |  |
| Management Science / Operations Management | 3101 | Operations Management | 3 |  |
| Business Administration | 3102 | Business Society \& Ethics | 3 |  |
| International Business Admin | 3101 | Fundamentals of International Business | 3 |  |
| Select one of the following: |  |  | 3 |  |
| Intl Business Admin/Asian Studies Intl Business Admin/Lat Amer Studies International Business Admin | $\begin{aligned} & 2501 / 2511 \\ & 2502 \\ & 2503 \end{aligned}$ | Fundamentals of/Intro to Asian Business Fundamentals of Latin American Business Business in the European Union (Temple Rome) |  |  |
| Subtotal |  |  | 15 |  |
| Semester VI - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 3103 | Integrative Business Applications | 3 |  |
| Select one of the following: |  |  | 3 |  |
| Intl Business Admin/Asian Studies Intl Business Admin/Lat Amer Studies International Business Admin <br> International Business Admin | $\begin{aligned} & 2501 / 2511 \\ & 2502 \\ & 2503 \\ & 3580 \end{aligned}$ | Fundamentals of/Intro to Asian Business Fundamentals of Latin American Business Business in the European Union (Temple Rome) <br> Special Topics in IB: Doing Business in Emerging Markets (Destination Ghana/India/Vietnam) |  |  |
| International Business Admin | 3596 | Global Strategic Management | 3 | WI |


| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester VII - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 4101 | Global Business Policies | 3 |  |
| International Business Admin / Marketing | 3553 | International Marketing | 3 |  |
| International Business Admin / Economics | 3563 | International Trade | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester VIII - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| International Business Admin | 4587 | International Business Practicum | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Free Elective |  |  | 3-4 |  |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Total credits for the B.B.A. in International Business Administration: |  |  | 124 |  |

## Accelerated 3 Year BBA

Motivated students can accelerate their BBA program to finish in 3 years. Please see the suggested sequence at www.fox.temple.edu/web_dev/accel_docs/Fox3yearBBAinInternationalBusiness.pdf.

## Certificates

Several interdisciplinary certificates are offered that will enhance international understanding: Asian Business \& Society and Spanish \& Latin American Studies for Business.

## Legal Studies

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www.fox.temple.edu/cms_academics/dept/legal-studies-in-business

The Legal Studies curriculum is designed to acquaint students with the broad spectrum of the economic, political, and sociological framework within which the law functions. It also may be pursued as a pre-law major in preparation for law school. Majors will be exposed to a curriculum that will challenge their thinking process and reasoning abilities through the use of actual court cases, trial simulations, negotiations and other advocacy skills that stress written and oral communication. All faculty are law trained, and the courses offer an interesting blend of theory and practice.

Students pursuing this curriculum in preparation for the study of law should acquaint themselves with the content and format of the Law School Admissions Test. Information about the test and the Law School admission's process may be accessed by visiting our web site.

Legal Studies majors are encouraged to become involved in Phi Alpha Delta Law Fraternity, International. This organization hosts guest speakers, sponsors law-related field trips, and assists students in gaining internships within the legal field.

## Summary of Requirements

## University Requirements

All new students starting in the 2013-2014 academic year and beyond are required to complete the university's General Education (GenEd) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of reenrollment.

## College Requirements

Students must meet College Graduation Requirements, including the requirements of the major listed below. Legal Studies students must attain a 2.0 GPA in the major and a 2.0 cumulative GPA in order to graduate. Please note that GPA requirements for Law School admission will be significantly higher. Use the major GPA calculator at www.fox.temple.edu/cms_academics/dept/advising/ to calculate the GPA in the major.

## Major Requirements for new students

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

## Suggested Sequence for new students

## Requirements of Legal Studies Major

| Subject | Course \#Course Title | Hours | Attribute |  |
| :--- | :--- | :--- | :--- | :--- |
| Legal Studies | 1102 | Law of Contracts | 3 |  |
| Legal Studies | 3562 | International Law | 3 |  |
| Legal Studies | $4596^{*}$ | Legal Research, Writing \& Advocacy | 3 | WI |


| Choose three: |  |  | 9 |  |
| :--- | :--- | :--- | :--- | :--- |
| Legal Studies | 3502 | Law for the Entrepreneur |  |  |
| Legal Studies | 3503 | The Consumer \& the Law |  |  |
| Legal Studies | 3504 | Sports \& the Law |  |  |
| Legal Studies | 3505 | Constitutional Law |  |  |
| Legal Studies | 3506 | Law, Technology \& E-Commerce |  |  |
| Legal Studies | 3507 | Business Law for Accountants |  |  |
| Legal Studies | 3508 | The Litigation Process |  |  |
| Legal Studies | 3509 | Entertainment Law |  |  |
| Legal Studies | 3511 | Environmental Law, Sustainability \& Public Policy |  |  |
| Legal Studies | 3512 | Law of Nonprofits |  |  |
| Legal Studies | 3582 | Independent Study |  |  |
| Real Estate | 3502 | Real Estate Practice | $\mathbf{1 8}$ |  |
| Subtotal |  |  |  |  |
| *This major capstone is taken in the final semester and all prerequisites must be met. |  |  |  |  |

## Suggested Sequence of Legal Studies Major

Please note that this sequence is suggested only, ensuring prerequisites are met. Students' academic sequences may differ based on individual academic plans.

| Semester I - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 1001 | Pre-Calculus for Business | 3 |  |
| Economics | 1101 | Macroeconomic Principles | 3 |  |
| Human Resource Management | 1101 | Leadership \& Organizational Management | 3 |  |
| English | $\begin{array}{\|l\|} 0802,0812 \text { or } \\ 0902 \end{array}$ | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester II - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 1102 | Calculus for Business | 3 |  |
| Economics | 1102 | Microeconomic Principles | 3 |  |
| Legal Studies | 1101 | Legal Environment of Business | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester III - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 2103 | Business Statistics <br> \{waives GenEd GQ requirement \} | 4 |  |
| Accounting | 2101 | Financial Accounting | 3 |  |
| Management Information Systems | 2101 | Information Systems in Organizations | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |


| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Subtotal |  |  | 16 |  |
| Semester IV - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Accounting | 2102 | Managerial Accounting | 3 |  |
| Marketing | 2101 | Marketing Management | 3 |  |
| Business Administration | 2101 | Professional Development Strategies | 1 |  |
| Business Administration | 2196 | Business Communications | 3 | WI |
| Risk Management \& Insurance | 2101 | Introduction to Risk Management | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester V - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Finance | 3101 | Financial Management | 3 |  |
| Management Science / Operations Management | 3101 | Operations Management | 3 |  |
| Business Administration | 3102 | Business Society \& Ethics | 3 |  |
| Legal Studies | 1102 | Law of Contracts | 3 |  |
| Select one of the following: |  |  | 3 |  |
| Legal Studies Legal Studies Legal Studies Legal Studies Legal Studies Legal Studies Legal Studies Legal Studies Legal Studies Legal Studies Legal Studies Real Estate | $3502^{*}$ <br> 3503 <br> 3504 <br> $3505^{* *}$ <br> $3506^{* *}$ <br> 3507 <br> $3508^{* * *}$ <br> $3509^{* * * *}$ <br> $3511^{*}$ <br> 3512 <br> 3582 <br> 3502 | Law for the Entrepreneur <br> The Consumer \& the Law <br> Sports \& the Law <br> Constitutional Law <br> Law, Technology \& E-Commerce <br> Business Law for Accountants <br> The Litigation Process <br> Entertainment Law <br> Environmental Law, Sustainability \& Public Policy <br> Law of Nonprofits <br> Independent Study <br> Real Estate Practice |  |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester VI - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 3103 | Integrative Business Applications | 3 |  |
| International Business Admin | 3101 | Fundamentals of International Business | 3 |  |
| Legal Studies | 3562 | International Law | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester VII - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 4101 | Global Business Policies | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Free Elective |  |  | 4 |  |



## Accelerated 3 Year BBA

Motivated students can accelerate their BBA program to finish in 3 years. Please see the suggested sequence at www.fox.temple.edu/web_dev/accel_docs/Fox3yearBBAinLegalStudies.pdf.

## Online BBA Program

The Legal Studies major is available as an online BBA degree completion program designed for new students ready to start their junior year in a business curriculum. Please see our web site at www.fox.temple.edu/cms_academics/undergraduate-2/online-bba/ for program and admission information.

## The Temple Law Scholars Program

Temple University School of Law and the Temple University Fox School of Business and Management have created a program for exceptional students who plan on attending law school. The Temple Law Scholars Program provides an opportunity for outstanding students to gain
provisional admission to Temple University School of Law at the same time they are accepted into the Fox School of Business and Management. As Temple Law Scholars, students will spend their undergraduate years in Temple's Honors Program with a major in Legal Studies, after which they will enroll in Temple University School of Law, leading to the degree of Juris Doctor. While undergraduates, students may choose to add a second major or minor.

The Temple Law Scholars Program offers two options:

1. The $3 / 3$ option offers an accelerated experience in which the student begins law school after three years of undergraduate work in the Honors program. The bachelor's degree in Business Administration with a major in Legal Studies is awarded after completion of the first year of law school, and the law degree is received after three years of law school.
2. The $4 / 3$ program offers an enriched undergraduate experience in which the student receives the bachelor's degree in Business Administration with a major in Legal Studies after four years in the Honors Program, and the law degree after three years of law school.

Students who wish to seek additional work experience prior to matriculating in law school can also be granted a one-year deferral between college and law school.

For more information about the Department of Legal Studies and its course offerings, please visit our web site at www.fox.temple.edu/cms_academics/dept/legal-studies-in-business.

## Minors

Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor.

## Human Resource Minor for Legal Studies

Legal Studies majors only.
Law permeates most aspects of our business lives and few decisions lack legal repercussions. In a business setting, the law regulates such things as who businesses can hire and fire, the liability for people injured on business premises and labor/management relations. On the other hand, organizations are hiring non-lawyer professionals to manage the most important asset of business, its human talent. Those employees are usually trained in human resource management. In practice, lawyers and human resource managers work hand in hand to deal with employee problems and statutory regulations dealing with compliance issues. A major in law with a minor in human resource management is a natural fit. Students will learn the legal repercussions of a business decision while also being exposed to management and human side of that decision with practical exposure to those issues.

Requirements for this minor must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.

## Entertainment Law Minor

Business students only.
As long as people have had free time, they have pursued leisure activities. Music, theaters, and sports have been a part of culture since ancient times. As leisure time and personal incomes have grown, so has the arts, entertainment, and recreation industry. There are about 125,500 establishments, ranging from art museums to minor league sports teams in the entrainment field. Practically any activity that occupies a person's leisure time, excluding the viewing of motion pictures and video rentals, is part of this industry. What is often overlooked by those who wish to make a career in the field is that this endeavor is still a business and requires an understanding of the business enterprise. Not only will students who pursue this minor obtain a business degree but they will also learn about the special legal issues that confront this industry that provides about 2 million jobs a year.

Requirements for this minor must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.

## Legal Studies Minor

## Business students only

This four course, 12-credit minor is designed to expose students to a curriculum in legal studies, particularly students majoring in other disciplines such as accounting, risk management or finance who are considering law school. Students will learn how to read cases and statutes, do legal research and make a legal argument as well as identify the legal issues that will impact their business and personal decisions.

Requirements for this minor must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.

## Legal Studies Minor for Human Resource Managers

Human Resource Management majors only
The legal aspects of managing people at all levels of business and non profit organizations come into play in a wide variety of human resources policies and decisions as well as the ramifications of decisions about the business itself. Compliance with local, state and federal laws and regulations also creates the need for HR practitioners to consider the legal ramifications of hiring, training, coaching, disciplining and terminating individual employees. Larger organizational issues such as layoffs, restructuring, outsourcing, benefits and retirement programs and decisions must also be made in compliance with the law.

Requirements for this minor must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor or certificate.

## Management Information Systems

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The nationally ranked Fox BBA Major in Management Information Systems (MIS) produces leaders who initiate, design, and apply technology to transform business functions and produce innovative products and services.

The Fox MIS program moved into the Top 15 in the recently released 2014 U.S. News and World Report Best Undergraduate Business Programs - Business Specialties ranking (see http://community.mis.temple.edu/blog/2013/09/18/fox-bba-in-mis-moves-into-the-top-15-in-us-news-and-world-report/). The Fox School's Management Information Systems (MIS) program climbed three spots from No. 17 in the country to No. 14th. This is the third consecutive year that the BBA in MIS has made the U.S. News and World Report ranking and the third consecutive positive move up in the rankings! The Top 15 status places the program in elite top $1 \%$ of all 1300 undergraduate MIS programs in the United States. It was also ranked top 10 in the U.S. by TechRepublic for 2008/2009 (see www.fox.temple.edu/posts/2008/11/the-fox-schools-bba-in-mis-at-temple-university-named-top-10-in-the-u-s-2/). Fox MIS students are sought by the top firms in the nation, and the placement rate was $100 \%$ for the class of May 2012.

The BBA in MIS prepares students for a digital centric economy in which large and growing IT centric firms provide infrastructure-like services that smaller entrepreneurial firms re-imagine to create innovative and value added services for consumers and business. Fox MIS students will successfully compete in a world in which traditional large corporations continue to streamline their IT operations but grow by adding new technologically enhanced innovative capabilities.

Fox MIS students will learn to:

- Initiate and lead technology enabled change (e.g., act as a change agent in a large firm)
- Analyze and design innovative digital products and services (e.g., create and implement the social media strategy for a new start-up)
- Apply IT to automate and improve business processes (e.g., patient information system for a hospital)
- Transform a business function with IT (e.g., use iPhone apps to reach new customers)
- Analyze clients, specify needs, integrate applications, and manage projects (e.g., select and acquire a new web conferencing system)
- Leverage the Fox MIS student organization (www.temple-ais.org/) to engage with industry and network with your peers


## The FoxMIS Edge: Connect and Innovate

- The Fox IT Career Fair (http://ibit.temple.edu/careerfair/) includes top employers and is only open to MIS students.
- Access extensive networking and placement opportunities through Fox's Institute of Business and Information Technology (http://ibit.temple.edu/) and exclusive Fox Center for Student Professional Development (www.fox.temple.edu/cms_research/institutes-and-centers/center_for_student_professional_development/).
- All Fox BBA in MIS students receive exclusive professional development counseling and training. (see http://community.mis.temple.edu/current-students/professionaldevelopment/).
- Gain course credit for practical work experience and internship opportunities. Learn more about internship opportunities at http://ibit.temple.edu/industryexperience/.
- Fox MIS students are eligible for scholarships and awards (see http://ibit.temple.edu/programs/scholarships/ and http://community.mis.temple.edu/current-students/annual-mis-awards/).
- Students compete to earn "Portfolio Points" by demonstrating academic development inside the classroom and professional development outside the classroom. (see http://community.mis.temple.edu/current-students/professionalachievement/)
- The award winning Association for Information Systems (AIS; www.templeais.org/) student professional organization provides students with professional, social, and community activities.
- The Fox BBA in MIS is closely connected to industry and designed in partnership with the Fox IT Industry Advisory Board (http://ibit.temple.edu/programs/fox-it-advisoryboard/)
- Fox BBA in MIS students use and learn the latest technologies (http://community.mis.temple.edu/technology/)
- Fox is one of the largest and most highly-ranked business schools (see http://www.fox.temple.edu/cms_about-fox/rankings/)

Fox MIS majors get placed in the top firms in the region and nationally. The Fox MIS careers site at http://community.mis.temple.edu/miscareers/ provides a one-stop placement and internship site for students majoring in MIS. The Fox IT Career Fair includes top employers and is only open to MIS students. Career options in MIS include:

- Business analyst $\mid$ Systems analyst
- Data analytics | Business Intelligence
- Database administrator / manager
- Information systems / project manager
- Consultant
- Application developer / web designer
- Information architect
- Social media consultant
- Digital entrepreneur and innovator

To learn more:

- Read the material What is MIS and why should you consider MIS? (at http://community.mis.temple.edu/why-fox-mis/what-is-mis/) and What is unique about the Fox MIS program? (at http://community.mis.temple.edu/why-fox-mis/)
- Review the qualifications of our internationally renowned faculty at http://community.mis.temple.edu/about/faculty/.
- Contact the students of our award winning student professional organization on Twitter (https://twitter.com/TempleAIS)
- Check out scholarships available exclusively for Fox MIS students at http://ibit.temple.edu/programs/scholarships/.
- If you are a high performing motivated student, we would like to see you succeed in our program - please contact Joseph Allegra at jallegra@temple.edu
- Learn about internships or careers of current students and recent graduates at http://community.mis.temple.edu/miscareers/.

All MIS students are strongly encouraged to become involved in the Association for Information Systems (AIS). Temple AIS is the founding student chapter of the Association for Information Systems and serves as a student professional organization, open to any Temple University student interested in a Management Information Systems-related career. AIS offers students many opportunities to promote the study and practice of management information systems including professional development, social, and community activities.

## Summary of Requirements

## University Requirements

All new students starting in the 2013-2014 academic year and beyond are required to complete the university's General Education (GenEd) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of reenrollment.

## College Requirements

Students must meet College Graduation Requirements, including the requirements of the major listed below. Management Information Systems students must attain a 2.0 GPA in the major, including a minimum grade of C in every course, and a 2.0 cumulative GPA in order to graduate. Use the major GPA calculator at www.fox.temple.edu/cms_academics/dept/advising/ to calculate the GPA in the major.

## Major Requirements for new students

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

## Suggested Sequence for new students

## Requirements of the Management Information Systems Major

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Note that minimum grades of C are required in the courses below. |  |  |  |  |
| Semester 5 |  |  |  |  |
| Management Information Systems | 2501 | Enterprise IT Architecture | 3 |  |
| Management Information Systems | 2502 | Data Analytics | 3 |  |
| Semester 6 |  |  |  |  |
| Management Information Systems | 3501 | Data-Centric Application Development | 3 |  |
| Management Information Systems | 3504 | Digital Design and Innovation | 3 |  |
| Semester 7 |  |  |  |  |
| Management Information Systems | $3535 *$ | Lead Global Digital Projects | 3 |  |
| Select one elective from this list: |  |  |  |  |
| Management Information Systems | 3503 | User Interface Design | 3 |  |
| Management Information Systems | 3533 | Electronic Commerce Site Design |  |  |
| Management Information Systems | 3534 | Strategic Management of Information Technology |  |  |
| Management Information Systems | 3536 | Information Systems Innovation |  |  |
| Management Information Systems | 3537 | Internet Enabled Supply Chains |  |  |
| Management Information Systems | 3538 | Social Media Innovation |  |  |
| Management Information Systems | 3580 | Special Topics |  |  |
| Management Information Systems | 3581 | Co-operative Experience in Management |  |  |
| Management Information Systems | 3582 | Independent Study |  |  |
| Management Information Systems | 3682 | Independent Study |  |  |
| Semester 8 |  |  |  |  |
| Management Information Systems | $4596 * *$ | Information Systems Integration |  |  |
| Subtotal |  |  | $\mathbf{2 1}$ |  |

*This course will replace International Business Administration 3101 in the Fox upper-division foundation unless a second major or minor is added. Please see an advisor regarding this exception if adding a second major.
**This major capstone is taken in the final semester, and all prerequisites must be met.

## Suggested Sequence of the Management Information Systems Major

Please note that this sequence is suggested only, ensuring prerequisites are met. Students' academic sequences may differ based on individual academic plans.

## Semester I - Fall

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Statistics | 1001 | Pre-Calculus for Business | 3 |  |
| Economics | 1101 | Macroeconomic Principles | 3 |  |


| Human Resource <br> Management | 1101 | Leadership \& Organizational Management | 3 |  |
| :--- | :--- | :--- | :---: | :---: |
| English | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | $08 x x$ or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | $\mathbf{1 6}$ |  |

Semester II - Spring

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Statistics | 1102 | Calculus for Business | 3 |  |
| Economics | 1102 | Microeconomic Principles | 3 |  |
| Legal Studies | 1101 | Legal Environment of Business | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | $08 x x$ or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

## Semester III - Fall

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Statistics | 2103 | Business Statistics <br> \{waives GenEd GQ requirement $\}$ | 4 |  |
| Accounting | 2101 | Financial Accounting | 3 |  |
| Management Information <br> Systems | 2101 | Information Systems in Organizations | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08 xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | $\mathbf{1 6}$ |  |

Semester IV - Spring

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :---: |
| Accounting | 2102 | Managerial Accounting | 3 |  |
| Marketing | 2101 | Marketing Management | 3 |  |
| Business Administration | $2101 \wedge$ | Professional Development Strategies | 1 |  |
| Business Administration | 2196 | Business Communications | 3 | WI |
| Risk Management \& | 2101 | Introduction to Risk Management | 3 |  |
| Insurance |  |  |  |  |
| GenEd | G8xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | $\mathbf{1 6}$ |  |

## Semester V - Fall

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Finance | 3101 | Financial Management | 3 |  |
| Management Science / <br> Operations Management | 3101 | Pperations Management | 3 |  |


| Business Administration | 3102 | Business Society \& Ethics | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Management Information Systems | 2501 | Enterprise IT Architecture | 3 |  |
| Management Information Systems | 2502 | Data Analytics | 3 |  |
| Subtotal |  |  | 15 |  |
| Semester VI - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 3103 | Integrative Business Applications | 3 |  |
| Management Information Systems | 3501 | Data-Centric Application Development | 3 |  |
| Management Information Systems | 3504 | Digital Design and Innovation | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester VII - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 4101 | Global Business Policies | 3 |  |
| Management Information Systems | 3535 | Lead Global Digital Projects | 3 |  |
| MIS major elective |  | Select one course from the elective list above | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Free Elective |  |  | 4 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester VIII - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Management Information Systems | 4596 | Information Systems Integration | 3 | WI |
| Free Elective |  |  | 3 |  |
| Free Elective |  |  | 3 |  |
| Free Elective |  |  | 3 |  |
| Free Elective |  |  | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Total credits for the B.B.A. in Management Information Systems: |  |  | 124 |  |
|  |  |  |  |  |
| MMIS majors take a restricted section of Business Administration 2101 taught by the MIS department. |  |  |  |  |

## Accelerated 3 Year BBA

Motivated students can accelerate their BBA program to finish in 3 years. Please see the suggested sequence.

## Minors

## Management Information Systems Minor

A minor in Management Information Systems provides undergraduate students the ability to specify, select, utilize, and apply information technology (IT) to their major field of study. The minor provides the skills and terminology needed to become an expert user of IT in the business world.

## Who Should Minor in Management Information Systems?

Business students will benefit from a minor in Management Information Systems. The minor in Management Information Systems will position you for jobs in business application areas, consulting positions, technical liaisons, and selling and acquisition of business software.

## What is in it for me?

- Understand the key information technologies used by organizations.
- Learn how to specify technology solutions and engage with IT professionals.
- Understand the importance of business processes
- Identify how specific IT solutions are designed and implemented to increase efficiency and effectiveness.
- Apply data analytics to collect, store, analyze, and disseminate organizational information.

Requirements for the minor must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor. For more information or to declare Management Information Systems as your minor, visit: http://community.mis.temple.edu/programs/misminor/

## Information Technology Innovation and Entrepreneurship Minor (ITIE)

The Information Technology Innovation and Entrepreneurship (ITIE) minor integrates the enabling role of IT and the drive of entrepreneurial thinking. The minor includes courses in Entrepreneurship, Management Information Systems (MIS), and other related areas.

## Who Should Minor in ITIE?

The minor is appropriate for all majors and particularly relevant for students in Marketing, Finance, Human Resources, and Management Information Systems. ITIE minors can drive new IT-enabled innovative projects in existing firms and create technology enabled start-ups.

The minor is a joint venture between the Management Information Systems department and the Strategic Management department.

Requirements for the minor must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor. For more information or to declare ITIE as your minor, visit:
http://community.mis.temple.edu/programs/minor-in-itie/.

## Digital Marketing Minor

The Digital Marketing Minor prepares students for careers related to customer relationship management, social media, information architecture, e-commerce, search engine optimization, edetailing, site design, Internet research, demographic and sales analytics, blogging, and media design. The Digital Marketing minor is appropriate for all BBA students in the Fox School of Business and is particularly relevant for Marketing, Human Resource Management, Business Management, and Management Information Systems students.

Requirements for the minor must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor.

For more information about the Digital Marketing minor, visit:
http://community.mis.temple.edu/programs/digital-marketing-minor/

## Certificate

Students who wish to earn a Certificate in Management Information Systems can do so by completing the required courses. Courses cannot be used to meet certificate requirements if already used to meet the requirements for a major or a different minor or certificate. The certificate does not require the completion of the Business Minor or the Business Studies Minor. Certificates are not listed on the academic transcript.

Requirements for the certificate must be completed prior to graduation. Go to http://community.mis.temple.edu/form/?formname=mis_cert_dec_form to declare the Management Information Systems certificate.

# Marketing 

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www.fox.temple.edu/cms_academics/dept/marketing_and_supply_chain_management/
Marketing serves critical economic functions; companies of all sizes must develop effective marketing strategies to reach customers, which require an understanding of how to innovate and develop new products, create effective promotional programs, price products and services, and distribute these in a global marketplace. The marketing curriculum at Fox provides students with occupationally-viable skills and professional development opportunities.

Contemporary marketing focuses on performance metrics and the curriculum seeks to immerse students in the quantitative methods and the behavioral sciences necessary to address marketing problems. Experiential and active learning are common in the upper division curriculum and projects are often offered in cooperation with business and government organizations.

Students are encouraged to choose specific course sequences within the curriculum which offer more in-depth coverage of topics and provide job-ready skills; these sequences include: Supply Chain Management, Digital Marketing, Consumer Insights, Sales Force Effectiveness and Retailing. Information on these industry-focused sequences can be found on our department's web site at www.fox.temple.edu/cms_academics/dept/marketing_and_supply_chain_management/programs /undergraduate-academics/career-focused-sequences/.

Marketing majors have varied career choices, including:

- Advertising - including media planning, social media, or account management
- Direct Marketing
- Digital Marketing
- Global Marketing
- Logistics and supply chain management
- Marketing Management
- Marketing Research and consumer insights
- Non-profit organizations such as hospitals and universities
- Sales and sales management
- Wholesaling and Retail Management, including buying and allocations

Marketing majors are encouraged to become involved in the American Marketing Association (AMA), a student professional organization that offers students the opportunity to meet business leaders in marketing. The AMA hosts regular meetings and career development programs. The AMA is open to all majors. For more information, please see the AMA web site at www.templeama.org/ or contact Professor Craig Atwater at atwater@temple.edu (215-204-5220).

## Summary of Requirements

## University Requirements

All new students starting in the 2013-2014 academic year and beyond are required to complete the university's General Education (GenEd) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of reenrollment.

## College Requirements

Students must meet College Graduation Requirements, including the requirements of the major listed below. Students must attain an overall GPA of 2.0 and a 2.0 GPA in the major to graduate as a Marketing major. Use the major GPA calculator at
www.fox.temple.edu/cms_academics/dept/advising/ to calculate the GPA in the major.

## Major Requirements for new students

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

Suggested Sequence for new students
Requirements of Marketing Major

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Marketing | 3596 | Consumer \& Buyer Behavior | 3 | WI |
| Marketing | 3511 | Marketing Research | 3 |  |
| Marketing | $3553^{*}$ | International Marketing | 3 |  |
| Marketing | $4501^{* *}$ | Marketing Strategy | 3 |  |
|  |  |  |  |  |
| Choose three: |  | 9 |  |  |
| Marketing | 3501 | Integrated Marketing Communications |  |  |
| Marketing | 3502 | Information Management for Marketing Strategies |  |  |
| Marketing | 3503 | Promotion Management |  |  |
| Marketing | 3504 | Sales \& Sales Management |  |  |
| Marketing | 3505 | Entrepreneurial Marketing |  |  |
| Marketing | 3506 | Value Delivery Networks in Marketing |  |  |
| Marketing | 3507 | Direct Marketing |  |  |
| Marketing | 3508 | Digital Marketing |  |  |
| Marketing | 3509 | Quantitative Methods in Marketing Management |  |  |
| Marketing | 3515 | Principles of Supply Chain Management |  |  |
| Marketing | 3580 | Special Topics - Marketing |  |  |
| Marketing | 3581 | Marketing Internship/Co-operative Experience |  |  |


| Marketing | 3582 | Independent Study |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Subtotal |  |  | 21 |  |

NOTE: Some courses listed above have minimum grade requirements. Check course descriptions for details. *Marketing 3553 replaces International Business 3101 (Fundamentals of International Business) in the upper division foundation. This course is not calculated in the major GPA.
**This major capstone is taken in the final semester and all prerequisites must be met.

## Suggested Sequence of Marketing Major

Please note that this sequence is suggested only, ensuring prerequisites are met. Students' academic sequences may differ based on individual academic plans.

| Semester I - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 1001 | Precalculus for Business | 3 |  |
| Economics | 1101 | Macroeconomic Principles | 3 |  |
| Human Resource Management | 1101 | Leadership \& Organizational Management | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester II - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 1102 | Calculus for Business | 3 |  |
| Economics | 1102 | Microeconomic Principles | 3 |  |
| Legal Studies | 1101 | Legal Environment of Business | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3-4 |  |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Semester III - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 2103 | Business Statistics <br> \{waives GenEd GQ requirement \} | 4 |  |
| Accounting | 2101 | Financial Accounting | 3 |  |
| Management Information Systems | 2101 | Information Systems in Organizations | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester IV - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Accounting | 2102 | Managerial Accounting | 3 |  |
| Marketing | 2101 | Marketing Management | 3 |  |
| Business Administration | 2101 | Professional Development Strategies | 1 |  |


| Business Administration | 2196 | Business Communications | 3 | WI |
| :---: | :---: | :---: | :---: | :---: |
| Risk Management \& Insurance | 2101 | Introduction to Risk Management | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester V - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Finance | 3101 | Financial Management | 3 |  |
| Management Science / <br> Operations Management | 3101 | Operations Management | 3 |  |
| Business Administration | 3102 | Business Society \& Ethics | 3 |  |
| Marketing | 3596 | Consumer \& Buyer Behavior | 3 | WI |
| Marketing | 3511 | Marketing Research | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester VI - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 3103 | Integrative Business Applications | 3 |  |
| Marketing | $3501 / 3502 / 3503 / 3504 /$ <br> $3505 / 3506 / 3507 / 3508 /$ <br> $3509 / 3515 / 3580 / 3581 /$ <br> 3582 | Select one | 3 |  |
| Marketing | $3501 / 3502 / 3503 / 3504 /$ <br> $3505 / 3506 / 3507 / 3508 /$ <br> $3509 / 3515 / 3580 / 3581 /$ <br> 3582 | Select one | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester VII - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 4101 | Global Business Policies | 3 |  |
| Marketing | $3501 / 3502 / 3503 / 3504 /$ $3505 / 3506 / 3507 / 3508 /$ $3509 / 3515 / 3580 / 3581 /$ 3582 | Select one | 3 |  |
| Marketing | 3553 | International Marketing | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Free Elective |  |  | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester VIII - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Marketing | 4501 | Marketing Strategy | 3 |  |
| Free Elective |  |  | 3 |  |
| Free Elective |  |  | 3-4 |  |
| Free Elective |  |  | 3 |  |
| Free Elective |  |  | 3 |  |


| Subtotal |  |  | $15-16$ |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| Total credits for the B.B.A. in Marketing: |  | 124 |  |  |

## BBA Online Program Option

The Marketing major is available as an online BBA degree completion program designed for new students ready to start their junior year in a business curriculum. Please see our web site at www.fox.temple.edu/cms_academics/undergraduate-2/online-bba/ for program and admission information.

## Accelerated 3 Year BBA

Motivated students can accelerate their BBA program to finish in 3 years. Please see the suggested sequence at www.fox.temple.edu/cms_academics/dept/marketing_and_supply_chain_management/programs /undergraduate-academics/3-1-program/.

## Minors

## The Marketing Minor

Students in the Fox School who are interested in expanding their career options through a general knowledge of marketing principles and specializing in an area of marketing should consider completing a minor in Marketing. The requirements must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor.

## The Digital Marketing Minor

The Digital Marketing Minor prepares students for careers related to customer relationship management, social media, information architecture, e-commerce, search engine optimization, edetailing, site design, internet research, demographic and sales analytics, blogging, and media design. The Digital Marketing minor is appropriate for all BBA students in the Fox School of Business and is particularly relevant for Marketing, Human Resource Management, Business Management, and MIS students. The requirements must be completed prior to graduation. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor.

## 4+1 Master of Education Degree (M.Ed.)

The 4+1 Master of Education (M.Ed.) program is designed for students who are interested in pursuing a Master of Education while completing the Bachelor of Business Administration (B.B.A.) in Marketing requirements. After completion of the programs, students earn a B.B.A.
degree and an M.Ed. in Business, Computers \& Information Technology Education (BCITE) or Marketing Education (ME), and a Commonwealth of Pennsylvania Instructional I Teaching Certificate in BCITE or ME. There is an application process. The deadline to apply is June 15th for the fall admittance. For more information please contact Dr. D. James Gilmour.

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## Real Estate

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The real estate major is designed to provide an educational foundation for students interested in learning about real estate and real estate markets and/or pursuing careers in real estate. Traditional career paths include real estate investment and financial analysis, real estate financing and mortgage lending, real estate appraisal and valuation, property management, residential and commercial brokerage and marketing, and corporate real estate analysis.

Core competencies to be developed include the ability to analyze real estate investment opportunities from investor and lender perspectives, conduct asset and risk assessments and implement risk management strategies, understand the dynamics of real estate markets, and develop an understanding of the legal framework surrounding real estate ownership, title transfer, and the regulatory and legal requirements, including agency obligations, common in real estate transactions.

All real estate-interested students are encouraged to participate in Temple Real Estate Organization (TREO), the Fox School student professional organization (SPO) for real estate interested students. TREO meets regularly throughout the semester and has an active real estate speaker series. A Temple University real estate student listserv serves as a conduit for various internships and job/career opportunities from real estate companies in the local area. Temple University also hosts a chapter of Alpha Sigma Gamma, the International Real Estate Honorary Society. Alpha Sigma Gamma is the premier honorary organization for real estate students, faculty and professionals with over 30 university chapters and program affiliates. Membership in ASG is based on academic achievement. Real estate majors are eligible for a number of
professional and university scholarships and financial awards, including the Fox School's E. Fred Kemner Scholarship Award, devoted exclusively to Temple real estate students. Students interested in any of the opportunities above should contact Professor Huffman for more information.

## Summary of Requirements

## University Requirements

All students starting in the 2013-2014 academic year and beyond are required to complete the university's General Education (GenEd) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of reenrollment.

## College Requirements

Students must meet College Graduation Requirements, including the requirements of the major listed below. Students must maintain a 2.0 GPA overall and a 2.0 GPA in the major to graduate. Use the major GPA calculator at www.fox.temple.edu/cms_academics/dept/advising/ to calculate the GPA in the major.

## Major Requirements for new students

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

## Suggested Sequence for new students

Requirements of Real Estate Major

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Real Estate | 3501 | Real Estate Fundamentals | 3 |  |
| Real Estate | 3502 | Real Estate Practice | 3 |  |
| Finance | 3504 | Intermediate Corporate Finance | 3 |  |
| Finance | 3507 | Investments | 3 |  |
| Finance | 3509 | Real Estate Investment \& Finance | 3 |  |
| Finance | $3551 \wedge$ | International Finance | 3 |  |
| Finance | $4597 \wedge \wedge$ | Seminar in Real Estate Asset Analysis (Spring only) | 3 | WI |
| Subtotal |  |  | $\mathbf{2 1}$ |  |

[^1]
## Suggested Sequence of Real Estate Major

Please note that this sequence is suggested only, ensuring prerequisites are met. Students' academic sequences may differ based on individual academic plans.

| Semester I - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 1001 | Pre-Calculus for Business | 3 |  |
| Economics | 1101 | Macroeconomic Principles | 3 |  |
| Human Resource Management | 1101 | Leadership \& Organizational Management | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester II - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 1102 | Calculus for Business | 3 |  |
| Economics | 1102 | Microeconomic Principles | 3 |  |
| Legal Studies | 1101 | Legal Environment of Business | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3-4 |  |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Semester III - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 2103 | Business Statistics <br> \{waives GenEd GQ requirement \} | 4 |  |
| Accounting | 2101 | Financial Accounting | 3 |  |
| Management Information Systems | 2101 | Information Systems in Organizations | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester IV - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Accounting | 2102 | Managerial Accounting | 3 |  |
| Marketing | 2101 | Marketing Management | 3 |  |
| Business Administration | 2101 | Professional Development Strategies | 1 |  |
| Business Administration | 2196 | Business Communications | 3 | WI |
| Risk Management \& Insurance | 2101 | Introduction to Risk Management | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester V - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Finance | 3101 | Financial Management | 3 |  |
| $\begin{array}{\|l} \hline \text { Management Science / } \\ \text { Operations Management } \\ \hline \end{array}$ | 3101 | Operations Management | 3 |  |


| Business Administration | 3102 | Business Society \& Ethics | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Real Estate | $\begin{gathered} 3501 \\ \text { or } \\ 3502 \end{gathered}$ | Real Estate Fundamentals or Real Estate Practice | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 15 |  |
| Semester VI - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 3103 | Integrative Business Applications | 3 |  |
| Real Estate | $\begin{gathered} 3501 \\ \text { or } \\ 3502 \end{gathered}$ | ```Real Estate Fundamentals or Real Estate Practice``` | 3 |  |
| Finance | $\begin{gathered} 3504 \\ \text { or } \\ 3507 \end{gathered}$ | Intermediate Corporate Finance or <br> Investments | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Free Elective |  |  | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester VII - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 4101 | Global Business Policies | 3 |  |
| Finance | $\begin{gathered} 3504 \\ \text { or } \\ 3507 \\ \hline \end{gathered}$ | Intermediate Corporate Finance or Investments | 3 |  |
| Finance | 3509 | Real Estate Investment and Finance | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Free Elective |  |  | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester VIII - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Finance | 3551 | International Finance | 3 |  |
| Finance | 4597 | Seminar in Real Estate Asset Analysis | 3 | WI |
| Free Elective |  |  | 3 |  |
| Free Elective |  |  | 3-4 |  |
| Free Elective |  |  | 3 |  |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Total credits for the B.B.A. in Real Estate: |  |  | 124 |  |

## Accelerated 3 Year BBA

Motivated students can accelerate their BBA program to finish in 3 years. Please see the suggested sequence at www.fox.temple.edu/web_dev/accel_docs/3yearBBAinRealEstate.pdf.

# Risk Management \& Insurance 

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Temple University's program in Risk Management and Insurance (RMI) is nationally recognized. Located in the Department of Risk, Insurance, and Healthcare Management, the program prepares students to identify and evaluate various sources of risk, then select and implement solutions to control these risks through insurance and other mechanisms of risk transfer and distribution.

Graduates of this program often enter the risk management or employee benefit departments of large businesses and other organizations. They may also take challenging positions within insurance or benefit consulting firms, brokerage firms, agency operations, or insurance companies.

Risk management and insurance majors are strongly encouraged to become active in the Sigma chapter of Gamma Iota Sigma, Temple's national award-winning professional student organization in Risk Management, Insurance, and Actuarial Science. The organization hosts numerous guest speakers from the industry, sponsors a variety of career development seminars, and maintains a widely-distributed résumé book. For more information, please contact the GIS President, at 215-204-9368 or visit the web site at www.sigmachapter.org.

## Major Tracks within Risk Management \& Insurance

Students in the Risk Management \& Insurance major may select from one of three tracks depending on their interests. These include:

- Employee Benefit Management
- Healthcare Risk Management
- Property-Liability/Corporate Risk Management


## Summary of Requirements

## University Requirements

All students starting in the 2013-2014 academic year and beyond are required to complete the university's General Education (GenEd) curriculum.

Note that students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University requirements current at the time of reenrollment.

## College Requirements

Students must meet College Graduation requirements, including the requirements of the major listed below. Students pursuing any of the Risk Management and Insurance major/tracks must attain a 2.0 cumulative GPA and 2.0 in the major/track to graduate with the Risk Management major. Use the major GPA calculator at www.fox.temple.edu/cms_academics/dept/advising/ to calculate the GPA in the major.

## Major Requirements

Students must follow the Major Requirements and College Requirements current at the time of declaration. Students not continuously enrolled who have not been approved for a Leave of Absence or study elsewhere must follow University, College, and Major requirements current at the time of re-enrollment.

## Employee Benefits track

Healthcare Risk Management track
Property-Liability/Corporate Risk Management track

## Suggested Sequences

## Employee Benefits track

Healthcare Risk Management track
Property-Liability/Corporate Risk Management track

## Requirements of Employee Benefits Track

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Risk Management \& Insurance | 3501 | Life \& Health Insurance \& Employee Benefits | 3 |  |
| Risk Management \& Insurance | 3502 | Property \& Liability Insurance Coverages | 3 |  |
| Risk Management \& Insurance | 3503 | Retirement Plans | 3 |  |
| Risk Management \& Insurance | $3567^{*}$ | International Risk Management | 3 |  |
| Risk Management \& Insurance | $4596^{* *}$ | Advanced Topics in Health \& Welfare Employee <br> Benefits | 3 | WI |
| Select one: |  |  | 3 |  |
| Risk Management \& Insurance | 3504 | Property \& Liability Insurance Functions |  |  |
| Risk Management \& Insurance | 3505 |  <br> Insurance |  |  |
| Risk Management \& Insurance | 4597 | Global Corporate Risk Management |  | WI |
| Healthcare Management | $4596^{* * *}$ | Healthcare Quality \& Risk Management | WI |  |
| Subtotal |  |  |  |  |
| * Risk Management \& Insurance 3567 replaces International Business 3101 (Fundamentals of International <br> Business) in the upper division foundation. This course is not calculated in the major GPA. |  |  |  |  |
| ** This major capstone is taken in the final fall semester, and all prerequisites must be met. |  |  |  |  |
| *** Healthcare Management 4596 is offered only in fall. Completion of prerequisites of Healthcare Management |  |  |  |  |
| 3501 and 3502 required. Healthcare Management 3501 and 3502 can replace two of your free electives below (6 <br> credits). |  |  |  |  |

## Suggested Sequence of the Employee Benefits Track

Please note that this sequence is suggested only, ensuring prerequisites are met. Students' academic sequences may differ based on individual academic plans.

| Semester I - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 1001 | Pre-Calculus for Business | 3 |  |
| Economics | 1101 | Macroeconomic Principles | 3 |  |
| Human Resource Management | 1101 | Leadership \& Organizational Management | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester II - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 1102 | Calculus for Business | 3 |  |
| Economics | 1102 | Microeconomic Principles | 3 |  |
| Legal Studies | 1101 | Legal Environment of Business | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester III - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 2103 | Business Statistics <br> \{waives GenEd GQ requirement \} | 4 |  |
| Accounting | 2101 | Financial Accounting | 3 |  |
| Management Information Systems | 2101 | Information Systems in Organizations | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester IV - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Accounting | 2102 | Managerial Accounting | 3 |  |
| Marketing | 2101 | Marketing Management | 3 |  |
| Business Administration | 2101 | Professional Development Strategies | 1 |  |
| Business Administration | 2196 | Business Communications | 3 | WI |
| Risk Management \& Insurance | 2101 | Introduction to Risk Management | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester V - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Finance | 3101 | Financial Management | 3 |  |
| Management Science / Operations Management | 3101 | Operations Management | 3 |  |


| Business Administration | 3102 | Business Society \& Ethics | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Risk Management \& Insurance | 3501 | Life \& Health Insurance \& Employee Benefits | 3 |  |
| Risk Management \& Insurance | 3502 | Property \& Liability Insurance Coverages | 3 |  |
| Subtotal |  |  | 15 |  |
| Semester VI - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 3103 | Integrative Business Applications | 3 |  |
| Risk Management \& Insurance | 3503 | Retirement Plans | 3 |  |
| Risk Management \& Insurance | 3567 | International Risk Management | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Free Elective |  |  | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester VII - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Risk Management \& Insurance | 4596* | Advanced Topics in Health \& Welfare Employee Benefits | 3 | WI |
| Select one of the following: |  |  | 3 |  |
| Risk Management \& Insurance Risk Management \& Insurance <br> Risk Management \& Insurance Healthcare Management | 3504 3505 4597 $4596 * *$ | Property \& Liability Insurance Functions <br> Actuarial Applications in Risk Management <br> \& Insurance <br> Global Corporate Risk Management <br> Healthcare Quality \& Risk Management |  | $\begin{aligned} & \text { WI } \\ & \text { WI } \end{aligned}$ |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Free Elective |  |  | 4 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester VIII - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 4101 | Global Business Policies | 3 |  |
| Free Elective |  |  | 3 |  |
| Free Elective |  |  | 3 |  |
| Free Elective |  |  | 3 |  |
| Free Elective |  |  | 3 |  |
| Subtotal |  |  | 15 |  |
| * This course is offered only in the fall semester. |  |  |  |  |
| ** This course is offered only in the fall semester and has prerequisites of Healthcare Management 3501 and 3502. Students who want to take this option as an elective should plan to take Healthcare Management 3501 in Semester 5 (switching Business Administration 3102 to semester 6 to replace free elective), Healthcare Management 3502 in Semester 6, and Healthcare Management 4596 in Semester 7. Healthcare Management 3501 and Healthcare Management 3502 can be used to replace free electives. |  |  |  |  |
| Total credits for the B.B.A. in Employee Benefits Track: | Risk Manage | \& Insurance/ | 124 |  |

## Requirements of Healthcare Risk Management Track

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Risk Management \& Insurance | 3501 | Life \& Health Insurance \& Employee Benefits | 3 |  |
| Risk Management \& Insurance | 3502 | Property \& Liability Insurance Coverages | 3 |  |
| Risk Management \& Insurance | $3567^{*}$ | International Risk Management | 3 |  |
| Healthcare Management | 3501 | Introduction to Health Services Systems | 3 |  |
| Healthcare Management | 3502 | Healthcare Financing \& Information Technology | 3 |  |
| Healthcare Management | $4596^{* *}$ | Healthcare Quality \& Risk Management | 3 | WI |
| Economics | 3507 | Health Economics | 3 |  |
| Subtotal |  |  | $\mathbf{2 1}$ |  |
| * Risk Management \& Insurance <br> Business) in the upper division foundation. This course is not calculated in the major GPA. |  |  |  |  |
| ** This major capstone is offered only in fall semester and and has prerequisites of Healthcare Management 3501 <br> and 3502. |  |  |  |  |

## Suggested Sequence of the Healthcare Risk Management Track

Please note that this sequence is suggested only, ensuring prerequisites are met. Students' academic sequences may differ based on individual academic plans.

| Semester I - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 1001 | Pre-Calculus for Business | 3 |  |
| Economics | 1101 | Macroeconomic Principles | 3 |  |
| Human Resource Management | 1101 | Leadership \& Organizational Management | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester II - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 1102 | Calculus for Business | 3 |  |
| Economics | 1102 | Microeconomic Principles | 3 |  |
| Legal Studies | 1101 | Legal Environment of Business | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester III - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 2103 | Business Statistics <br> \{waives GenEd GQ requirement | 4 |  |
| Accounting | 2101 | Financial Accounting | 3 |  |
| Management Information Systems | 2101 | Information Systems in Organizations | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |


| Subtotal |  |  | 16 |  |
| :---: | :---: | :---: | :---: | :---: |
| Semester IV - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Accounting | 2102 | Managerial Accounting | 3 |  |
| Marketing | 2101 | Marketing Management | 3 |  |
| Business Administration | 2101 | Professional Development Strategies | 1 |  |
| Business Administration | 2196 | Business Communications | 3 | WI |
| Risk Management \& Insurance | 2101 | Introduction to Risk Management | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester V - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Finance | 3101 | Financial Management | 3 |  |
| Management Science / Operations Management | 3101 | Operations Management | 3 |  |
| Risk Management \& Insurance | 3501 | Life \& Health Insurance \& Employee Benefits | 3 |  |
| Risk Management \& Insurance | 3502 | Property \& Liability Insurance Coverages | 3 |  |
| Healthcare Management | 3501 | Introduction to Health Services Systems | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester VI - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 3102 | Business Society \& Ethics | 3 |  |
| Business Administration | 3103 | Integrative Business Applications | 3 |  |
| Risk Management \& Insurance | 3567 | International Risk Management | 3 |  |
| Healthcare Management | 3502 | Healthcare Financing \& Information Technology | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester VII - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 4101 | Global Business Policies | 3 |  |
| Healthcare Management | 4596* | Healthcare Quality \& Risk Management | 3 | WI |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Free Elective |  |  | 4 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester VIII - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Economics | 3507 | Health Economics | 3 |  |
| Free Elective |  |  | 3 |  |
| Free Elective |  |  | 3 |  |
| Free Elective |  |  | 3 |  |
| Free Elective |  |  | 3 |  |



## Requirements of Property-Liability/Corporate Risk Management Track

| Subject | Course | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Risk Management \& Insurance 3501 | Life \& Health Insurance \& Employee Benefits | 3 |  |  |
| Risk Management \& Insurance 3502 | Property \& Liability Insurance Coverages | 3 |  |  |
| Risk Management \& Insurance | 3504 | Property \& Liability Insurance Functions | 3 |  |
| Risk Management \& Insurance | $3567^{*}$ | International Risk Management | 3 |  |
| Risk Management \& Insurance $4597^{* *}$ | Global Corporate Risk Management | 3 | WI |  |
| Select one: |  | 3 |  |  |
| Risk Management \& Insurance 3503 | Retirement Plans |  |  |  |
| Risk Management \& Insurance | 3505 | Actuarial Applications in Risk Management \& Insurance |  |  |
| Subtotal |  |  | $\mathbf{1 8}$ |  |
| * Risk Management \& Insurance 3567 replaces International Business 3101 (Fundamentals of International <br> Business) in the upper division foundation. This course is not calculated in the major GPA. |  |  |  |  |
| ** This major capstone is taken in the final semester, and all prerequisites must be met. |  |  |  |  |

## Suggested Sequence of the Property-Liability/Corporate Risk Management Track

Please note that this sequence is suggested only, ensuring prerequisites are met. Students' academic sequences may differ based on individual academic plans.

## Semester I - Fall

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Statistics | 1001 | Pre-Calculus for Business | 3 |  |
| Economics | 1101 | Macroeconomic Principles | 3 |  |
| Human Resource Management | 1101 | Leadership \& Organizational Management | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester II - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 1102 | Calculus for Business | 3 |  |
| Economics | 1102 | Microeconomic Principles | 3 |  |
| Legal Studies | 1101 | Legal Environment of Business | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 15 |  |


| Semester III - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Statistics | 2103 | Business Statistics <br> \{waives GenEd GQ requirement $\}$ | 4 |  |
| Accounting | 2101 | Financial Accounting | 3 |  |
| Management Information Systems | 2101 | Information Systems in Organizations | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester IV - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Accounting | 2102 | Managerial Accounting | 3 |  |
| Marketing | 2101 | Marketing Management | 3 |  |
| Business Administration | 2101 | Professional Development Strategies | 1 |  |
| Business Administration | 2196 | Business Communications | 3 | WI |
| Risk Management \& Insurance | 2101 | Introduction to Risk Management | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester V - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Finance | 3101 | Financial Management | 3 |  |
| $\begin{array}{\|l} \hline \text { Management Science / } \\ \text { Operations Management } \\ \hline \end{array}$ | 3101 | Operations Management | 3 |  |
| Business Administration | 3102 | Business Society \& Ethics | 3 |  |
| Risk Management \& Insurance | 3501 | Life \& Health Insurance \& Employee Benefits | 3 |  |
| Risk Management \& Insurance | 3502 | Property \& Liability Insurance Coverages | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester VI - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 3103 | Integrative Business Applications | 3 |  |
| Risk Management \& Insurance | 3504 | Property \& Liability Insurance Functions | 3 |  |
| Risk Management \& Insurance | 3567 | International Risk Management | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Semester VII - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Administration | 4101 | Global Business Policies | 3 |  |
| Risk Management \& Insurance | $\begin{gathered} 3503 \\ \text { or } \\ 3505 \end{gathered}$ | ```Retirement Plans or Actuarial Applications in Risk Management & Insurance``` | 3 |  |
| GenEd | 08xx or 09xx | GenEd Breadth Course | 3 |  |
| Free Elective |  |  | 3 |  |


| Free Elective |  |  | 4 |  |
| :---: | :---: | :---: | :---: | :---: |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Semester VIII - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Risk Management \& Insurance | 4597 | Global Corporate Risk Management | 3 | WI |
| Free Elective |  |  | 3 |  |
| Free Elective |  |  | 3 |  |
| Free Elective |  |  | 3 |  |
| Free Elective |  |  | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Total credits for the B.B.A. in Risk Management \& Insurance/ Property-Liability/Corporate Risk Management Track: |  |  | 124 |  |

## RMI \& HRM Focus

The Risk Management Insurance (RMI) Department and Human Resource Management (HRM) Department offer several complimentary courses for students interested in a career in employee benefits and/or human resource management. These courses allow students to broaden their career options by taking advantage of the cross-training offered by these departments.

- HRM major with a RMI focus: Students take Risk Management \& Insurance 3501 (Life \& Health Insurance \& Employee Benefits) and Risk Management \& Insurance 3503 (Retirement Plans).
- RMI major with a HRM focus: Students take Human Resource Management 2501 (Introduction to Human Resource Management) and Human Resource Management 3511 (Compensation Management).
- Dual HRM/RMI major: Students fulfill all requirements for both majors.

For more information on joint HRM/RMI courses, contact Rob Drennan at 215-204-8894.

## Minor

Students in any college who are interested in the health professions and want enhance their skills by understanding the business principles underlying healthcare systems should consider a minor in Healthcare Management. Risk Management majors who complete the Healthcare track are not eligible for the minor. Courses cannot be used to meet minor requirements if already used to meet the requirements for a major or a different minor.

## CENTER FOR THE ARTS

The Center for the Arts at Temple University is a comprehensive and unified academic unit consisting of the Boyer College of Music and Dance, Tyler School of Art, and Division of Theater, Film and Media Arts.

The Center for the Arts offers the BA, BS, BM, BFA, MA, MM, MS, MED, MFA, MMT, DMA and PhD degrees and a collaboratively oriented community of award-winning faculty and professionals within the context of an urban major research university located in one of the most culturally vital cities in the United States.

Sharing the Center's vision of growth and sustainability as a cultural leader in the 21st century, its donors and alumni serve as ambassadors to the mission and represent some of the most prolific and noted individuals in national and international cultural arenas.

The Center for the Arts at Temple University serves its neighboring communities in addition to national and international audiences through more than 500 events, performances, lectures and exhibits annually.

The Center for the Arts is overseen by its Dean and the Vice Provost for the Arts at Temple University, Dr. Robert T. Stroker.
arts.temple.edu

## TYLER SCHOOL OF ART

Founded 1935
Robert Stroker, Vice Provost for the Arts and Dean for the Center for the Arts 2001 North 13th Street
Philadelphia, PA 19122
215-777-9000
http://tyler.temple.edu/
tyler@temple.edu

## Introduction

## Goals and Objectives

The Tyler School of Art provides a comprehensive curriculum in fine arts, crafts, design, art education, art history, and architecture. The Bachelor of Fine Arts (B.F.A.) professional programs are offered in Ceramics/Glass, Fibers and Material Studies, Graphic and Interactive

Design, Metals/Jewelry/CAD-CAM, Painting/Drawing, Photography, Printmaking, Sculpture, and B.F.A. Studio with an Art Education Concentration. The Tyler School of Art also offers the Bachelor of Arts (B.A.) in Art (no longer accepting students for the Main campus program but still available on the Japan campus), the B.A. in Art History, the B.A. in Visual Studies, the Bachelor of Science (B.S.) in Art Education, the B.S. in Architecture, the B.S. in Facilities Management and the B.S. in Architectural Preservation.

Summer classes, pre-college programs and weekend workshops are available. For information on graduate programs, please go to the Tyler web site at tyler.temple.edu or to www.temple.edu/grad.

## History

Stella Elkins Tyler donated her estate to Temple University in the early 1930s. With an interest in progressive education and a deep appreciation of her mentor, the sculptor Boris Blai, Mrs. Tyler offered her estate with the expressed wish that, through Boris Blai, it would become an environment for the advancement of the fine arts, scholarly study in the arts, and individual creativity.

As founding Dean of Tyler School of Art, Blai instilled within the School a commitment to progressive education, emphasizing the student's mastery of technique within the framework of a liberal arts curriculum. Dean Blai insisted upon individual attention to each student's needs as the basis of successful teaching. During his 25-year tenure Dean Blai shaped the school into one of the finest visual arts centers in the country, and his founding ideals still remain paramount to Tyler's educational philosophy.

In 1960 Dean Charles Le Clair succeeded Boris Blai. During this period the Tyler Campus was improved with construction of a residence hall and two studio/classroom buildings. In 1966 Dean Le Clair founded the Tyler Study Abroad program in Rome, Italy. Tyler's Rome Campus thrives today as one of the most respected fine arts study abroad programs in Europe. The program has expanded to include a full range of liberal arts, architecture, business, and law courses, with an emphasis on topics relating to Rome, Italy, and the European Common Market.

Throughout the 1960s and 1970s, Tyler's curriculum continued to grow in response to new definitions of art-making and the role of art in society. New programs and modern facilities in design, ceramics, glass, metals, and photography were added. During this time, Tyler developed the Art and Art Education department (changed in 2013 to Art Education and Community Arts Practices) and the Art History department on Temple's Main Campus. Today, the curriculum at Tyler continues to address contemporary needs by incorporating digital technology, video, installation, performance, community arts, and the newest degree program, the B.A. in Visual Studies, inaugurated in fall 2011.

In January 2009, we opened our doors to the new Tyler facility on main campus. Award-winning architect Carlos Jimenez, designer of some of the country's premier art education facilities and exhibition spaces, designed Temple's new Tyler School of Art building. The new Tyler building is located adjacent to the Esther Boyer College of Music and Dance, the new Tyler Architecture

Building (opened 2012) and the departments of Film and Media Arts and Theater to form a "mini arts campus" within Temple's main campus. In June 2012, the Temple University Board of Trustees voted to create the Temple University Center for the Arts, uniting the Boyer College of Music and Dance, Tyler School of Art, and the Division of Theater, Film and Media Arts under one administrative umbrella. For more information on the Arts at Temple, go to http://arts.temple.edu.

Easy access to the wealth of academic courses in Temple's other schools and colleges, athletics, residence halls, student parking, student organizations, and the active campus life of Temple University adds cosmopolitan breadth to Tyler's studio and academic programs.

From its modest enrollment of 12 students in the first freshman class in 1935, Tyler now boasts a student body of over 1,400 . Today, Tyler is a dynamic organization, serving students at Temple's Main Campus and the Temple University Rome and Tokyo campuses. For over 70 years, the foundation of Tyler's program has been a faculty of practicing artists and scholars teaching highly-talented and motivated students.

## Accreditation

Tyler School of Art, Temple University is an accredited member of the National Association of Schools of Art and Design (NASAD) and the Middle States Association of Colleges and Schools.

The Architecture Program is accredited by the National Architectural Accrediting Board (NAAB), the sole agency authorized to accredit U.S. professional degree programs in architecture. The Facilities Management program is in the process of applying for accreditation by IFMA, the International Facility Management Association.

According to the NAAB, "In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted a 6-year, 3-year, or 2-year term of accreditation, depending on the extent of its conformance with established educational standards. Master's degree programs may consist of a preprofessional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the preprofessional degree is not, by itself, recognized as an accredited degree."

## Admissions Information

Tyler Admissions Office
Suite 100
2001 N. 13th Street
Philadelphia, PA 19122
215-777-9090
tyler.temple.edu/admission-process
tylerart@temple.edu

Nicole Hall, Director
Grace Ahn, Senior Admissions Counselor
Lindsey Stevenson, Senior Admissions Counselor
Katie Ames, Administrative Assistant
General Information for freshman and transfer applicants to all programs (BA, BS, BFA)

Applicants to any Tyler program must meet the deadlines established by the Undergraduate Admissions Office. Please refer to tyler.temple.edu/admission-process for updated undergraduate deadline information as well as information regarding the academic requirements for admission. After the priority deadline dates listed by Temple Undergraduate Admissions, applications are accepted on a rolling admissions basis.

General Information for Intra-University Transfer Students
Temple students who wish to transfer into a Tyler program or Tyler students who wish to transfer into a different Tyler program should contact the Tyler Admissions Office for policies and procedures.

## Art, Art Education and Visual Studies

## Bachelor of Arts in Visual Studies and Bachelor of Science Programs

Entering undergraduates are admitted to the Tyler programs by the Director of Admissions of Temple University based on a review of the applicant's academic credentials and the results of the portfolio review. This procedure requires the applicant to file all records and test scores in the Office of Undergraduate Admissions of Temple University and to submit a portfolio. There is a specific format for the portfolio required; please review the information at the Tyler web site: tyler.temple.edu. Appointments for freshman portfolio reviews can be made by calling 215-7779090.

Transfer Students to the B.A. in Visual Studies and the B.S. in Art Education Programs Transfer applicants or freshmen with Advanced Placement or College-Level Studio Courses All transfer applicants must complete the Temple online application and send their transcripts, etc., to the Temple University Undergraduate Admissions Office. All students are required to submit a portfolio of work for admission and evaluation.

## Bachelor of Arts in Art

The B.A. in Art program on the Main campus of Temple University is no longer admitting new students. Those interested in a B.A. in Art may investigate the B.A. in Art offered through the Temple University Japan campus or consider the B.A. in Visual Studies offered through Tyler on
the Main campus of Temple University. Students who were previously enrolled in the B.A. in Art who wish to re-matriculate should review the re-enrollment policy under the Academic Policies section.

## Transfer Portfolio Format

The portfolio should be uploaded to temple.slideroom.com. SlideRoom charges a fee for this service. Transfers are reviewed by a committee, so they are not eligible for in-person reviews. You are required to submit images that represent each studio art course completed. Descriptions of each image should be included, indicating size, medium, title, the course in which the work was completed, and date completed. Applicants to the BA in Visual Studies and the BS in Art Education are required to submit the writing exercise as outlined in the portfolio requirements for these programs. Most transfer applicants should include the drawing exercise as well unless they have completed a college drawing course. For more information, refer to the Tyler web site: tyler.temple.edu/admission-process.

Please note that the Department of Art Education and Community Arts Practices will only accept up to 24 credits of studio toward either the B.A. in Art or the B.S. in Art Education degree.

Tyler accepts transfer students from institutions of higher education, depending on accreditation. The transfer student will be required to complete a minimum of 30 studio credits as a full-time student at the Tyler School of Art. In order to be considered for transfer credit to the B.A. or B.S. degree, studio credits must have been completed within the last 10 years, regardless of where those credits were completed.

## B.S. in Architecture, B.S. in Architectural Preservation, B.S. in Facilities Management

The three Architecture department programs all begin with the same two-year Architecture Foundations curriculum, also called the Architecture Undeclared curriculum. All freshman applicants to any of the three programs must complete the Temple online application and select "Architecture Undeclared" as their program of study. Admission will be granted to those students with strong academic credentials. Admission to the university does not guarantee admission to the one of the three degrees offered by the Architecture department. Students who clearly meet the academic requirements for admission are not required to submit a portfolio. Students who are accepted into another program at Temple who do not meet the academic requirements for admissions may present a portfolio. For specific portfolio format guidelines, please go to tyler.temple.edu/admission-process.

All students are initially admitted into the Architecture Foundation Program (Architecture Undeclared) and, if desired, apply for admission to the pre-professional Bachelor of Science in Architecture (Pre-Professional Program), or the B.S. in Facilities Management or the B.S. in Architectural Preservation during the fourth studio semester. Requirements for entrance into these programs are outlined on the Architecture web site at tyler.temple.edu/programs/architecture.

The professional degree in architecture offered by Tyler is the Master of Architecture (M.Arch) degree. Students completing the pre-professional B.S. in Architecture will have the option to
apply to the two-year M.Arch Professional Program in their senior year. Students from other Bachelor's programs can apply to the three-year Design Intensive Program.

All students admitted to the Architecture Department are guaranteed to graduate from one of the three undergraduate degree programs (the B.S. in Architecture, the B.S. in Facilities Management, or the B.S. in Architectural Preservation) as long as the academic requirements of the University are met, but admission into the B.S. in Architecture is limited and competitive. Students without college-level architecture studio coursework may apply for the fall semester only.

Students who are not accepted into the B.S. in Architecture may select either the B.S. in Facilities Management or the B.S. in Architectural Preservation as long as they are in good academic standing and have completed the required coursework.

For additional information, please go to tyler.temple.edu/programs/architecture.
Transfer students seeking advanced placement in architecture design studio will be evaluated by portfolio and the review of the transcripts. Admitted students not presenting a portfolio of work will automatically be placed in first-year design studio, regardless of previous credits. A maximum of 12 semester hours of credit will be allowed by the Program in relevant work experience, Advanced Placement, or CLEP examination. Matriculated, enrolled students may apply for work experience through the Director of Academic Services. Portfolios must be uploaded to temple.slideroom.com. SlideRoom charges a fee for this service.

## Architecture Portfolio Format

Admission to the architecture program is selective, and based on a review of the academic credentials. A portfolio is not required for admission. If the student is not selected for architecture but meets the general requirements for admission to Temple University and wishes to be considered for admission to architecture, he/she must submit a portfolio of artistic or creative work, as per requirements, procedures and assessment criteria specified by the Architecture Department. Portfolios must be uploaded at temple.slideroom.com. SlideRoom requires an additional fee for this service.

For complete portfolio format information for freshman and transfer applicants please go to tyler.temple.edu/admission-process.

## Intra-University Transfer Admission

Temple University students who apply as Intra-university transfer students are reviewed for admission to Architecture Foundation Studies based on GPA and availability of space in the program. Admission is selective. Typically, students with a 3.0 or higher GPA are considered. While a portfolio is not required, students may wish to submit a portfolio or work to enhance their application. Students with previous college credits in architecture should submit a portfolio of work that represents studio coursework taken for consideration for advanced standing. Portfolios are to be uploaded at temple.slideroom.com. Follow the instructions on the SlideRoom web site to do this. SlideRoom requires an additional fee for this service. All intrauniversity transfer students (regardless of the number of credit hours completed) must complete
all architecture courses from Architecture Foundation Studies (or submit evidence of having completed equivalent courses elsewhere) before continuing into the 3rd and 4th year of the B.S. in Architecture, the B.S. in Facilities Management or the B.S. in Architectural Preservation.

## Other Transfer Admission

All transfer students must submit the online Temple University application at admissions.temple.edu. Admission will be based on GPA and prior education. A portfolio is not required for consideration for admission, but may be submitted to enhance the application. Transfer students with previous credits in architecture from other institutions may be considered for admission to Tyler's Architecture program with advanced standing. Students who already hold a Bachelor's degree and certain other upper-level transfer students may be eligible for consideration for participation in various options for acceleration. Placement into the program is based upon prior architectural education and a review of a portfolio representing studio coursework completed, not merely the number of credits earned at another institution. Students who do not submit a portfolio but are academically admissible will be accepted into first year studio only.

Portfolios are to be uploaded at temple.slideroom.com. SlideRoom requires an additional fee for this service.

Students without college-level architecture studio coursework may apply for the fall semester only.

## Bachelor of Fine Arts

Entering undergraduates are admitted to Tyler by the Director of Undergraduate Admissions of Temple University after consultation with Tyler's Director of Admissions following the review of the student's academic record and art portfolio. This procedure requires the applicant to file all records and test scores in the Office of Undergraduate Admissions of Temple University. See Undergraduate Admissions (http://admissions.temple.edu/) for more information.

Please refer to the university deadlines on the Undergraduate Application or go to the Temple web site (www.temple.edu/) for deadline information. After the priority deadline dates, applications are accepted on a rolling admissions basis.

Undergraduate applicants for the B.F.A. program apply for full-time matriculation for either the Fall or Spring semester. Part-time status is not available for B.F.A. applicants.

## Portfolio Review

## Freshman Applicants

In addition to satisfying academic requirements, all B.F.A. freshman applicants are required to present a portfolio of fifteen to twenty pieces of original artwork for evaluation. Regularlyscheduled portfolio reviews are held on campus. Applicants living at a considerable distance from Tyler may elect to upload a portfolio at temple.slideroom.com. SlideRoom charges a fee for this service. Those who live in or near the Philadelphia area are expected to present a portfolio of original work during a portfolio review day. This is an occasion when applicants and their
families may see the campus and discuss Tyler's educational program with faculty, staff, and students. Tyler also participates in a number of National Portfolio Day events where students can meet with staff or faculty for a portfolio critique. For a complete list of NPDA events in which Tyler will participate, please contact the Tyler Admissions Office. While the application to Tyler is being processed by Temple University, an interview by a member of the Tyler faculty or by the Admissions Staff must be arranged. All work included in the portfolio should have been completed during the previous year and should represent as broad a selection as possible: drawings from life, work in both color and black and white media, design examples, photography, prints, crafts, or sculpture. Portfolios must include five strong examples of drawing from observation regardless of the major the applicant wishes to pursue. We discourage work that is copied directly from photographs or magazines. Original work, CDs, DVDs, binders, etc., must not be sent through the mail. These are unacceptable and will not be reviewed or returned.

The freshman applicant is advised to submit work done independently as well as under instruction.

In order for the application to be completed, an $8 \frac{1}{2 \prime}$ x $11^{\prime \prime}$ self-portrait, in pencil from a mirror reflection, must be sent to Tyler. The application is not considered complete without the selfportrait; it becomes a permanent part of the application and is not returned. This self-portrait should not be framed or matted. Please refer to the Tyler admissions web site for more information. Tyler also requires a statement of purpose that is separate from the undergraduate application essay as well as a completed B.F.A. information form. For more information on the statement and the self-portrait, contact the Tyler Admissions Office.

To make a portfolio review appointment, please call the Tyler Admissions Office 215-777-9090.

## Transfer Students to the BFA program

To enroll with advanced standing, applicants must fulfill the admission requirements of Temple University as well as the special requirements of the Tyler School of Art. Applicants should demonstrate a level of art performance appropriate to the year for which they are applying. Usually this requires completion of a proportion of studio and academic courses comparable to that taken by Tyler students, as well as a comparable portfolio of at least twenty (20) images of work uploaded to temple.slideroom.com. SlideRoom charges a fee for this service. The images must represent all studio coursework taken, as well as work towards a specific major. The portfolio must also include five (5) strong examples of drawing from observation, regardless of the major the applicant wishes to pursue. Drawings should be complete, sustained works, not sketches.

A transfer committee comprised of Tyler faculty and the Admissions staff will review the portfolios and academic records of each application to determine the best placement level possible. We encourage all transfer applicants to schedule a campus tour.

Tyler accepts transfer students from accredited institutions of higher education. The transfer student will be required to complete a minimum of 30 studio credits as a full-time student at the Tyler School of Art. In order to be considered for transfer credit to the B.F.A., B.A. in Visual

Studies, B.S. in Art Education or B.S. in Architecture degree, studio credits must have been completed within the last 10 years.

If the transfer student has not completed the equivalent of Tyler's Foundation Program, he or she must take the deficient courses, beginning with the first semester enrolled at Tyler.

Transfer students are admitted at a specific studio level (second semester sophomore, first semester junior, etc.), which is determined by transferable courses, academic performance, and the portfolio evaluation by Tyler faculty. Students who choose to enroll do so with the understanding that they are accepting the studio placement as determined by the transfer committee.

## Readmission Policy (Re-Enrollment)

## See Tyler's Academic Policies and Regulations section.

Financial Aid \& Scholarships

Student Financial Services
Conwell Hall, Ground Floor
1801 N. Broad Street
215-204-2244

## Financial Aid

Please see the Student Financial Aid section of the Bulletin. Detailed information can also be found on the Student Financial Services web site at sfs.temple.edu. Applications for financial aid (Free Application for Federal Student Aid) are available through the Student Financial Services office, 215-204-2244.

## Scholarships

Tyler offers merit-based and merit/financial need-based scholarships dependent upon available funding. Generally, between 16 and 20 portfolio scholarships, ranging from $\$ 1000$ to full tuition, are awarded to undergraduate students entering in the fall semester. Some of these scholarships may continue dependent upon available funds, cumulative grade point average, and/or demonstrated financial need. All scholarships and guidelines for consideration are posted on the Tyler web site at tyler.temple.edu/scholarships-grants.

Students who wish to compete for portfolio scholarships must follow the deadlines and application procedures indicated on the scholarship list form.

Matriculated students also have the opportunity to compete for Tyler-specific scholarships, including the Wayne Becker Scholarship Award and the Betty-Ann Shema Morris Scholarship. Information about merit scholarships for continuing students is posted annually on the Tyler Student Life web site: tyler.temple.edu/scholarships-grants.

In addition to portfolio-based scholarships, a number of scholarships for entering students based on academic achievement are awarded through Temple University to Tyler School of Art. For more information about these awards, please contact the Temple University Office of Undergraduate Admissions or go to sfs.temple.edu.

## Study Away Programs

Education Abroad \& Overseas Campuses<br>200 Tuttleman Learning Center<br>1809 N. 13th Street<br>215-204-0720<br>www.temple.edu/studyabroad

## Study Abroad

## Rome

Juniors may elect a year or semester abroad. Housed in the Villa Caproni, facing the Tiber River just north of the Piazza del Popolo, the school offers courses in painting, drawing, photography, printmaking, sculpture, architecture, and art history. Facilities include a library, an art gallery, private work areas, and full equipment in studio disciplines. Art history is taught through direct observation of original works and historic sites. The student also may elect to take courses in Italian, anthropology, history, or literature. For more information about Study Abroad options, see Education Abroad. Depending on their major, students may elect to take a summer program, or spend a semester or full academic year in Rome.

Temple Abroad in Rome enrolls approximately 140 to 180 students per semester with programs focusing on architecture, international business, and liberal arts, with topics and courses varying somewhat depending on the resident faculty. Liberal arts majors account for one third of the total enrollment and have a diversity of interests: anthropology, art history, classics, English, history, Italian, music philosophy and sociology.

Students are strongly encouraged to meet with an advisor the summer before sophomore year to determine the best time to study in Rome.

For more information visit the Education Abroad web site at www.temple.edu/studyabroad.

## Scotland

In conjunction with the Glasgow School of Art, the Crafts Department of the Tyler School of Art offers an interdisciplinary summer studio program in Scotland. The program consists of four weeks of traveling and intensive studio workshops in a variety of media while exploring the art, culture, and geographic beauty of Great Britain.

## Japan

Students in the Architecture Department programs can apply to study at Temple University Japan for a semester of study abroad. The spring semester offerings include an urbanism elective course for all students and a design studio for B.S. Architecture students. Students in the B.S. Facilities Management program can take business and other course requirements in Japan.

The Japan campus frequently offers summer studio-intensive workshops. The summer workshop course incorporates lectures, site visits, readings, and discussions as well as a workshop component. Temple Japan now offers a B.A. in Art degree (digital media concentration).

Students are strongly encouraged to meet with an advisor the summer before sophomore year to determine which semester and coursework would be most appropriate for their major. B.F.A. students who plan to attend Japan should ensure that all sophomore pre-requisites for their major are met in the fall semester of their sophomore year.

For more information visit the Education Abroad web site at www.temple.edu/studyabroad.

## Special Programs in the US

## Yale Norfolk

Traditionally, Tyler has been invited to nominate a distinguished junior B.F.A. Painting or Sculpture major for participation in the Yale Norfolk Summer School of Art and Music in Connecticut. Nominations are made by the PDS faculty.

## Penland/Pilchuck/Skowhegan

One scholarship is awarded to the summer program of the Pilchuck Glass School in Washington State. The Pilchuck School offers glassblowing, hot glass sculpture, casting, mixed media sculpture, flame working, and neon to students from around the world. The School emphasizes experimentation, investigation, teamwork, and personal growth. Nominations are made by the Glass faculty. Each year, students are nominated for a full scholarship to the nine-week Skowhegan School of Painting and Sculpture Summer Program in Maine. The scholarship covers full costs of room, board, and tuition. Skowhegan enrolls 60 advanced students of painting and sculpture from schools across the country who work independently under the guidance of six resident faculty members and weekly visiting artists. Students who have completed the junior year are nominated by presenting work to the PDS faculty.

## Career Center

Temple University Career Center
220 Mitten Hall, 1913 N. Broad Street
215-204-7981

The Career Center provides students and alumni with up-to-date material on career planning, résumé preparation, interviewing skills, and job search techniques. Students are encouraged to
schedule appointments for career conversation and advisement. For more information, see the Career Center section of the Bulletin, or go to their web site at www.temple.edu/careercenter or telephone the office at 215-204-7981.

The Tyler Student Life Blog posts networking and career events and advertises career events and employment and internship opportunities through the weekly e-newsletter, the WHAT (Week Here At Tyler). Review the WHAT archives on the Tyler web site: tyler.temple.edu

## Honor Societies/Awards

Annual cash, book, and gift certificate awards are given to graduating students who have excelled in art, demonstrated outstanding scholastic achievement, or distinguished themselves in a particular department. Among these awards are the Alec Abels Memorial Award in Painting, the Alumni Service Award, the Art/Art Education Achievement Award, the Essie Baron Memorial Award, the Billikopf Awards, the Rudolf Staffel Award in Ceramics, the Boris Blai Memorial Award in Sculpture, the Jane D. Bonelli Art Education Award, the Kristin Huggins Memorial Award, the Del Val Potters Supply Award, the East Bay Batch \& Color Awards, the Faculty Award in Art Education, the Faculty Award in Art History, the Faculty Award in Metals, the Frei and Borel Student Awards, the Graphic Design Alumni Award, the Graphic and Interactive Design Senior Project Award, the Jack Malis Glass Award, the Kalnin Graphics Award, the Allen Koss Memorial Awards, the Ann and Jack Moskovitz Art Education Award, the Raphael Sabatini Memorial Award in Printmaking, the Herman Gundersheimer Award for Academic Excellence, the Herman Gundersheimer Award for Art History, the Carmela Corso Scholarship Prize, the Edith Weil Hecht Memorial Awards in Painting and Sculpture, the Lester and Violet Hecht Award in Printmaking, the Robert and Richard Hecht Awards, the Photography Faculty Awards, the Printmaking Faculty Award, the Bertha Lowenburg Prize for excellence in art, the Nathan Margolis Award in Ceramics, the Dorothy H. Ward Memorial Award, the Philadelphia Print Center Award, the Plastic Club Award, the Power Design Award, the Philadelphia Water Color Club Award, the Rio Grande Student Award, the Vivian Rosenberg Memorial Senior Project Award, the Sculpture Project Award, the Senior Painting Award, the Bruce Silver Outstanding Achievement Award, the Taws Artist Materials Award, the Rochelle Toner Award, the T.B. Habstoz Student Award, the Utrecht Supplies Award, and the Utrecht/Hallmark Award.

The Architecture Program offers the following awards: The Architecture Program Merit Award, the Bachelor of Architecture Award, the AIA Henry Adams Medal, the AIA Henry Adams Certificate of Merit, the Alpha Rho Chi Medal, the Alumni Thesis Prize, the Da Vinci Prize, and the Diener Brick Company Masonry Award.

## Student Life

Kari Scott, Tyler Student Life Coordinator
Tyler Building 110F (in the Temple Contemporary Suite)
miss.kari@temple.edu
215-777-9141

Student Life information can be found at our Tyler Student Life web site: http://tyler.temple.edu/student-life

## Student Life Office

The Tyler Student Life Coordinator acts as an ombudsperson for students and facilitates a number of events and activities at Tyler. These include career networking events, graduation and convocation, student organizations and student government, and extracurricular activities. The Student Life Coordinator also mentors the Tyler Living Learning Community and serves as an advisor to the Dean's Student Advisory Committee. The Coordinator also facilitates the annual BFA lottery for exhibition slots in the Stella Elkins Tyler Galleries and lower atrium lounge.

## Student Health

Temple University's Student Health Services provides the eligible student community with affordable, accessible and high quality primary health care. They are located on the fourth floor of the 1800 Liacouras Walk building on Main campus. Information: www.temple.edu/studenthealth/About_SHS.html

Tuttleman Counseling Services offers students support for emotional, educational or vocational concerns. Assistance is confidential and free of charge: www.temple.edu/studentaffairs/counseling/

The Wellness Resource Center (HEART) provides comprehensive wellness education, resources and prevention services that empower and support Temple University Students in making informed, healthier choices in order to achieve emotional and academic success. www.temple.edu/studentaffairs/heart/

## Student Resources

## http://tyler.temple.edu/student-resources

This Tyler web site hosts a number of resources and information invaluable to students, including the WHAT (Week Here At Tyler) newsletter, on-campus and off-campus lectures, events and activities, and information about Philadelphia. Links to Art Supply sources, Tyler's Digital Services, forms for installations, and even pages for academic advising information are all found on the Tyler Student Resources site.

## Student Organizations and Appointed Positions

Student Government - Two elected Tyler representatives participate in the Temple Student Government. This organization provides an integral link between students on all campuses and assures an ongoing dialogue with the administration.

Student Run Gallery - "Produce" serves as a venue to promote both student works as well as professional exhibitors. Every year, exhibitions are chosen and curated by the student advisory
board. A graduate student director manages the student advisory board and gallery budget. Students are encouraged to participate in the selection of exhibitions by becoming a part of the advisory board.

Student Program Board - Interested students organize, plan, and present culturally diverse and entertaining extracurricular programs open to the campus community as well as the general public. The General Activities Fee funds both groups.

GAF Steering Committee Representative (General Activities Fee) - Each year a student is appointed by the Director of Student Life to represent Tyler on the university's GAF Steering Committee. The committee oversees the equitable distribution of GAF money for the university/campus-wide programs, special events, and activities.

Dean's Student Advisory Committee - Students who seek leadership opportunities may join the Dean's Student Advisory Committee. Recent DSAC projects include the Philadelphia Art School Mixer reception for the Annual Student Exhibition, the creation of the TEST group (Tyler Exhibition Support Team) and "The Puppet Project", a community service event. For more information, contact Assistant Dean Carmina Cianciulli at carmina@temple.edu.

Additional information on Student Life organizations and events can be found at our Tyler Student Life web site: http://tyler.temple.edu/student-life.

## Visiting Artists Program

The school and individual departments sponsor an active program of extracurricular events both on and off campus, including public lectures through critical dialogues and arranged introductions, exhibitions, and workshops. These offer students the opportunity to meet with the artists and discuss their work. Visiting artist lectures are posted on the Tyler web site, on the plasma screens throughout the Tyler building, and in the WHAT (Week Here At Tyler) enewsletter.

## Temple Contemporary - Exhibitions and Public Programs

Robert Blackson, Director
Sarah Biemiller, Assistant Director
Adam Blumberg, Preparator
Tyler Building, Suite 110
templecontemporary@temple.edu
http://tyler.temple.edu/temple-contemporary
215-777-9144

Temple Contemporary provides a visual context to inform and inspire public discussion of contemporary social concern. These discussions are collaboratively developed to address issues of local purpose and international significance.

Public programs are the primary initiative of Temple Contemporary, with exhibitions as one component of this greater need. Temple Contemporary provides approximately two live events per week from September to February, which could include screenings, workshops, gallery tours, classes, student presentations, how-to-sessions, rallies, debates, symposiums, concerts, etc. The initiation and consideration of these live events result from the recommendations of members from the Department's advisory councils which represent a cross section of Temple University and cultural leaders of Philadelphia.

Through consistent collaborations with faculty members and departmental curricula, the programming of the Exhibitions and Public Programs will also provide a visual and dialogical resource to aid in the teaching of numerous disciplines.

Exhibitions of undergraduate student work are held in the Stella Elkins Tyler galleries and in the Tyler upper and lower atriums and Green hallway as well as in the Architecture building. Installations of student work may also be found throughout the campus. The student-runexhibition program, "Produce," organizes exhibitions, performances and lectures both on-campus and at other locations. MFA exhibitions are held in the Temple Contemporary gallery space from March through May.

Funding for Temple Contemporary comes from the Pew Center for Arts \& Heritage, The Andy Warhol Foundation, The Fels Foundation, The Barra Foundation, The Pennsylvania Humanities Council, The Pennsylvania Council on the Arts, Tyler School of Art and Temple University.

## Academic Advising Information

Please note: Non-Tyler students who are interested in learning more about the majors and/or admissions requirements should contact the Tyler Admissions staff at tylerart@temple.edu or by calling 215-777-9090. Non-matriculants who wish to register for a Tyler course should contact the Academic Advising office at 215-777-9193.

## Academic Advising

Academic Advising Office
Tyler Building, 212
215-777-9193
Laureen Duffy, Senior Advisor
215-777-9185
lduffy@temple.edu
Monday through Friday, 8:30 a.m. to 4:30 p.m., by appointment
Kristan Campbell, Secretary
215-777-9193
kristan.campbell@temple.edu

## Major Advising

Architecture (first and second year)<br>Assistant Professor Sneha Patel<br>Architecture Building, 137<br>215-204-8813<br>sneha.patel@temple.edu<br>Architecture (third and fourth year)<br>Assistant Professor Vojislav Ristic<br>Architecture Building, 139<br>215-204-8813<br>vristic@temple.edu

Arts in Community Certificate Program
Associate Professor William Yalowitz
Tyler Building, 210J
215-777-9163
artedart@temple.edu
Art
Laureen Duffy, Senior Advisor
Tyler Building, 212
215-777-9185
lduffy@temple.edu
Art Education
Dr. Lisa Kay
Assistant Professor Wendy Osterweil
Tyler Building, B090D
215-777-9163
artedart@temple.edu

Art History
Dr. Jonathan Kline
Tyler Building, 211E
215-777-9165
jdkline@temple.edu
Ceramics
Associate Professor Chad Curtis
Tyler Building, 150M
215-777-9201
chad.curtis@temple.edu

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Fibers and Material Studies
Assistant Professor C. Pazia Mannella
Tyler Building, 250N
215-777-9136
pazia@temple.edu
Glass
Professor Sharyn O'Mara
Tyler Building, 120D
215-777-9128
somara@temple.edu
Foundation Program
Associate Professor Gerard Brown, Program Head
Tyler Building, 210R
215-777-9181
gerard.brown@temple.edu
Graphic & Interactive Design
Professor Alice Drueding
Tyler Building, 240O
215-777-9185
drueding@temple.edu
Metals/Jewelry/CAD-CAM
Professor Stanley Lechtzin
Tyler Building, 220F
215-777-9129
stanlech@temple.edu
Photography
Professor Martha Madigan
Tyler Building, B030Y
215-777-9245
mmadigan@temple.edu
Printmaking
Professor Richard Hricko
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215-777-9125
hricko@temple.edu
Painting
Associate Professor Philip Glahn
Tyler Building, 300A
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215-777-9104
phglahn@temple.edu
Sculpture
Professor Jude Tallichet
Tyler Building, 140A
215-777-9155
jude@temple.edu
Visual Studies
Associate Professor Nichola Kinch
Tyler Building, 230C
215-777-9170
nmkinch@temple.edu

## For BFA Students:

Advising is provided individually and in groups to full-time, degree-seeking students enrolled in Tyler School of Art. While students may make appointments at any time, the week before the start of registration is set aside each semester for advising purposes, at which time students receive their DARS and meet with an advisor. Advising about academic requirements is always provided by the academic advisors.

First-year students are advised by the advising staff and the faculty while taking FDPR 1502 and are registered for their studio courses. Foundation courses are rostered by the advising staff but students will select their own academic classes. Midway through their second semester, freshmen are advised both individually and in groups by the advising staff on policies, methods, and procedures to assist them in self-registration for their first sophomore semester.

It is critical to note that all majors have either one or two sophomore prerequisites. Students who are thinking about overseas study should consult an advisor before the beginning of the sophomore year.

Sophomores should arrange to meet with the academic advisors who will help them register for their second sophomore semester. Faculty advisors are also available for sophomore students who have questions about the majors. When sophomores register for their junior year they are assigned to a major advisor, a faculty member from the major they enter, who will continue to advise the student during his/her junior and senior years on studio matters. Faculty advisors are also available for sophomore students who have questions about the majors.

Juniors, seniors, and all transfer students should continue to consult the academic advisors for course requirements.

The Art Education staff provides additional advising for B.F.A. students seeking the Art Education concentration as there are a number of clearances and special requirements for that program, as required by the PA Department of Education.

## Additional Advising Services

The academic advising office should be contacted if there are questions concerning courses that require placement testing. The senior academic advisor meets with all students on academic warning, academic probation or designated "at-risk" by virtue of multiple mid-term deficiency notices and works with students with disabilities to ensure appropriate accommodations are made. Although the senior advisor has scheduled hours, we suggest calling 215-777-9193 for an appointment.

## For Architecture, Art, Art Education, Art History and Visual Studies Students:

Advising is provided to degree-seeking students enrolled in the Architecture, Visual Studies, Art, Art Education, Arts in Community and Art History programs by the academic advising staff and the major undergraduate advisors in the departments.

The week before the start of registration is set aside each semester for advising purposes, at which time students can obtain their DARS report and meet with an advisor. Faculty advisors in the student's area provide advising to most juniors and seniors for their major and academic advising is provided by the academic advisors.

The Art Education staff provides additional advising for students in the B.S. in Art Education and B.F.A. with Art Education Concentration, as there are a number of clearances and special requirements for that program, as required by the PA Department of Education.

An academic advisor should be contacted if there are questions concerning English 0802 (Analytical Reading \& Writing), Intellectual Heritage 0851 \& 0852 (Mosaic: Humanities Seminar I and Mosaic: Humanities Seminar II), and other General Education (GenEd) requirements, or developmental courses in English and Mathematics.

## Academic Policies \& Regulations

The university policies and regulations generally apply to all undergraduate students and provide a framework within which schools and colleges may specify further conditions or variations appropriate to students in their courses or programs. Policies specific to Tyler School of Art are as follows:

## Academic Credit

A credit hour is a measure of the amount of work represented in intended learning outcomes and verified by evidence of student achievement. A credit hour is an institutionally established equivalency that reasonably approximates: (1) not less than one hour of classroom instruction or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester of credit or the equivalent amount of work over a different amount of time; or (2) at least an equivalent amount of work for other academic activities such as studio work. For example, a three-credit studio course allows for not less than
nine hours of work which can include five hours of in-class studio and at least four hours of out-of-class student work.

Additional academic credit policies may be found in the Academic Policies section of this Bulletin: www.temple.edu/bulletin/Academic_policies/policies_part1/policies_part1.shtm\#acad_credit.

## Courses Inapplicable to Graduation

Credits earned in Mathematics 0015 (formerly Math 0001) and lower-level courses in Military Science are not included in the minimum number of credits required for graduation. A maximum of 4 courses or up to 12 semester hours for upper-level Military Science (Army ROTC), Naval Science (Navy ROTC), or Aerospace Studies (Air Force ROTC) courses will be applicable toward graduation credits. Courses transferred from other institutions or taken at Temple University that do not satisfy studio, art history, College or General Education requirements are elective and applicable toward degree completion as long as university and major requirements are met. Please see your advisor if you have questions regarding credits towards graduation.

## Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List policy for specific GPA and credit-hour requirements.

## Double Major within Tyler

Some undergraduate students may be interested in pursuing a double major within Tyler. Generally, two separate writing intensive courses are required for each major - they can not overlap. Tyler is currently creating a new policy regarding double majors and requirements. Please see the academic advising staff for updated information.

## Grievances

Please refer to the University grievance policy, located in the Responsibilities \& Rights section of this Bulletin: www.temple.edu/bulletin/Responsibilities_rights/rights/rights.shtm\#grievance.

## Student Academic Grievance Policy and Procedure

Title IX of the Education Amendments Act of 1972 requires that each college or university establish due process for the resolution of academic grievances. Students enrolled at Temple University have the right to appeal academic decisions that they dispute. Each school and college at Temple University has established and adheres to its own grievance procedure. The following procedures are specifically applicable to all degree programs of Tyler School of Art.

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

Step 1 - Faculty Member: A student with an academic grievance must first attempt to discuss the problem with the faculty member. In most cases, the grievance can be settled in this manner.

Step 2 - Chairperson: If the grievance cannot be resolved in Step 1, the student may submit a letter of grievance to the chairperson of the faculty member's department stating the following: course reference number, course number and section, faculty member teaching the course, and specific reason(s) for the grievance. The chairperson shall review with the student his/her reasons for the grievance. The chairperson, with letter of grievance, shall meet with the faculty member to discuss the problem. The chairperson shall transmit, in writing, the outcome of this meeting and his/her decision to the student and faculty member. Note: If the faculty member in the grievance is the department chairperson, the letter of grievance should be submitted directly to the Associate Dean's Office.

Step 3 - Assistant Dean: If the student remains dissatisfied, he/she may appeal to the Assistant Dean's Office. The Assistant Dean shall schedule a meeting first with the faculty member and the chairperson to discuss the grievance. Following this discussion, the student is invited to join the meeting to discuss the matter further and hear the decision. A report regarding the outcome of the meeting is written by the Assistant Dean and forwarded to the Dean’s Office.

Step 4 - Student Appeal and Grievance Committee: If the student decides to pursue the matter further, he/she may appeal the case to the Dean's Office. The Dean shall call a meeting of the Student Appeal and Grievance Committee which consists of the four at-large members of the Tyler Executive Council. The Dean shall appoint one of these members as Chair without vote. The committee shall also consist of two undergraduate students and one graduate student provided by the Tyler Student Alliance (see Tyler School of Art By-Laws, Article III, Section B., No. 1). The Student Appeal and Grievance Committee shall make recommendations to the Dean on each appeal or grievance. All recommendations to the Dean shall reasonably summarize the student's claim, provide the basis for the committee's recommendation, and state clearly the committee's recommended disposition of the student's claim.

Step 5 - Dean of Tyler: The Dean of Tyler shall investigate the matter thoroughly and, if necessary, discuss the case with all those involved. The Dean's decision shall be forwarded, in writing, to the student and committee.

Step 6 - University Administration: Should the student decide to appeal further, he/she will be directed to the appropriate University administrator: the Vice Provost for Undergraduate Students or the University Dean of the Graduate School. All materials will be forwarded to the appropriate office for further consideration.

Step 7 - Provost: Appeals for contesting a grade or any academic matter are directed from the Vice Provost for Undergraduate Students or the University Dean of the Graduate School to the Provost's Office. This is the final step and highest level for student academic appeals.

## Fall and Spring Semester Time Limit For Academic Appeals

The time limit within which a grade grievance can be entered is one (1) semester after the grade has been made a part of the student's transcript.

## Summer Session Time Limit For Academic Appeals

Due to the condensed schedule of the summer sessions, the limit within which summer grade grievances can be entered is two (2) weeks after the grade has been made a part of the student's transcript.

For further information on academic grievance procedures, please inquire in the Associate Dean's Office.

## Grievances Other Than Academic Appeals:

- Students who believe they have been discriminated against or harassed because of age, color, disability, marital status, national or ethnic origin, race, religion, sex (including pregnancy), sexual orientation and gender identity, veteran status or genetic information should contact the Office of Equal Opportunity Compliance, 2nd Floor Mezzanine, Sullivan Hall. Phone: 215-2048890; web site: www.temple.edu/eoc.
- Students who have other non-academic complaints about a faculty member's conduct (without regard to grading), should refer those concerns in writing to the Chair of the Department or, if the faculty member is also the chair, to Vice Dean Hester Stinnett.

Students who have sexual harassment complaints should contact the Tyler Sexual Harassment ombudsperson, Kari Scott at miss.kari@temple.edu.

Students are welcome to contact Assistant Dean Carmina Cianciulli, at carmina@temple.edu or 215-777-9199 to discuss grievance policies and procedures.

## Incomplete Coursework Policy

An instructor will file an "I" (Incomplete) only if the student has completed the majority (51\% or more) of the work of the course at a passing level, and only for reasons beyond the student's control. This may include severe illness, broken limbs, family situation, etc. An incomplete may not be used to give students extra time to improve their grades. There must be a compelling reason behind each incomplete grade assigned. An instructor may file an "I" when a student has not completed the work of a course by the time grades must be submitted but has completed the majority of the work at a passing level and has a written agreement with the instructor and the department regarding completion of the work, including the nature of the work to be completed. The completion date may be no later than one year from the end of the semester in which the student took the course. The agreement shall also specify a default grade to be received if the work is not completed by the date indicated. Four copies of the agreement must be made: One copy shall be retained by the instructor, one shall be given to the student, one shall be filed with the department office and one shall be filed in the Tyler Academic Advising office in the student's record file (note that the University form states that one copy goes to the Dean's office - Tyler holds those copies in the student's file in Advising).

When reporting the grade of "I" for a student, the instructor shall also file a report of the default grade. If the instructor does not change the grade of "I", pursuant to the agreement with the student, by the end of one year from the time the grade of "I" was awarded, the appropriate University official shall automatically change the grade of "I" to the reported default grade and the default grade shall appear on the transcript and be used for all other grading purposes as the actual grade received in the course. Faculty advisors and staff advisors have the option of not permitting a student to register for an "overload" if the student is carrying one or more active incomplete courses, or for a "full load" if the student is carrying two or more active incompletes.

## Independent Study Policy

The following are the guidelines and standards for "Independent Study" Undergraduate credit in Studio, Art History and Art Education for students and faculty at Tyler School of Art:

There will be a maximum of 1 student in Independent Study per full-time faculty per fall and spring semester.

The intended area of study must supplement, not supplant, existing studio, art history and art education courses, and curriculum.

An Independent Study course shall count for 1-3 credits, with a maximum of 6 credits applicable toward the degree. You may not take more than two Independent Study courses in your career.

Independent Study courses shall carry upper level numbers. Students must be classified as Juniors or Seniors. Students should have prior experience with the faculty member teaching the Independent Study course.

A written proposal must be developed and agreed upon in advance of the beginning of the semester, describing the intended area of the investigation. At the end of the Independent Study, a paper must be submitted describing the outcome of the learning experience.

Only after the student receives written permission from the faculty member and the department chair may they register for the class.

## Installation Policy

Students or faculty who wish to have art work or performances installed outside the studio must complete an Installation form, and have it approved by the appropriate University personnel. Students or faculty must also have an approved installation form to place work outside the building, anywhere on campus. The Assistant Dean's office requires 7 business days to ensure enough time to get the appropriate approvals. In many cases extra time is needed to revise a proposal due to safety issues or otherwise unavailable space. Forms filed less than seven (7) days will risk being denied. The Assistant Dean will work with the student and faculty and University personnel to locate appropriate space for student installations. Please note that approvals are not automatic, and can be denied on the basis of non-compliance with University policies.

Students who place projects without approval, or who abandon or incompletely de-install projects, or who do not properly restore sites, buildings, or other university property will be subject to fine and, potentially, disciplinary action. Installation forms are available in the Assistant Dean's office, 210G, Tyler. Please refer any questions or concerns to Assistant Dean Carmina Cianciulli via e-mail - carmina@temple.edu - or by stopping by the office, room 210G in the Tyler building.

## Loss or Damage

Temple University is not responsible for loss of property of any student or other individual due to fire, theft, or other cause. The university may require residence hall students to present proof of insurance against loss by fire, theft, or other cause before assignment to any university housing.

## Program Performance

Matriculated BA in Art History, BA in Art, BA in Visual Studies and BFA students (with the exception of those seeking the Art Education concentration) in the Tyler School of Art must maintain a minimum grade point average (GPA) of 2.0* or may be subject to academic action including academic warning, probation, and dismissal from the university. Higher minimum GPAs are required by the Bachelor of Architecture Program (2.5)**, the BFA with Art Education Concentration (3.0), and the BS in Art Education program (3.0).
*Please contact the academic advisor for updates to this policy.
**Please contact the Architecture program office for updates to this policy.

## Re-Enrollment Policy

All students who have attended Tyler School of Art of Temple University and wish to be considered for readmission (re-enrollment) to Tyler must fill out the request to re-enroll form available at Temple University's Senior Vice Provost for Undergraduate Studies web site: www.temple.edu/vpus/documents/request_to_reenroll.pdf.

For those students who have left Tyler in academic good standing and apply for re-enrollment into a semester within three years of the last completed semester, no portfolio review or interview is required. A portfolio uploaded to temple.slideroom.com is required for those BFA, BA in Art, BA in Visual Studies, or BS in Art Education students who have not attended Tyler for more than three years from the semester in which they intend to apply for reenrollment. SlideRoom charges a fee for this service. Please note: We are no longer accepting students for re-enrollment into the BA in Art on the Main campus; the BA in Art will only be available at the Japan campus. Students previously enrolled in that program may seek admission into the BA in Visual Studies. Students who seek re-enrollment will be considered for matriculation into the current catalog year.

Students who are dismissed from Tyler or who left on academic probation must review the academic standing policy located in the Academic Policies section of this Bulletin: www.temple.edu/bulletin/Academic_policies/policies_part1/policies_part1.shtm\#acad_stand.

A portfolio uploaded to temple.slideroom.com is also required of all BFA, BA in Art, BA in Visual Studies, or BS in Art Education students who were dismissed or who left Tyler on academic probation. It must include twenty (20) images of your studio work, ten (10) completed at Tyler, and ten (10) after leaving Tyler that demonstrate studio progress.

Any student who attends another college or university and has taken studio art credits must submit a portfolio uploaded to temple.slideroom.com to represent completed studio coursework in order to have those credits considered for transfer credit into the Tyler BFA, BA in Visual Studies, or BS in Art Education programs or one of the Architecture programs. Academic credits will be accepted into the Tyler degree programs as determined by Temple University policy for the semester in which the student is applying for readmission.

The final decision regarding readmission will depend both on the recommendation of the transfer committee as well as the review of academic credentials by the Assistant Dean. Please note well: Any student applying for readmission must be aware that Tyler may not accept studio credits that are more than 10 years old into any Tyler curriculum from transfer or readmission applicants regardless of where those credits were completed.

## Student Art Work

The school reserves the right to keep art work submitted for course credit. In practice, this privilege is exercised sparingly but, in certain studio areas, the selection of one piece by each graduating student contributes to an important instructional collection. When the student art work is reproduced in Tyler publications, either in print form or electronic form, every effort will be made to give credit to the student artist.

Tyler School of Art records images of student work for use in Tyler publications and web sites. Tyler reserves the right to reproduce without notification such images of any artwork produced by students while attending Tyler for promotional or other purposes, including in print publications, institutional web sites, e-communications, multimedia presentations, and documents about Tyler or Temple University for admission recruitment, fundraising, or institutional informational purposes.

No compensation is provided to students for such uses of images of student work.
Please see the Installation Policy above regarding placing student art work in the public spaces at Tyler and in any Temple building or on Temple grounds.

## General College Graduation Requirements

Students in the Tyler School of Art must meet all degree requirements mandated by Temple University, as well as requirements from individual departments and programs.

New students will follow the General Education (GenEd) program requirements.
Students are responsible for following the course requirements and department policies as listed in the Undergraduate Bulletin and in departmental handbooks, curriculum and advising publications. Please note that Tyler has minimum grade requirements for required courses for the majors. Please refer to the DARS and academic advising sheets available from your advising staff.

## Student Contact Information

## Tyler Administration

Robert T. Stroker, Dean and Vice Provost for the Arts
Tyler Building, Room 210C
215-777-9195
robert.stroker@temple.edu
Hester Stinnett, Vice Dean \& Graduate Program Director
Tyler Building, Room 210F
215-777-9884
hesters@temple.edu
Brigitte Knowles, Senior Associate Dean
Tyler Building, Room 210I
215-204-3204
bknowles@temple.edu
Carmina Cianciulli, Assistant Dean for Undergraduate Studies and Student Affairs
Tyler Building, Room 210G
215-777-9099
carmina@temple.edu
Doris Izes, Executive Assistant to the Dean
Tyler Building, Room 210H
215-777-9195
dizes@temple.edu
Suzanne Earnest, Administrative Coordinator
Tyler Building, Room 210G
215-777-9884
earnest@temple.edu
Tara Webb Duey, Director of Development
215-926-2567
webbduey@temple.edu
Molly Clark Davis, Alumni Relations Officer
215-926-2226
molly.clarkdavis@temple.edu

## Admissions and Continuing Education/Pre-College Programs

## Admissions

Tyler Building, Room 100<br>215-777-9090<br>tylerart@temple.edu

Nicole Hall, Director of Admissions
Tyler Building, Room 100E
215-777-9090
nicoleh@temple.edu
Lindsey Stevenson, Admissions Counselor
Tyler Building, Room 100B
215-777-9096
lindseystevenson@temple.edu

Grace Ahn, Admissions Counselor
Tyler Building, Room 100A
215-777-9097
graceahn@temple.edu
Katie Ames, Administrative Assistant
Tyler Building, Room 100
215-777-9090
katherine.ames@temple.edu
Continuing Education and Pre College Programs
Terry Putscher, Director, Tyler Continuing Education \& Pre-College Programs
Tyler Building, Room 100C
215-777-9010
putscher@temple.edu

## Advising, Finance \& Computer Support Services

## Advising

Laureen Duffy, Senior Academic Advisor
Tyler Building, Suite 212
215-777-9185
lduffy@temple.edu
Kristan Campbell, Academic Advising Secretary
Tyler Building, Suite 212
215-777-9193
klinnea@temple.edu

For faculty advisors in the specific majors, please go to the Academic Advising page.

## Computer and Technical Support

David Rhoads, Manager, Technical Support
Tyler Building, Room 202
215-777-9239
tylercs@temple.edu
Craig Fineburg, Senior Technical Support Specialist
Tyler Building, Room 202
215-777-4956
tylercs@temple.edu
L. Steven Campbell, Technical Support Specialist

Tyler Building, Room B20
215-777-9241
tylercs@temple.edu
Finance
Marie Birster, Administrative Coordinator for Finance
Tyler Building, Room 210H
215-777-9160
mbirster@temple.edu

## Exhibitions \& Public Programs and Student Life

## Temple Contemporary - Exhibitions and Public Programs

Robert Blackson, Director of Exhibitions \& Public Programs
Tyler Building, Room 110H
215-777-9139
robert.blackson@temple.edu
Sarah Biemiller, Assistant Director
Tyler Building, Room 110
215-777-9139
sarah.biemiller@temple.edu
Adam Blumberg, Preparator
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adam.blumberg@temple.edu

## Student Life

Kari Scott, Coordinator, Tyler Student Life
Tyler Building, Room 110B
215-777-9141
miss.kari@temple.edu
Departmental Contacts

## Architecture

M. Katherine Wingert-Playdon, Chairperson

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215-204-8813
kwingert@temple.edu

Valentina Cleary, Architecture Secretary
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vcleary@temple.edu
John (Jack) Fanning, Technician
Architecture \& Engineering Building, Room 925
215-204-8813
jfanning@temple.edu

## Art/Art Education/Community Arts/Visual Studies

Pepon Osorio, Department Chairperson<br>Tyler Building, Room 210K<br>215-777-9163<br>pepono@temple.edu<br>Cynthia Patterson, Secretary<br>Tyler Building, Room 210K<br>215-777-9163<br>cynthia.patterson@temple.edu<br>Zach Lindenberger, Technician<br>Tyler Building, Room 210K<br>215-777-9163<br>zachary.lindenberger@temple.edu<br>\section*{Art Education Area Head}<br>Jo-Anna Moore<br>Tyler Building, Room B090D<br>215-777-9259<br>jmoore06@temple.edu

# Visual Studies Area Head 

Dr. Leah Modigliani
Tyler Building, Room 230C
215-777-9170

## Art History

Dr. Gerald Silk, Department Chairperson
Tyler Building, Room 210M
215-777-9165
gsilk@temple.edu
Michele Gudknecht, Secretary
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## Crafts

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215-777-9168
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Patricia Reavis, Secretary
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## Ceramics Area Head

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chad.curtis@temple.edu

John Williams, Technician
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john.williams0005@temple.edu
Fibers \& Material Studies Area Head
C. Pazia Mannella

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Loo Bain, Fibers Technician
Tyler Building, Room 250M
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For other contact information, go to the Tyler School of Art web site:
http://tyler.temple.edu/administration

## Faculty

For a list of faculty, go to the Tyler School of Art web site: http://tyler.temple.edu/facultydirectory.

## Architecture

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## About the Architecture Department

Tyler Architecture focuses on design in the contexts of culture, technology, and stewardship of the built and natural environment. Its programs stress critical inquiry and innovation as part of the creative process, teaching students how to intervene in the physical world through carefully considered acts of making. The Department engages the city, exploring and addressing the ethical and social dimensions of architecture and the urban environment. Through this engagement, it seeks to develop an ethos of responsibility in the students, preparing them to become effective leaders in practices and discourses surrounding the complex global and local issues of our time.

The Department offers the following degrees:

- Bachelor of Science in Architecture pre-professional degree
- Bachelor of Science in Facilities Management
- Bachelor of Science in Architectural Preservation
- National Architectural Accrediting Board (NAAB) accredited Bachelor of Architecture degree, five-year, for students who entered through fall of 2009
- National Architectural Accrediting Board (NAAB) accredited Master of Architecture degree, two-year track, for students who receive a 4-year pre-professional bachelor's degree program in architecture, three year track for students who receive a bachelor's program in other disciplines or in a non-pre-professional architecture program

The undergraduate architecture curricula share a common two-year Foundation Program. Upon successful completion of this preparatory program, students may continue in the Bachelor of Science in Architectural Preservation or the Bachelor of Science in Facilities Management, or can apply for acceptance into the Bachelor of Science in Architecture degree program.

Since the four-year Bachelor of Science in Architecture degree program leads directly to the Master of Architecture degree program, admission is competitive. This is so that students are well prepared for graduate level professional program studies after obtaining the Bachelor of Science in Architecture degree. Typically, students have a cumulative GPA of 3.0 or higher and an excellent portfolio. Completion of minimum entrance requirements does not guarantee admission.

The four-year Bachelor of Science in Architecture degree is a pre-professional program. Graduates are qualified for a variety of positions in architecture and related fields for which a professional degree and registration are not requirements for advancement. Additionally, students may utilize this degree toward the goal of architectural education at the graduate level.

The four-year Bachelor of Science in Facilities Management degree prepares students for a career in the profession of Facility Management. It is a profession that encompasses multiple disciplines to ensure functionality of the built environment by integrating people, place, process and technology. Students who choose this degree program can pursue facility management certification after entering into the profession.

The four-year Bachelor of Science in Architectural Preservation degree prepares students for a career in cultural and historic preservation focused on the built environment. Careers in the field of Architectural Preservation are those where leadership includes advocacy for places important to the underlying cultural and historical infrastructure of communities and environments.

The NAAB accredited Master of Architecture (M.Arch.) professional degree program prepares students for the practice of architecture in entry-level positions and is part of an intern development program that leads to professional registration. Tyler Architecture Department offers two tracks in the M.Arch. degree program, a 2-year Professional Program track for students who have earned a pre-professional Bachelor’s degree in architecture and a 3-year Design Intensive track for students who have a non-pre-professional Bachelor's degree in architecture or another discipline. This curriculum is designed to enable students to learn theories and methodologies of architectural design as well as to understand the social, economic, political, and technological forces that shape the built environment. The principal educational component of the program is a coordinated series of studio courses in which creative design talents and management skills are developed. Holders of this degree may, upon completion of
postgraduate work experience, be admitted to the architectural licensing examinations offered in each state, through which they may become registered architects.

According to the NAAB, "In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted a 6-year, 3-year, or 2-year term of accreditation, depending on the extent of its conformance with established educational standards. Master's degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree."

All Architecture Department students have the opportunity to study abroad for a semester at Temple Rome or Temple Japan. Admission to these programs is competitive. Applications are made through the Temple Education Abroad Office.

For students entering our programs from Fall 2010 onwards, the Master of Architecture (2-year professional track and 3-year design intensive track) is the National Architecture Accreditation Board accredited professional degree (NAAB, www.naab.org).
(Note: The Bachelor of Architecture degree program is not available for students entering in Fall 2010 or after. It will be phased out by Spring 2014. Students who entered in 2009 and who have completed a substantial amount of the requirements of the Bachelor of Architecture degree program by Spring 2014 will have until Spring 2016 to finish all requirements for the Bachelor of Science in Architecture or the Bachelor of Architecture degrees offered on entry in 2009. For further information, consult the department's web site at www.temple.edu/architecture.)

## Study Abroad

Students who plan to study abroad should arrange to meet with an academic advisor as early as possible, preferably during the freshman year, in order to plan the sequence of courses that would be most appropriate. While students majoring in Architecture may study in Rome in the fall or spring semester, Japan is only an option for the spring. Architectural Preservation and Facilities Management majors should consider attending the Rome or Japan program only during the spring semester of the junior year.

## University Requirements

All students are required to complete the General Education requirements. Go to the General Education section for more information.

All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific writing-intensive courses required for the major are identified below by "WI" in the Attribute column.

A total of 123 s.h. is required for completion of the Bachelor of Science in Architecture; 122 s.h. is required for completion of the Bachelor of Science in Architectural Preservation; 122 s.h. is required for completion of the Bachelor of Science in Facilities Management.

## Architecture Foundation Studies Courses (Year 1 \& 2)

| Freshman Year - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Arts | 3 | GA |
| Mathematics | 1031 | Differential \& Integral Calculus | 4 |  |
| Architecture | 1011* | Visual Literacy for Architects 1 (fall only) | 3 |  |
| Total |  |  | 14 |  |
| * Although not required, freshman students registered for Architecture 1011 should also take Foundation 1501: Introduction to Art \& Design |  |  |  |  |
|  |  |  |  |  |
| Freshman Year - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Physics | 1021 | Introduction to General Physics I | 4 | (GS) |
| Architecture | 1001 | Introduction to Design \& the Environment | 3 |  |
| Architecture | 1012* | Visual Literacy for Architects 2 (spring only) | 3 |  |
| Total |  |  | 16 |  |

*Although not required, students registered for Architecture 1012 should also take Foundation 1502: Investigations of Art \& Design

## Sophomore Year - Fall

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Architecture | $2121^{*}$ | Foundation Architectural Design 1 (fall only) | 4 |  |
| Architecture | 2141 | Architectural History: Ancient through Renaissance <br> (fall only) | 3 |  |
| Architecture | 2151 | Architecture, Technology, \& the Environment | 3 |  |
| Total |  |  | $\mathbf{1 6}$ |  |

*Option to take Architecture 2123/2153 instead of Architecture 2121 for B.S. in Facilities Management

Sophomore Year - Spring

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| GenEd | $08 \times x$ or 09xx | Science \& Technology | 3 | GS |
| Architecture | $2122^{*}$ | Foundation Architectural Design 2 | 4 |  |
| Architecture | 2142 | Architectural History: Renaissance through 20th Century | 3 |  |
| Elective | $* *$ | Free elective | 3 |  |
| Elective | $* *$ | Free elective | 3 |  |
| Total |  |  | $\mathbf{1 6}$ |  |

*Option to take Architecture 2124/2154 instead of Architecture 2122 for B.S. in Facilities Management.
**Students planning to study abroad should substitute the Free Elective for a required course available only on Main campus.
For more information, please see your advisor.

Note: The Architecture Foundation is common to all three undergraduate degrees. In the spring of the sophomore year, students declare a major in one of the degrees offered. A place in the B.S. in Facilities Management or the B.S. in Architectural Preservation is guaranteed for all students in good standing with the University. Admission to the Bachelor of Science in Architecture is competitive. Typically, students have a cumulative GPA of 3.0 or higher and an excellent portfolio. Completion of minimum entrance requirements does not guarantee admission.

## Bachelor of Science in Architecture (Year 3 \& 4)

| Junior Year - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course\# | Course Title | Hours | Attribute |
| Architecture | 3231 | Architectural Design III | 6 |  |
| Architecture | 3152 | Materials \& Methods | 4 |  |
| Architecture | 3296 | Movements in Modern Architecture | 3 | WI |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Total |  |  | 16 |  |
|  |  |  |  |  |
| Junior Year - Spring |  |  |  |  |
| Subject | Course\# | Course Title | Hours | Attribute |
| Architecture | 3232 | Architectural Design IV | 6 |  |
| Architecture | 3354 | Sustainability \& Architecture | 3 |  |
| GenEd | 08xx or 09xx* | Global/World Society | 3 | GG |
| Elective |  | Free Elective | 3 |  |
| Total |  |  | 15 |  |

*Successful completion of an approved study abroad program provides a waiver from the Global/World Society area of GenEd

| Senior Year - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course\# | Course Title | Hours | Attribute |
| Architecture | 4331 | Architectural Design V (fall only) | 6 |  |
| Architecture | 3251 | Structural Analysis for Architects | 3 |  |
| Architecture |  | Architecture Elective | 3 |  |
| Elective |  | Free Elective | 3 |  |
| Total |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - Spring |  |  |  |  |
| Subject | Course\# | Course Title | Hours | Attribute |
| Architecture | 4332 | Architectural Design VI (capstone) (spring only) | 6 |  |
| Architecture | 4596 | Seminar in Architectural Theory | 3 | WI |
| Architecture |  | Architecture Elective | 3 |  |
| Architecture |  | Architecture Elective | 3 |  |
| Total |  |  | 15 |  |
|  |  |  |  |  |
| Total Credits for the B.S. in Architecture: |  |  | 123 |  |
|  |  |  |  |  |
| Rome Option |  |  |  |  |

BS Arch students who plan to study abroad are encouraged to meet with an advisor as early as the freshman year. While the grid below suggests appropriate coursework, a semester abroad would require using free electives that ordinarily would be taken in other semesters. It will take careful planning with an advisor to ensure that the degree is completed as efficiently as possible, and that courses normally taken in the spring of junior year or the fall of senior year on Main campus are completed before the semester abroad. Architecture 3234 can substitute for Architecture 4331; Architecture 3241 counts as an Architecture elective.

| Subject | Course\# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Architecture | 3234 | Architectural Design Studio in Rome | 6 |  |
| Architecture | 3241 | Seminar Analysis of Urban Structure in Rome | 3 |  |
| Elective |  | Free Elective | 3 |  |
| Elective |  | Free Elective | 3 |  |
| Total |  |  | $\mathbf{1 5}$ |  |
|  |  |  |  |  |

## Japan Option

BS Arch students who plan to study abroad are encouraged to meet with an advisor as early as the freshman year. While the grid below suggests appropriate coursework, a semester abroad would require using free electives that ordinarily would be taken in other semesters. It will take careful planning with an advisor to ensure that the degree is completed as efficiently as possible, and that courses normally taken in the spring of junior year or fall of senior year on Main campus are completed before the semester abroad.

GenEd courses are offered at the Japan campus and can be substituted where appropriate for Free electives. Architecture 3234 can substitute for Architecture 4331; Architecture 3242 counts as an Architecture elective.

| Subject | Course\# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Architecture | 3233 | Architectural Design Studio in Tokyo (spring only) | 6 |  |
| Architecture | 3242 | Urban Seminar in Tokyo (spring only) | 3 |  |
| Elective |  | Free Elective | 3 |  |
| Elective |  | Free Elective | 3 |  |
| Total |  |  | $\mathbf{1 5}$ |  |

## Bachelor of Science in Architectural Preservation (Year 3 \& 4)

| Junior Year - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course\# | Course Title | Hours | Attribute |
| Architecture | 3111 | Introduction to Architectural Preservation | 3 |  |
| Architecture | 3152 | Materials \& Methods | 4 |  |
| Architecture | 3296 | Movements in Modern Architecture | 3 | WI |
| Chemistry | 1011 | Chemistry: The Study of Matter I | 4 |  |
| Elective |  | Free Elective | 3 |  |
| Total |  |  | 17 |  |
|  |  |  |  |  |
| Junior Year - Spring |  |  |  |  |
| Subject | Course\# | Course Title | Hours | Attribute |
| Architecture | 3251 | Structural Analysis for Architects | 3 |  |
| Architecture |  | Architecture Elective | 3 |  |
| GenEd | 08xx or 09xx* | Global/World Society | 3 | GG |
| Elective |  | Free Elective | 3 |  |
| Elective |  | Free Elective | 3 |  |
| Total |  |  | 15 |  |

*Successful completion of an approved study abroad program provides a waiver from the Global/World Society area of GenEd

| Senior Year - Fall | Course Title | Hours | Attribute |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course\# | Global Preservation Practice (fall only) | 3 |  |
| Architecture | 4141 | Research Methods for Architectural Preservation (fall only) | 3 |  |
| Architecture | 4145 | Sustainability \& Architecture | 3 |  |
| Architecture | 3354 | Race \& Diversity | 3 | GD |
| GenEd | $08 x x$ or 09xx | 3 |  |  |
| Elective |  | Free Elective | $\mathbf{1 5}$ |  |
| Total |  |  |  |  |

Senior Year - Spring

| Subject | Course\# | Course Title | Hours |  |
| :--- | :--- | :---: | :---: | :---: |
| Attribute |  |  |  |  |
| Architecture | 4199 | Capstone Research Seminar for Architectural Preservation | 4 |  |
| Architecture | 4596 | Seminar in Architectural Theory | 3 |  |
| Architecture |  | Architecture Elective | WI |  |
| Elective |  | Free Elective | 3 |  |
| Total |  | $\mathbf{1 3}$ |  |  |
|  |  |  |  |  |
| Total Credits for the B.S. in Architectural Preservation: | $\mathbf{1 2 2}$ |  |  |  |

## Rome Option

Students who plan to study abroad are encouraged to meet with an advisor as early as the freshman year. While the grid below suggests appropriate coursework, a semester abroad would require using free electives that ordinarily would be taken in other semesters. It will take careful planning with an advisor to ensure that the degree is completed as efficiently as possible, and that courses normally taken in the spring of junior year on Main campus are completed before the semester abroad. Architecture 3241 counts as an Architecture elective.

| Subject | Course\# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Architecture | 3241 | Seminar Analysis of Urban Structure in Rome | 3 |  |
| Elective |  | Free Elective | 3 |  |
| Elective |  | Free Elective | 3 |  |
| Elective |  | Free Elective | 3 |  |
| Elective | Free Elective | 3 |  |  |
| Total |  |  | $\mathbf{1 5}$ |  |
|  |  |  |  |  |
| Japan Option |  |  |  |  |

Students who plan to study abroad are encouraged to meet with an advisor as early as the freshman year. While the grid below suggests appropriate coursework, a semester abroad would require using free electives that ordinarily would be taken in other semesters. It will take careful planning with an advisor to ensure that the degree is completed as efficiently as possible, and that courses normally taken in the spring of junior year on Main campus are completed before the semester abroad.

GenEd courses are offered at the Japan campus and can be substituted where appropriate for Free electives. Architecture 3242 counts as an Architecture elective.

| Subject | Course\# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Architecture | 3242 | Urban Seminar in Tokyo (spring only) | 3 |  |
| Elective |  | Free Elective | 3 |  |
| Elective |  | Free Elective | 3 |  |
| Elective |  | Free Elective | 3 |  |


| Elective |  | Free Elective | 3 |  |
| :--- | :--- | :--- | :---: | :---: |
| Total |  |  | $\mathbf{1 5}$ |  |

## Bachelor of Science in Facilities Management (Year 3 \& 4)

| Junior Year - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course\# | Course Title | Hours | Attribute |
| Architecture | 3097 | Introduction to Facility Management (fall only) | 3 | WI |
| Architecture | 3152 | Materials \& Methods | 4 |  |
| Accounting | 2101 | Financial Accounting | 3 |  |
| Real Estate | 3501 | Real Estate Fundamentals | 3 |  |
| Human Resource Management | 1101 | Leadership \& Organizational Management | 3 |  |
| Total |  |  | 16 |  |
|  |  |  |  |  |
| Junior Year - Spring |  |  |  |  |
| Subject | Course\# | Course Title | Hours | Attribute |
| Architecture | 3013 | Project Planning \& Programming | 3 |  |
| Architecture | 3354 | Sustainability \& Architecture | 3 |  |
| Economics | 1102 | Microeconomic Principles | 3 |  |
| Real Estate | 3502 | Real Estate Practice | 3 |  |
| GenEd | 08xx or 09xx* | Global/World Society | 3 | GG |
| Total |  |  | 15 |  |

*Successful completion of an approved study abroad program provides a waiver from the Global/World Society area of GenEd

Senior Year - Fall

| Subject | Course\# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Architecture | 3012 | Computer Aided Facility Management (fall only) | 3 |  |
| Architecture | 4011 | Research Methods for Facility Management (fall <br> only) | 3 |  |
| Architecture | 4296 | Design, Behavior \& Culture | 3 | WI |
| Legal Studies | 1102 | Law of Contracts | 3 |  |
| Statistics | 2103 | Business Statistics | 4 |  |
| Total |  |  | $\mathbf{1 6}$ |  |

Senior Year - Spring

| Subject | Course\# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Architecture | 4099 | Capstone Research Seminar for Facility Management <br> (spring only) | 4 |  |
| Management Science/ <br> Operations Management | 3101 | Operations Management | 3 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | Architecture Elective | 3 |
| Architecture |  |  | $\mathbf{1 3}$ |  |
| Total |  |  |  |  |


| Total Credits for the B.S. in Facilities Management: | 122 |
| :--- | :--- |

## Rome Option

Students who plan to study abroad are encouraged to meet with an advisor as early as the freshman year.
While the grid below suggests appropriate coursework, a semester abroad would require using free electives that ordinarily would be taken in other semesters. It will take careful planning with an advisor to ensure that the degree is completed as efficiently as possible, and that courses normally taken in the spring of junior year on Main campus are completed before the semester abroad. Architecture 3241 counts as an Architecture elective.

| Subject | Course\# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Architecture | 3241 | Seminar Analysis of Urban Structure in Rome | 3 |  |
| Elective |  | Free Elective | 3 |  |
| Elective |  | Free Elective | 3 |  |
| Elective | Free Elective | 3 |  |  |
| Elective | Free Elective | 3 |  |  |
| Total |  | $\mathbf{1 6}$ |  |  |
|  |  |  |  |  |
| Japan Option |  |  |  |  |

Students who plan to study abroad are encouraged to meet with an advisor as early as the freshman year. While the grid below suggests appropriate coursework, a semester abroad would require using free electives that ordinarily would be taken in other semesters. It will take careful planning with an advisor to ensure that the degree is completed as efficiently as possible, and that courses normally taken in the spring of junior year on Main campus are completed before the semester abroad.

GenEd courses are offered at the Japan campus and can be substituted where appropriate for Free electives. Architecture 3242 counts as an Architecture elective.

| Subject | Course\# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Architecture | 3242 | Urban Seminar in Tokyo (spring only) | 3 |  |
| Elective |  | Free Elective | 3 |  |
| Elective | Free Elective | 3 |  |  |
| Elective | Free Elective | 3 |  |  |
| Elective |  | Free Elective | 3 |  |
| Total |  |  | $\mathbf{1 5}$ |  |

Following a student's matriculation into the Architecture Program, transfer credits for architecture courses are accepted only from accredited architectural programs in four-year institutions. Students must receive permission in advance to take courses at other institutions. All university policies governing this process will be enforced.

## Art

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Temple University Japan's Art Major is offered under the auspices of the Tyler School of Art. While including courses in painting and drawing, three-dimensional design, and art history,
the major's principal focus is on digital media art. The major helps to cultivate the artistic sense and skills that will help students develop as artists and to work in art-related careers.

## Bachelor of Arts in Art, Digital Media Concentration (Japan campus only)

The Bachelor of Arts in Art with a Digital Media concentration is a fine-art oriented course of study focusing on the use of the computer as a creative tool. This concentration helps students develop their artistic vision using new technology to focus on personal expression; it is not graphic design. Students in this concentration pursue a variety of projects designed to help them explore the boundaries between technology and studio art processes. Students interested in graphic design should investigate the B.F.A. in Graphic and Interactive Design on the Main campus of Temple University.

New students are required to complete the General Education (GenEd) curriculum. In addition to the GenEd Global/World Society requirement, B.A. candidates in Art under the GenEd curriculum are required by their department to complete successfully the second semester of a foreign language. Study abroad for a summer or semester will satisfy the Global/World Society requirement.

There will be no requirement to take the GenEd Arts course if all of the following courses are completed with a C- or better: Art 1101, Art 1201, Art 1401 (or 1496 or 1996), and Art 1501. If the student changes majors before completing all four courses, s/he must complete a GenEd Arts course to satisfy the requirement for General Education.

Students must complete at least 15 semester hours in upper-level Liberal Arts courses.
There may be minimum grade requirements of C- or better in required courses - students should refer to the DARS and their advisor.

The Bachelor of Arts degree may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 123 semester hours of credit with a minimum cumulative GPA of 2.00.

Students who are seeking admission into the B.A. in Art degree program must review the requirements and procedures outlined on the TUJ web site: www.tuj.ac.jp/admissions/index.html.

## Bachelor of Arts in Art Major Requirements

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| rrt | 1501 | Introduction to Visual Language: Design | 3 |  |
| Art | 1401 | Introduction to Visual Language: Drawing | 3 |  |
| Art | 1101 | Introduction to Visual Language: Painting | 3 |  |
| Art | 1201 | Introduction to Visual Language: 3-D Design | 3 |  |
| Art | 4796 | Art Seminar | 3 | WI |
| Art History | 1155 or 1955 | Art Heritage of the Western World I | 3 |  |
| Art History | 1156 or 1956 | Art Heritage of the Western World II | 3 |  |


|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Select one from the following list: | 3 |  |  |  |
| Art History | Elective | 2000 or above <br> or <br> Art and Society <br> or <br> Introductory Seminar in Community Arts | 1061 |  |
| Philosophy |  |  |  |  |
| Art Education | 3011 |  |  |  |
|  |  |  |  |  |
| A course chosen here cannot be used as part of the upper-level CLA requirements. |  |  |  |  |

## Digital Media Concentration Requirements

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Art |  | Two Non-Digital Studio Electives | 6 |  |
| Select one from the following list: |  |  | 3 |  |
| Art | 2301 <br> 2302 <br> 2311 <br> 2312 <br> 2801 <br> 2802 | Relief Printmaking I <br> Intermediate Printmaking: Relief <br> Lithography <br> Intermediate Printmaking: Lithography <br> Art Photography: Darkroom <br> Intermediate Art Photography: Darkroom |  |  |
|  |  |  |  |  |
| Plus: |  |  |  |  |
| Art |  | Five Digital Studio Electives | 15 |  |
| Art |  | Two additional Studio Electives, digital or non-digital. | 6 |  |
| CLA |  | Five upper-level CLA courses, one must be in Social Science. Upper-level Art History courses can be counted here except as noted above. | 15 |  |

## Art Minor Requirements

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Art | 1501 | Introduction to Visual Language: Design | 3 |  |
| Art | 1401 | Introduction to Visual Language: Drawing | 3 |  |
| Art | 1101 | Introduction to Visual Language: Painting | 3 |  |
| Art History | $\begin{aligned} & 1155 / 1955 \\ & 1156 / 1956 \\ & \hline \end{aligned}$ | Art Heritage of the Western World I or <br> Art Heritage of the Western World II | 3 |  |
|  |  |  |  |  |
| Select one from the following list: |  |  | 3 |  |
| Art | 2301 <br> 2311 <br> 2601 <br> 2801 <br> 2811 | Relief Printmaking <br> Lithography <br> Computer Imaging <br> Art Photography: Darkroom <br> Art Photography: Digital |  |  |
|  |  |  |  |  |
| Plus: |  |  |  |  |
| Art |  | Two additional Studio Electives | 6 |  |

Note: The department will accept a maximum of 9 s.h. of transfer studio credits towards the minor. A portfolio of work must be submitted for review by department faculty.

## Suggested Semester By Semester Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

## Bachelor of Art in Art, Digital Media Concentration

Requirements for New Students starting in the 2013-2014 Academic Year

| Year 1 - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812, or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Art | 1501 | Introduction to Visual Language: Design** | 3 |  |
| Art | 1401 | Introduction to Visual Language: Drawing** | 3 |  |
| Art History | 1155 or 1955 | Art Heritage of the Western World I | 3 |  |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Year 1 - Spring Semester |  |  |  |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Art | 1201 | Introduction to Visual Language: 3-D Design** | 3 |  |
| Art | 1101 | Introduction to Visual Language: Painting** | 3 |  |
| Art History | 1156 or 1956 | Art Heritage of the Western World II | 3 |  |
| Semester Total |  |  | 16 |  |

Year 2 - Fall Semester

| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| :---: | :---: | :---: | :---: | :---: |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
|  |  | Language I | 4 |  |
| Art |  | Non-Digital Studio Elective | 3 |  |
| Select one from the following list: |  |  | 3 |  |
| Art | 2301 <br> 2302 <br> 2311 <br> 2312 <br> 2801 <br> 2802 | Relief Printmaking I <br> Intermediate Printmaking: Relief <br> Lithography <br> Intermediate Printmaking: Lithography <br> Art Photography: Darkroom <br> Intermediate Art Photography: Darkroom |  |  |
| Semester Total |  |  | 16 |  |
| Year 2 - Spring Semester |  |  |  |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
|  |  | Language II | 4 |  |
| Art |  | Non-Digital Studio Elective | 3 |  |
| Art |  | Digital Studio Elective | 3 |  |
| Semester Total |  |  | 16 |  |



## Bachelor of Science in Art Education

Lisa Kay, Art Education Program Head
Tyler School of Art Building
Administrative Suite Room 210K
215-777-9163
artedart@temple.edu

Tyler School of Art offers the Bachelor of Science in Art Education, an accredited program leading to Pennsylvania Certification in Art, K-12. Newly-expanded offerings in the Community Arts have developed courses with outreach to the Philadelphia community. Graduates from our Art programs have gone on to graduate study, field work in art galleries, studios, and a wide variety of art-related occupations. We have a 92\% placement rate for Art Education in K-12 schools and also in community sites.

The Art Education program ensures a fully-rounded preparation for the elementary and secondary school teacher. This program provides content study for art teacher preparation and teacher certification to teach art in kindergarten through twelfth grade. The requirements for the degree are 122 total credits: 42 credits are in studio art, 10 credits in Art History, 20 credits in Art Education, 15 credits in Education and Special Education, and 29 credits in General Education and required or elective liberal arts courses. A 3.0 minimum cumulative GPA is required for registration in all Art Education courses. The Bachelor of Science degree in Art Education may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 122 semester hours of credit with a minimum cumulative GPA of 3.0.

A portfolio is required for admission into the B.S. in Art Education degree program. If you have completed college-level studio courses and are seeking studio equivalency credit, you must complete a transfer portfolio review. The department will only accept up to 24 transfer credits of studio work toward the major. Students who are seeking admission into the B.S. in Art Education degree program must contact the Tyler Admissions Office (215-777-9090) for portfolio requirements.

Courses required for the degree may have a minimum grade requirement - please check with the advising staff and the DARS.

Degree Requirements for the B.S. in Art Education

A minimum of 122 hours is required for the degree.

## University Requirements

- Students must complete the university's General Education curriculum.


## Art Education Major Requirements

- Visual Studies 1058, 1151, 1351, 1451, 1651, 2058, 2152, 2252, 2552, 3253
- Tyler Foundation 1501
- Art History 1155 or 1955, 1156 or 1956, and an additional Art History writing intensive elective course (2000+ level)
- Art Education 2001, 3096, 4003, 4088
- Education 2103, 2109
- Special Education 2231, 3211
- English Education (Secondary) 3338
- Three studio art electives (may be taken from Visual Studies, Community Arts, or from 2000 level Crafts, PDS, or GAD)
- One academic elective
- One Mathematics course (in addition to GenEd Math)
- One Ceramics studio course


## Suggested Semester By Semester Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

## Bachelor of Science in Art Education

Requirements for New Students starting in the 2013-2014 Academic Year

| Freshman Year - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812, or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Visual Studies | 1151 | VS 1 Foundation: Drawing ^ | 3 |  |
| Visual Studies | 1451 | VS 1 Foundation: Composition \& Color | 2 |  |
| Art History | 1155 or 1955 | Art Heritage of the Western World I | 3 |  |
| Foundation | 1501 | Introduction to Art \& Design | 1 |  |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Freshman Year - Spring |  |  |  |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Visual Studies | 1058 | VS 1 Interdisciplinary Studio Seminar 1 | 3 |  |
| Visual Studies | 1351 | VS 1 Foundation: 3D | 3 |  |
| Art History | 1156 or 1956 | Art Heritage of the Western World II ^ | 3 |  |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - Fall |  |  |  |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Education | 2103 | Socio-Cultural Foundations of Education in the U.S. | 3 |  |
| Visual Studies | 1651 | VS 1 Foundation: Digital Imaging | 3 |  |
| Visual Studies | 2252 | VS 2 Concept Studio: Painting | 3 |  |
| Mathematics |  | Math elective (1000+ or higher) | 3-4 |  |
| Semester Total |  |  |  |  |
|  |  |  |  |  |
| Sophomore Year - Spring |  |  |  |  |
| Visual Studies | 2552 | VS 2 Concept Studio: Print Imaging | 3 |  |
| Visual Studies | 2058 | VS 2 Interdisciplinary Studio Seminar 2 | 3 |  |
| GenEd | 08xx or 09xx | Global/World Society* | 3 | GG |
| Education | 2109 | Adolescent Development for Educators** | 3 |  |
| Special Education | 2231 | Introduction to Inclusive Education** (field experience) | 3 |  |
| Semester Total |  |  | 15 |  |


| Junior Year - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| Elective |  | Studio Elective | 3 |  |
| Visual Studies | 2152 | VS 2 Concept Studio: Drawing | 3 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Art Education | 2001 | Science \& Art of Teaching (field experience) | 4 |  |
| Semester Total |  |  | 16 |  |
| Junior Year - Spring |  |  |  |  |
| Visual Studies | 3253 | VS 3 Concept Studio: Hybrid Painting | 3 |  |
| Elective |  | Ceramics | 3 |  |
| Special Education | 3211 | Effective Instructional Strategies for Young Children with Disabilities | 3 |  |
| English Education (Secondary) | 3338 | Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12** | 3 |  |
| Art History |  | Art History Elective | 4 | WI |
| Semester Total |  |  | 16 |  |
| Senior Year - Fall |  |  |  |  |
| Art Education | 3096 | Art in Elementary \& Secondary School (field experience) | 4 | WI |
| Elective |  | Studio Art Elective | 3 |  |
| Elective |  | Studio Art Elective | 3 |  |
| Elective |  | Academic Elective | 3 |  |
| GenEd | 108xx or 09xx | U.S. Society | 3 | GU |
| Semester Total |  |  | 16 |  |
| Senior Year - Spring |  |  |  |  |
| Art Education | 4088 | Student Teaching | 9 |  |
| Art Education | 4003 | Special Needs K-12 Students in the Art Room | 3 |  |
| Semester Total |  |  | 12 |  |
|  |  |  |  |  |
| Total Hours for Art Education: |  |  |  |  |
| *Summer or semester study abroad program will satisfy the GenEd Global/World Society requirement. |  |  |  |  |
| **GenEd Human Behavior (GB) Waiver: Completion of Education 2109, Special Education 2231 and English Education (Secondary) 3338 with a C- or better. |  |  |  |  |
| M GenEd Arts (GA) Waiver: Completion of Art History 1156 and Visual Studies 1151 with a C- or better. |  |  |  |  |
| See academic advisor for information on the GenEd Arts waiver. |  |  |  |  |

# Certificate in Arts in Community 

Pepon Osorio, Chair<br>Tyler School of Art Building<br>Administrative Suite Room 210J<br>215-777-9163<br>pepono@temple.edu<br>artedart@temple.edu

The Arts in Community Program (ACP) was started as a commitment to the many and varied communities in Philadelphia and to Tyler students' education as artists to combine artistic disciplines with skills and knowledge in community organizing, positioning them for an expanded civic role in the 21st century. ACP develops and delivers university courses, afterschool workshops, intergenerational forums, inter-disciplinary performances and site-specific installations. At the heart of the program are community partnerships and internships that enable Tyler/Temple students to expand their art disciplines as community collaborators. During the last several years ACP has created a body of community-based arts works, establishing a network of relationships and ongoing presence in neighborhoods that translates into continued projects. During this time, we have worked with youth and adults, organizations and families, in North Philadelphia neighborhoods and beyond, building a broad range of community arts partnerships that stimulate dialogue and share history to create exhibitions and interdisciplinary performances based on community lives and stories and shared student experiences.

As part of this program, Tyler offers an undergraduate Certificate in Arts in Community on the Main Campus only. The undergraduate certificate consists of a four-course, 12 -credit sequence. Both matriculated and non-matriculated students may register for these courses. The required courses for the undergraduate certificate are:

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Art Education | 3011 or 3911 | Introductory Seminar in Community Arts | 3 |  |
| Art Education | 3089 or 3989 | Research \& Project Planning Seminar in Community Arts | 3 |  |
| Art Education | 4012 | Community Arts | 3 |  |
| Art Education | 4089 | Evaluation \& Documentation in Community Arts | 3 |  |
| Total credits for certificate: |  | $\mathbf{1 2}$ |  |  |

## Art History

Dr. Gerald Silk, Chairperson of Art History gsilk@temple.edu

Dr. Jonathan Kline, Undergraduate Advisor
jdkline@temple.edu
arthisto@temple.edu
The Department of Art History offers broad-ranging introductory surveys of art, from prehistoric times to the present, and more closely focused courses, treating limited segments of the vast historic panorama in both western and non-western art. Approximately sixty courses are offered over the span of a four-year period. Students majoring in art history should graduate with a thorough knowledge of the art historical traditions of each major period from ancient through postmodern art and with an understanding of the methods practiced in the discipline of art history.

Students majoring in art history, especially those pursuing the advanced degree, should be qualified to teach at all levels of lower and higher education. They can also obtain jobs as museum curators, gallery directors, corporate art employees, researchers, and work in a variety of capacities for cultural associations.

The Graduate Student Art History Association sponsors lectures and exhibition visits throughout the year.

## Bachelor of Arts in Art History Degree Requirements

The degree of Bachelor of Arts in Art History may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 123 semester hours of credit with a minimum cumulative GPA of 2.0 overall and in the major. No grade below a C- is allowed in any course in the major or in the University General Education (GenEd) curriculum.

## Degree Requirements:

## University Requirements

- Students must complete the requirements of the General Education (GenEd) program.
- A minimum of 45 semester hours in upper level courses must be completed with a passing grade (45 s.h.): CLA 2000 to 4999; CST 2000 to 4999.
- Students must complete the second level of a foreign language: Arabic 1002; Chinese 1002; French 1002; German 1002; Greek (Ancient) 1002; Greek (Modern) 1002; Hebrew 1002; Hindi 1002; Italian 1002; Japanese 1002; Korean 1002; Latin 1002; Portuguese 1002; Russian 1002; Spanish 1002, 1902; Vietnamese 1002.


## Art History Major Requirements (minimum of 41 s.h.)

- Two (2) introductory level courses are required (minimum of 6 s.h.): Art History 1155 or 1955, 1156 or 1956, 1801*. (*Note that Art History 1801 is only offered at the Japan campus.)
- Students must complete one (1) upper level lecture course from 5 of the 7 groups listed (20 s.h.):
o Ancient - Art History 2110, 2111, 2117, 2129, 2135, 2196.
o Medieval - Art History 2200, 2215, 2216, 2217, 2325.
o Renaissance - Art History 2300, 2321, 2323, 2325, 2329, 2350, 3301, 3324.
o Baroque - Art History 2329, 2350, 2400, 2428, 2431, 2432, 2450, 2496, 2497.
o 19th Century - Art History 2500, 2535, 2543, 2563, 2704.
o 20th Century - Art History 2008, 2013, 2600, 2601, 2610, 2622, 2642, 2644, 2651, 2658, 2701.
o Non Western - Art History 2800, 2807, 2815, 2818, 2819, 2868, 2871.
- Two (2) additional upper level Art History electives are required (8 s.h.): Art History 2000 to 4999.
- One (1) Capstone course is required (4 s.h.): Art History 3097.
- One Studio Art course is required. Options for courses change each semester; please see advisor.
- In addition to the Capstone course (Art History 3097), which is writing intensive, one (1) other upper level course in the major must be writing intensive (minimum 4 s.h.): Art History 2096, 2097, 2098, 2196, 2496, 2497, 2897.


## Art History Minor

Art History Minor Requirements (for non-B.F.A. Students)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Art History |  | Introductory Course: Select from 1801, 1155, 1156, 1955, 1956, 0808. | 3 |  |
| Art History |  | Upper-Level Electives: Select four from 2000 and above. | 16 |  |

Art History Minor Requirements (Tyler School of Art B.F.A. Students)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Art History | $1155 / 1955$ | Art Heritage of the Western World I | 3 |  |
| Art History | $1156 / 1956$ | Art Heritage of the Western World II | 3 |  |
| Art History |  | Upper-Level Electives: Select four from 2000 and above. | 16 |  |

## Suggested Semester-by-Semester Plan for the B.A. in Art history

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

For New Students starting in the 2013-2014 Academic Year

| First Year - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| Elective |  | Free Elective | 3 |  |
| Art History | 1155 or 1955 | Art Heritage of the Western World I | 3 |  |
| Subtotal |  |  | 16-17 |  |
|  |  |  |  |  |
| First Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Elective |  | Free Elective | 3 |  |
| Art History | 1156 or 1956 | Art Heritage of the Western World II | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Second Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
|  |  | Language I | 4 |  |
| Art History | 2000+ | Upper-Level Art History | 4 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Second Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Art History | 2000+ | Upper-Level Art History^ | 4 | WI |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
|  |  | Language II | 4 |  |
| Elective |  | Free Elective | 3 |  |
| GenEd | 08xx or 09xx | Global/World Society* | 3 | GG |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Third Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Art History | 2000+ | Upper-Level Art History | 4 |  |
| Art History | 2000+ | Upper-Level Art History | 4 |  |
| Elective | 2000+ | Upper-Level Liberal Arts | 3 |  |
| Art |  | Studio Art | 3 |  |


| Subtotal |  |  | 14 |  |
| :---: | :---: | :---: | :---: | :---: |
| Third Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Art History | 2000+ | Upper-Level Art History | 4 |  |
| Art History | 3097 | Art History Capstone** | 4 | WI |
| Elective |  | Free Elective | 3 |  |
| Elective | 2000+ | Upper-Level CLA - Social Science Elective | 3 |  |
| Subtotal |  |  | 14 |  |
|  |  |  |  |  |
| Fourth Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Art History | 2000+ | Upper-Level Art History | 4 |  |
| Elective | 2000+ | Upper-Level Liberal Arts | 3 |  |
| Elective | 2000+ | Upper-Level Liberal Arts | 3 |  |
| Elective |  | Free Elective | 3 |  |
| Elective |  | Free Elective | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Fourth Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Art History | 2000+ | Upper-Level Art History | 4 |  |
| Elective | 2000+ | Upper-Level Liberal Arts | 3 |  |
| Elective |  | Free Elective | 3 |  |
| Elective |  | Free Elective | 3 |  |
| Subtotal |  |  | 13 |  |
|  |  |  |  |  |
| Total Credits for the B.A. in Art History: |  |  | $123$ |  |
| $\triangle$ Art History 2897 (Writing for Art History: Art History Writing Intensive Seminar) is strongly recommended. |  |  |  |  |

All upper-level Art History courses are categorized as upper-level Liberal Arts courses.
*Summer or semester study abroad program will satisfy the GenEd Global/World Society requirement.
**Art History Capstone is a senior-level course in historiography and research methods, typically offered every semester. Students may take Capstone in either the third or fourth year, but should not enroll until after they have completed at least four upper-level art history courses.

## Bachelor of Fine Arts

Tyler School of Art
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Philadelphia, PA 19122
215-777-9000
tyler@temple.edu
Tyler's curriculum is designed to give sound preparation to the future artist while at the same time avoiding narrow vocational goals. The freshman foundation program and introductory
courses in each studio area develop a thorough understanding of fundamental processes and information. Advanced courses in the majors stress the development of an individual idiom and preparation for the professional world. At Tyler, art students find an atmosphere of aesthetic freedom that encourages personal experimentation and the exploration of visual concepts.

The B.F.A. with the Art Education Concentration prepares students for the PA certification in teaching art, kindergarten through twelfth grade. Students must complete B.F.A. requirements along with a three-year sequence in Education and Art Education that begins in the sophomore year. Five years are necessary to fulfill all requirements. Students who take summer session courses may complete the degree in 4.5 years. See additional information under B.F.A. with Art Education Concentration below.

## Freshman Year

The Foundation Program is highly structured and intensive; it forms the base that establishes the fundamental studio practice and principles for all visual art expression. In addition to presenting traditional vocabulary, theory, media, and technique, the Foundation Program develops creative thinking and problem solving, visual thinking, and perceptual and imaginative abilities. Faculty members from all areas of the school teach the Foundation courses, assuring a broad range of experience and diverse viewpoints.

## Sophomore Year

Sophomore studio electives serve as prerequisites to enter the major, of which one or two specific courses are required in each major. During the sophomore year, students are offered the opportunity to explore a wide range of studio areas. This experience gives the necessary background with which to make an informed selection of a major and adds to the overall breadth of the educational experience. Requirements are six 2000 -level studio courses ( 18 s.h.), not to exceed three courses from any one major area and to include at least one course from three different major areas; and additional credits in Art History electives and/or General Education.

## Junior and Senior Years

The Bachelor of Fine Arts degree is completed after a final two-year concentration in a major studio area. Because expressive work is often achieved by synthesis of disparate media, studio work outside the major is allowed. Requirements are the specified major courses (21-24 s.h. depending on the major), with a minimum grade of C- required in each course; three studio electives which may be taken outside the major (9-12 s.h. depending on the major); one major capstone course (3 s.h.); and additional credits in Art History, General Education and elective courses.

## B.F.A. Degree

The Bachelor of Fine Arts degree in Studio Art may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 126 semester hours of credit with a minimum cumulative GPA of 2.00.

Please note that there may be minimum grade requirements in the courses required for the degree and as prerequisites for other courses. Please confer with the advising staff and review the DARS for information.

## B.F.A. Curriculum

| Requirements | Credits |
| :--- | :---: |
| Studio courses | 74 |
| Art History | 14 |
| General Education | 32 |
| Non-studio elective | 3 |
| Open elective | 3 |
| Total | $\mathbf{1 2 6}$ |

Suggested Four-Year B.F.A. Sequence for New Students Starting in the 2013-2014
Academic Year

| Freshman Year - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Foundation | 1511 | Foundation Drawing * | 3 |  |
| Foundation | 1521 | 2-D Foundation Principles | 3 |  |
| Foundation | 1531 | 3-D Foundation Principles | 3 |  |
| Foundation | 1501 | Introduction to Art \& Design | 1 |  |
| Art History | 1155 | Art Heritage Western World I | 3 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Freshman Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Foundation | 1512 | Foundation Drawing | 3 |  |
| Foundation | 1522 | 2-D Foundation Principles | 3 |  |
| Foundation | 1532 | 3-D Foundation Principles | 3 |  |
| Art History | 1156 | Art Heritage Western World II * | 3 |  |
| Foundation | 1502 | Investigations of Art \& Design | 1 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Crafts/GAD/PDS | 2xxx | Studio Electives/Prerequisites | 9 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Subtotal |  |  | 16 |  |

## Sophomore Year - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Crafts/GAD/PDS | 2xxx | Studio Electives/Prerequisites | 9 |  |
| GenEd | $08 x x$ or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

Junior Year - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Studio Major Courses | 6 |  |
|  |  | Studio Elective | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Art History |  | Art History Elective | 4 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Junior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
|  |  | Studio Major Courses | 6 |  |
|  |  | Studio Elective | 3 |  |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Art History |  | Art History Writing-Intensive Elective** | 4 | WI |
| Subtotal |  |  | 16 |  |

**Students may elect to take a second writing intensive course within their majors (if available), but must still fulfill a total of 14 credits in Art History - see academic advisor for details.

## Senior Year - Fall Semester

| Subject | Course \# | Course Title | Hours Attribute |  |
| :--- | :--- | :--- | :---: | :---: |
|  |  | Studio Major Courses | 6 |  |
|  |  | Studio Elective | 3 |  |
| Elective |  | Non-Studio Elective*** | 3 |  |
| GenEd | $08 x x$ or 09xx | Human Behavior | 3 | GB |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

***see academic advisor for details

Senior Year - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
|  |  | Studio Major Courses | 6 |  |
|  |  | Open Elective | 3 |  |
| GenEd | $08 x x$ or 09xx | Science \& Technology II | 3 | GS |
|  |  | Writing Intensive course in major (Capstone) | 3 | WI |
| Subtotal |  | $\mathbf{1 5}$ |  |  |
| In some majors, the Capstone is taken in the junior year. |  |  |  |  |
|  |  |  |  |  |
| Total Hours for B.F.A.: | $\mathbf{1 2 6}$ |  |  |  |

* These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C - or better.


## B.F.A. Degree with Art Education Concentration

The Bachelor of Fine Arts degree with the Art Education Concentration may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 155 semester hours of credit with a minimum cumulative GPA of 3.0.

Students in the B.F.A. degree with the Art Education Concentration are required to take a Ceramics studio course and an additional studio course in Crafts; a Painting studio course and an additional studio course from PDS; a Printmaking studio course and an additional studio course from the GAD department. These courses may include pre-requisite, sophomore, and/or studio courses within the student's chosen B.F.A. major.

Any BFA student who wishes to pursue the Art Education Concentration must arrange to meet with the Art Education faculty advisor to discuss field placement, clearances, and requirements, as the state of Pennsylvania may change requirements after the Bulletin information has been posted. It is strongly suggested that students do so during their freshman year.

Please note that there may be minimum grade requirements in the courses required for the degree. Please confer with the advising staff and review the DARS for information.

## B.F.A. with Art Education Concentration

| Requirements | Credits |
| :--- | :---: |
| Studio Courses | 74 |
| Art History Courses | 14 |
| General Education Courses | 29 |
| Education Requirements | 18 |
| Art Education Courses | 20 |
| Total | $\mathbf{1 5 5}$ |

Suggested Five-Year B.F.A. with Art Education Concentration Sequence for New Students Starting in the 2013-2014 Academic Year

| Freshman Year - Fall Semester | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Subject | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| English | 1511 | Foundation Drawing * | 3 |  |
| Foundation | 1521 | 2-D Foundation Principles | 3 |  |
| Foundation | 1531 | 3-D Foundation Principles | 3 |  |
| Foundation | 1501 | Introduction to Art \& Design | 1 |  |
| Foundation | 1155 |  | 3 |  |
| Art History |  |  | $\mathbf{1 7}$ |  |
| Subtotal |  |  |  |  |
|  | Freshman Year - Spring Semester | Course Title | Hours | Attribute |
| Subject | Course \# | Mosaic: Humanities Seminar I | 3 | GY |
| Intellectual Heritage | 0851 or 0951 | Foundation Drawing | 3 |  |
| Foundation | 1512 | 2-D Foundation Principles | 3 |  |
| Foundation | 1522 | 3-D Foundation Principles | 3 |  |
| Foundation | 1532 |  |  |  |


| Art History | 1156 | Art Heritage Western World II * | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Foundation | 1502 | Investigations of Art \& Design | 1 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
|  |  | Studio | 3 |  |
|  |  | Studio | 3 |  |
|  |  | Studio | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Education | 2103 | Socio-Cultural Foundations of Education in the United States | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Sophomore Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
|  |  | Studio | 3 |  |
|  |  | Studio | 3 |  |
|  |  | Studio | 3 |  |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Education | 2109 | Adolescent Development for Educators ^ | 3 |  |
| Subtotal |  |  | 16 |  |

Junior Year - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
|  |  | Studio Major Course | 3 |  |
|  |  | Studio Major Course | 3 |  |
|  |  | Studio Elective | 3 |  |
| Mathematics |  | (second Mathematics course for certification) | $3-4$ |  |
| GenEd | Global/World Society | 3 | GG |  |
| Subtotal |  |  | $\mathbf{1 5 - 1 6}$ |  |

Junior Year - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Studio Major Course | 3 |  |
|  |  | Studio Major Course | 3 |  |
| Art Education | 2001 | Science and Art of Teaching | 4 |  |
| Special Education | 2231 | Introduction to Inclusive Education ^ | 3 |  |
| GenEd | $08 x x$ or 09xx | U.S. Society | 3 | GU |
| Subtotal |  |  |  |  |
|  |  |  |  |  |
| Senior Year - Fall Semester | Course \# | Course Title | $\mathbf{1 6}$ |  |
| Subject | Studio Major Course | Hours | Attribute |  |
|  | Studio Major Course | 3 |  |  |
|  | Science \& Technology I | 3 |  |  |
| GenEd |  | Art History Elective | 3 | GS |
| Art History |  |  | 4 |  |


| English Education (Secondary) | 3338 | Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to $12 \wedge$ | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Subtotal |  |  | 16 |  |
| Senior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
|  |  | Studio Major Course | 3 |  |
|  |  | Studio Major Course | 3 |  |
| Crafts/GAD/PDS |  | Major Capstone | 3 | WI |
| Art History |  | Art History | 4 |  |
| Special Education | 3211 | Effective Instructional Strategies for Young Children with Disabilities | 3 |  |
| Subtotal |  |  | 16 |  |
| Fifth Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
|  |  | Studio elective | 3 |  |
|  |  | Studio elective | 3 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Art Education | 3096 | Art in Elementary and Secondary School | 4 | WI |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Fifth Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Art Education | 4003 | Special Needs K-12 Students in the Art Room | 3 |  |
| Art Education | 4088 | Student Teaching | 9 |  |
| Subtotal |  |  | 12 |  |
|  |  |  |  |  |
| Total Hours for B.F.A. with Art Education Concentration |  |  | 155 |  |

* These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.
$\wedge$ These 3 courses constitute the waiver for the GenEd Human Behavior category if the courses are completed with a C- or better.


## B.F.A. Foundation Program

Gerard Brown, Chairperson
Tyler School of Art Building
Administrative Suite Room 210P
215-777-9170
gbrown@temple.edu
Studies for the B.F.A. degree at Tyler (including those who seek the Art Education Concentration begin with a common freshman experience, the Foundation Year. During this year, students are enrolled in studio courses in Drawing, 2-D and 3-D Principles as well as two

Foundation seminar courses. The Foundation Program Department is highly structured and intensive. It forms the fundamental basis for studio practice, critical thinking, and understanding and implementation of principles of visual expression. The program emphasizes creative and critical thinking, problem solving, visual thinking, perception and observation through the use of visual vocabulary, theory, media, and techniques of artistic practice. The Foundation faculty is comprised of artists from all the fields represented in the school's majors, providing freshmen with a broad perspective and diverse points of view from which to build their experience as artists.

## B.F.A. Foundation Year

| Subject | Course \# | Course Title | Fall | Spring | Attribute |
| :--- | :--- | :--- | :---: | :---: | :---: |
| Foundation | $1511 / 1512$ | Foundation Drawing | 3 | 3 |  |
| Foundation | $1521 / 1522$ | 2-D Foundation Principles | 3 | 3 |  |
| Foundation | $1531 / 1532$ | 3-D Foundation Principles | 3 | 3 |  |
| Foundation | 1501 | Introduction to Art \& Design | 1 |  |  |
| Foundation | 1502 | Investigations of Art \& Design |  | 1 |  |
| Art History | 1155 | Art Heritage Western World I <br> and <br> Art Heritage Western World II | 3 |  |  |
| Art History | 1156 | Analytical Reading \& Writing | 4 | 3 |  |
| English | 0802,0812 or 0902 | Mosaic: Humanities Seminar I |  | 3 | GY |
| Intellectual | 0851 or 0951 |  |  | GW |  |

## Crafts

Nicholas Kripal, Chairperson
Tyler School of Art Building
Administrative Suite Room 210N
215-777-9168
nkripal@temple.edu
The Crafts Department encompasses the media disciplines of Ceramics/Glass, Fibers and Material Studies, and Metals/Jewelry/CAD-CAM. These disciplines are rooted in a rich history, developed and refined within a contemporary context, and practiced and experienced through a series of formal presentations and evaluations. The Crafts Department faculty endeavor to refine and interpret Crafts traditions, techniques, and concepts while also pursuing the frontiers of their disciplines through their studio practice.

Students are challenged to explore the broad cultural and historical contexts in which their disciplines are made, exhibited, and experienced. They are encouraged to pursue their individual visions with an attitude of curiosity and imagination. The end goal of the curriculum is the education of a Crafts artist who will be creatively active throughout their lives, contributing to the enrichment of not only the communities in which they live and work, but the world community as well.

Upon graduation, students go on to careers in art education, design, the arena of not-for-profit and commercial galleries, and the professional practice of a studio artist. Many students go on to graduate school in order to receive further training and research for their eventual professional careers.

## Ceramics/Glass

Chad Curtis, Program Head, Ceramics
Tyler School of Art Building
Rooms 150/160
215-777-9201
chad.curtis@temple.edu
Sharyn O'Mara, Program Head, Glass
Tyler School of Art Building
Room 120
215-777-9211
somara@temple.edu
In the Ceramics area, equipment is available for wheel work, mold making, and slip casting projects, as well as large kilns for hand building and sculpture. The Glass curriculum incorporates glass blowing, casting, fusing, and kiln work.

Major Requirements for B.F.A. in Ceramics

| Sophomore Prerequisites: |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Crafts | 2151 | Beginning Ceramics | 3 |  |
| Crafts | 2161 | Intermediate Ceramics | 3 |  |
|  |  |  |  |  |
| Junior Requirements: | Hours | Attribute |  |  |
| Subject | Course \# | Course Title | 6 |  |
| Crafts | 3162 | Advanced Ceramics | 6 |  |
| Crafts |  | Two additional specialized Ceramics courses |  |  |
|  |  |  |  |  |
| Senior Requirements: | Hours | Attribute |  |  |
| Subject | Course \# Course Title | 6 |  |  |
| Crafts | 4162 | Advanced Ceramics | 6 |  |
| Crafts |  | Two additional specialized Ceramics courses |  |  |
| Crafts | 4496 | Business Practices in Crafts (Capstone) | 3 | WI |

## Major Requirements for B.F.A. in Glass

Sophomore Requirements:

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Crafts | 2258 | Introduction to Glass | 3 |  |
| Crafts | 2261 | Intermediate Glass | 3 |  |

Junior Requirements:

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Crafts | 3243 | Advanced Glass Seminar | 3 |  |
| Crafts | 3244 | Advanced Glass, Topic: Visiting Artist Series | 3 |  |
|  |  |  |  |  |
| At least two of the following courses: |  |  |  |  |
| Crafts | $\begin{array}{r} 3237 \\ 3238 \\ \hline \end{array}$ | Glass Construction, Topic: Kiln Working or <br> Glass Construction, Topic: Cold Glass | $3$ $3$ |  |
| Crafts | $\begin{aligned} & 3231 \\ & 3242 \\ & \hline \end{aligned}$ | Hot Glass, Topic: Blowing or <br> Hot Glass Casting | $\begin{aligned} & \hline \hline 3 \\ & 3 \\ & \hline \end{aligned}$ |  |
|  |  |  |  |  |
| Senior Requirements: |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Crafts | 4252 | Advanced Glass Seminar | 3 |  |
| Crafts | 4244 | Advanced Glass Seminar: Visiting Artist Series | 3 |  |
|  |  |  |  |  |
| At least two of the following courses: |  |  |  |  |
| Crafts <br> Crafts | $\begin{aligned} & 4237 \\ & 4238 \\ & \hline \end{aligned}$ | ```Glass Construction, Topic: Kiln Working or Glass Construction, Topic: Cold Glass``` | $3$ $3$ |  |
| Crafts <br> Crafts | $\begin{aligned} & 4241 \\ & 4242 \end{aligned}$ | Hot Glass Blowing or <br> Hot Glass Casting | 3 3 |  |
|  |  |  |  |  |
| Crafts | 14496 | Business Practices in Crafts (Capstone) | 3 | WI |

## Suggested Semester-by-Semester Plan for the B.F.A. in Ceramics:

Requirements for New Students starting in the 2013-2014 Academic Year

| Freshman Year - Fall Semester | Course Title | Hours | Attribute |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course \# | 4 | GW |  |
| English | 0802,0812 or 0902 | Analytical Reading \& Writing | 3 |  |
| Foundation | 1511 | Foundation Drawing ^ | 3 |  |
| Foundation | 1521 | 2-D Foundation Principles | 3 |  |
| Foundation | 1531 | 3-D Foundation Principles | 1 |  |
| Foundation | 1501 | Introduction to Art and Design | 3 |  |
| Art History | 1155 | Art Heritage Western World I | $\mathbf{1 7}$ |  |
| Subtotal |  |  |  |  |

Freshman Year - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Foundation | 1512 | Foundation Drawing | 3 |  |
| Foundation | 1522 | 2-D Foundation Principles | 3 |  |
| Foundation | 1532 | 3-D Foundation Principles | 3 |  |
| Art History | 1156 | Art Heritage Western World II ^ | 3 |  |
| Foundation | 1502 | Investigations of Art and Design | 1 |  |
| Subtotal |  |  | $\mathbf{1 6}$ |  |


| Sophomore Year - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Crafts | 2151 | Beginning Ceramics | 3 |  |
| Crafts/GAD/PDS | 2000-2999 | Sophomore Studio Elective | 3 |  |
| Crafts/GAD/PDS | 2000-2999 | Sophomore Studio Elective | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Crafts | 2161 | Intermediate Ceramics | 3 |  |
| Crafts/GAD/PDS | 2000-2999 | Sophomore Studio Elective | 3 |  |
| Crafts/GAD/PDS | 2000-2999 | Sophomore Studio Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Junior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Crafts | 3162 | Advanced Ceramics | 3 |  |
| Crafts |  | Studio Elective | 3 |  |
| Crafts/GAD/PDS | 3000+ | Specialized Ceramics Course | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Art History |  | Art History Elective | 4 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Junior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Crafts | 3162 | Advanced Ceramics | 3 |  |
| Crafts | 3000+ | Specialized Ceramics Course | 3 |  |
| Crafts/GAD/PDS |  | Studio Elective | 3 |  |
| Art History |  | Art History Elective | 4 | WI |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Senior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Crafts | 4162 | Advanced Ceramics | 3 |  |
| Crafts | 3000+ | Specialized Ceramics Course | 3 |  |
| Crafts/GAD/PDS |  | Studio Elective | 3 |  |
| Elective |  | Non-Studio Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |


| Crafts | 4162 | Advanced Ceramics | 3 |  |
| :--- | :--- | :--- | :---: | :---: |
| Crafts | $3000+$ | Specialized Ceramics Course | 3 |  |
| Elective |  | Open Elective | 3 |  |
| Crafts | 4496 | Business Practices in Crafts (Capstone) | 3 | WI |
| Subtotal |  |  | $\mathbf{1 5}$ |  |
|  |  |  |  |  |
| Total Hours for B.F.A. in Ceramics: | $\mathbf{1 2 6}$ |  |  |  |

$\wedge$ These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

## Suggested Semester-by-Semester Plan for the B.F.A. in Glass:

## Requirements for New Students starting in the 2013-2014 Academic Year

## Freshman Year - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| English | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Foundation | 1511 | Foundation Drawing ^ | 3 |  |
| Foundation | 1521 | 2-D Foundation Principles | 3 |  |
| Foundation | 1531 | 3-D Foundation Principles | 3 |  |
| Foundation | 1501 | Introduction to Art and Design | 1 |  |
| Art History | 1155 | Art Heritage Western World I | 3 |  |
| Subtotal |  | $\mathbf{1 7}$ |  |  |

Freshman Year - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Foundation | 1512 | Foundation Drawing | 3 |  |
| Foundation | 1522 | 2-D Foundation Principles | 3 |  |
| Foundation | 1532 | 3-D Foundation Principles | 3 |  |
| Art History | 1156 | Art Heritage Western World II ^ | 3 |  |
| Foundation | 1502 | Investigations of Art and Design | 1 |  |
| Subtotal |  |  | $\mathbf{1 6}$ |  |

Sophomore Year - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Crafts | 2258 | Introduction to Glass | 3 |  |
| Crafts/GAD/PDS | $2000-2999$ | Sophomore Studio Elective | 3 |  |
| Crafts/GAD/PDS | $2000-2999$ | Sophomore Studio Elective | 3 |  |
| Subtotal |  |  | $\mathbf{1 6}$ |  |

Sophomore Year - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| GenEd | 08 xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08 xx or 09xx | U.S. Society | 3 | GU |
| Crafts | 2261 | Intermediate Glass | 3 |  |


| Crafts/GAD/PDS | 2000-2999 | Sophomore Studio Elective | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Crafts/GAD/PDS | 2000-2999 | Sophomore Studio Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Junior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Crafts | 3243 | Advanced Glass Seminar | 3 |  |
| Crafts | $\begin{array}{\|l} \hline 3237 \\ \text { or } \\ 3238 \\ \hline \end{array}$ | ```Glass Construction, Topic: Kiln Working* or Glass Construction, Topic: Cold Glass``` | 3 |  |
| Elective |  | Studio Elective | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Art History |  | Art History Elective | 4 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Junior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Crafts | 3244 | Advanced Glass, Topic: Visiting Artist Series | 3 |  |
| Crafts | 3231 <br> or <br> 3242 | Hot Glass, Topic: Blowing or Hot Glass Casting | 3 |  |
| Crafts/GAD/PDS |  | Studio Elective | 3 |  |
| Art History |  | Art History Elective | 4 | WI |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Senior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Crafts | 4252 | Advanced Glass Seminar | 3 |  |
| Crafts | $\begin{gathered} 4237 \\ \text { or } \\ 4238 \\ \hline \end{gathered}$ | ```Glass Construction, Topic: Kiln Working or Glass Construction, Topic: Cold Glass``` | 3 |  |
| Elective |  | Non-Studio Elective | 3 |  |
| Crafts/GAD/PDS |  | Studio Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| Crafts | 4244 | Advanced Glass Seminar: Visiting Artist Series | 3 |  |
| Crafts | $\begin{array}{\|l\|} \hline 4241 \\ \text { or } \\ 4242 \\ \hline \end{array}$ | Hot Glass Blowing or <br> Hot Glass Casting | 3 |  |
| Elective |  | Open Elective | 3 |  |
| Crafts | 4496 | Business Practices in Crafts (capstone) | 3 | WI |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Total Hours for B.F.A. in Glass: |  |  | 126 |  |

$\wedge$ These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.
*Crafts 2237 is a required prerequisite for these courses.

## Fibers \& Material Studies

```
C. Pazia Mannella, Interim Area Head
Tyler School of Art Building
Suite 250N
215-777-9136
pazia@temple.edu
```

The Fibers and Material Studies major includes equipment and classes in weaving, off-loom structures, fabric dyeing and surface processes, screen printing on fabric, digital printing, and the use of alternative materials. Once students acquire an understanding and proficiency of techniques and media, the program promotes experimentation and development of a personal direction.

Major Requirements for B.F.A. in Fibers \& Material Studies

| Sophomore Prerequisites: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Crafts | 2305 | Fabric Pattern \& Image I | 3 |  |
| Crafts | 2317 | Off Loom Structure I | 3 |  |
|  |  |  |  |  |
| Junior and Senior Requirements: |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Eight of the following Specialized Fibers courses: 4 courses at 2000/3000 level; 4 courses at 3000/4000 level: |  |  |  |  |
| Crafts | 2318 <br> 3306 <br> 3307 <br> 3308 <br> 3309 <br> 3311 <br> 3312 <br> 3314 <br> 3315 <br> 3317 <br> 3318 <br> 3371 <br> 3385 <br> 4305 <br> 4306 <br> 4317 <br> 4318 <br> 4371 | Woven Structure I <br> Mixed Media Construction: Structural Embellishment I <br> Soft Sculpture <br> Shibori Cloth Techniques <br> Body Wear Construction <br> Body Art \& Adornment <br> Alternative Materials <br> Mixed Media Printing <br> Textile Design for Print Production <br> Off Loom Structure II <br> Woven Structure II <br> Silkscreen on Fabric I <br> Field Internship in Fibers <br> Fabric Pattern \& Image II <br> Structural Embellishment II <br> Off Loom Structure III <br> Woven Structure III <br> Silkscreen on Fabric II | $\begin{aligned} & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \end{aligned}$ |  |
| Crafts | 4496 | Business Practices in Crafts (Capstone) | 3 | WI |

Suggested Semester-by-Semester Plan for the B.F.A. in Fibers \& Material Studies:

Requirements for New Students starting in the 2013-2014 Academic Year

| Freshman Year - Fall Semester | Course Title | Hours | Attribute |  |
| :--- | :--- | :--- | :--- | :---: |
| Subject | Course \# | 4 | GW |  |
| English | 0802,0812 or 0902 | Analytical Reading \& Writing | 3 |  |
| Foundation | 1511 | Foundation Drawing ^ | 3 |  |
| Foundation | 1521 | 2-D Foundation Principles | 3 |  |
| Foundation | 1531 | 3-D Foundation Principles | 1 |  |
| Foundation | 1501 | Introduction to Art and Design | 3 |  |
| Art History | 1155 | Art Heritage Western World I | $\mathbf{1 7}$ |  |
| Subtotal |  |  |  |  |

Freshman Year - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Foundation | 1512 | Foundation Drawing | 3 |  |
| Foundation | 1522 | 2-D Foundation Principles | 3 |  |
| Foundation | 1532 | 3-D Foundation Principles | 3 |  |
| Art History | 1156 | Art Heritage Western World II ^ | 3 |  |
| Foundation | 1502 | Investigations of Art and Design | 1 |  |
| Subtotal |  |  | $\mathbf{1 6}$ |  |

Sophomore Year - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | $08 \times x$ or 09xx | Quantitative Literacy | 4 | GQ |
| Crafts | 2305 | Fabric Pattern \& Image I | 3 |  |
| Crafts/GAD/PDS | $2000-2999$ | Sophomore Studio Elective | 3 |  |
| Crafts/GAD/PDS | $2000-2999$ | Sophomore Studio Elective | 3 |  |
| Subtotal |  | $\mathbf{1 6}$ |  |  |

Sophomore Year - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| GenEd | $08 \times x$ or 09xx | Race \& Diversity | 3 | GD |
| GenEd | $08 x x$ or 09xx | U.S. Society | 3 | GU |
| Crafts | 2317 | Off Loom Structure I | 3 |  |
| Crafts/GAD/PDS | $2000-2999$ | Sophomore Studio Elective | 3 |  |
| Crafts/GAD/PDS | $2000-2999$ | Sophomore Studio Elective | 3 |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

Junior Year - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Crafts | $2 \mathrm{xxx} / 3 \mathrm{xxx}$ | Specialized Fibers Course | 3 |  |
| Crafts | $2 \mathrm{xxx} / 3 \mathrm{xxx}$ | Specialized Fibers Course | 3 |  |
| Crafts/GAD/PDS |  | Studio Elective | 3 |  |
| GenEd | Science \& Technology I | 3 | GS |  |


| Art History |  | Art History Elective | 4 |  |
| :---: | :---: | :---: | :---: | :---: |
| Subtotal |  |  | 16 |  |
| Junior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | $08 x x$ or 09xx | Global/World Society | 3 | GG |
| Crafts | 2xxx/3xxx | Specialized Fibers Course | 3 |  |
| Crafts | 2xxx/3xxx | Specialized Fibers Course | 3 |  |
| Elective |  | Studio Elective | 3 |  |
| Art History |  | Art History Elective | 4 | WI |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Senior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Crafts | $3 \mathrm{xxx} / 4 \mathrm{xxx}$ | Specialized Fibers Course | 3 |  |
| Crafts | 3xxx/4xxx | Specialized Fibers Course | 3 |  |
| Elective |  | Open Elective | 3 |  |
| Elective |  | Non-Studio Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| Crafts | $3 \mathrm{xxx} / 4 \mathrm{xxx}$ | Specialized Fibers Course | 3 |  |
| Crafts | $3 \mathrm{xxx} / 4 \mathrm{xxx}$ | Specialized Fibers Course | 3 |  |
| Crafts/GAD/PDS |  | Studio Elective | 3 |  |
| Crafts | 4496 | Business Practices in Crafts (Capstone) | 3 | WI |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Total Hours for B.F.A. in Fibers \& Material Studies: |  |  | 126 |  |

$\wedge$ These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C - or better.

## Metals/Jewelry/CAD-CAM

Stanley Lechtzin, Area Head
Tyler School of Art Building
Room 220
215-777-9129

## stanlech@temple.edu

This program stresses the use of traditional techniques and materials in relation to their historical significance while encouraging the use of new technologies in the advanced courses. The assignments are focused on the design and creation of jewelry, functional forms, tableware, furniture, lighting, toys, and product design, to name a few. Along with teaching studio practices centered around the utilization of metal, plastics, and composite materials, the curriculum
integrates the technologies of digital practices as they relate to three-dimensional form realization, and include computer-aided-design, computer-aided manufacture and 3D printing technologies.

Major Requirements for B.F.A. in Metals/Jewelry/CAD-CAM

| Sophomore Prerequisite: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Crafts | 2453 | Jewelry | 3 |  |
|  |  |  |  |  |
| Junior Requirements: |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Crafts | 2433 or 3433 | CAD-CAM I | 3 |  |
| Crafts | 3465 | Junior Metalsmithing | 3 |  |
| Crafts | 3466 | Junior Metalsmithing | 3 |  |
|  |  | One specialized Metals course | 3 |  |
|  |  |  |  |  |
| Senior Requirements: |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Crafts | 2434 or 3434 | CAD-CAM II | 3 |  |
| Crafts | 4463 | Senior Metals \& Plastics | 3 |  |
| Crafts | 4464 | Senior Metals \& Plastics | 3 |  |
|  |  | One specialized Metals course | 3 |  |
| Crafts | 4496 | Business Practices in Crafts (Capstone) | 3 | WI |

Specialized Metals/Jewelry/CAD-CAM (MJC-C) or Elective Courses:<br>Crafts 2408, 3408: Electroforming Workshop<br>Crafts 2409, 3409: Color in Metals<br>Crafts 2413: Machine Tool Processes<br>Crafts 2415, 3415: Production Processes<br>Crafts 2475 or 2476: Casting<br>Crafts 3407: Plastics for Jewelry<br>Crafts 3435: Advanced CAD/CAM<br>Crafts 3457: Plastics for Jewelry and Objects<br>Crafts 3459: Metalsmithing<br>Crafts 3463: Enameling<br>Crafts 3467: Tyler Metals Workshop, England/Scotland<br>Crafts 3471: Lapidary and Stone Setting<br>Crafts 3479: Photo Etching in Jewelry<br>Crafts 4435, 4436: Rapid Prototyping<br>Crafts 4471: Senior Seminar in Metals<br>Crafts 4485: Field Internship Metals/Jewelry/CAD-CAM

## Suggested Semester-by-Semester Plan for the B.F.A. in Metals/Jewelry/CAD-CAM:

Requirements for New Students starting in the 2013-2014 Academic Year

| Freshman Year - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Foundation | 1511 | Foundation Drawing ^ | 3 |  |
| Foundation | 1521 | 2-D Foundation Principles | 3 |  |
| Foundation | 1531 | 3-D Foundation Principles | 3 |  |
| Foundation | 1501 | Introduction to Art and Design | 1 |  |
| Art History | 1155 | Art Heritage Western World I | 3 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Freshman Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Foundation | 1512 | Foundation Drawing | 3 |  |
| Foundation | 1522 | 2-D Foundation Principles | 3 |  |
| Foundation | 1532 | 3-D Foundation Principles | 3 |  |
| Art History | 1156 | Art Heritage Western World II ^ | 3 |  |
| Foundation | 1502 | Investigations of Art and Design | 1 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Crafts | 2453 | Jewelry | 3 |  |
| Crafts/GAD/PDS | 2000-2999 | Sophomore Studio Elective | 3 |  |
| Crafts/GAD/PDS | 2000-2999 | Sophomore Studio Elective | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Crafts/GAD/PDS | 2000-2999 | Sophomore Studio Elective | 3 |  |
| Crafts/GAD/PDS | 2000-2999 | Sophomore Studio Elective* | 3 |  |
| Crafts/GAD/PDS | 2000-2999 | Sophomore Studio Elective** | 3 |  |
| Subtotal |  |  | 15 |  |
| *Crafts 2433 CAD CAM is highly recommended to be taken during the sophomore year. |  |  |  |  |
| **Crafts 2454 is recommended, but not required. |  |  |  |  |
|  |  |  |  |  |
| Junior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Crafts | 3465 | Junior Metalsmithing | 3 |  |
| Crafts | 2433 or 3433 | CAD/CAM I | 3 |  |
| Elective |  | Studio Elective | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Art History |  | Art History Elective | 4 |  |
| Subtotal |  |  | 16 |  |


| Junior Year - Spring Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Crafts | 3466 | Junior Metalsmithing | 3 |  |
| Crafts | 2434 or 3434 | CAD/CAM II | 3 |  |
| Elective |  | Studio Elective | 3 |  |
| Art History |  | Art History Elective | 4 | WI |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Senior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Crafts | 4463 | Senior Metals \& Plastics | 3 |  |
| Crafts |  | Specialized MJC-C Course | 3 |  |
| Elective |  | Studio Elective | 3 |  |
| Elective |  | Non-Studio Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| Crafts | 4464 | Senior Metals \& Plastics | 3 |  |
| Crafts |  | Specialized MJC-C Course | 3 |  |
| Elective |  | Open Elective | 3 |  |
| Crafts | 4496 | Business Practices in Crafts | 3 | WI |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Total Hours for B.F.A. in Metals/Jewelry/CAD-CAM: |  |  | 126 |  |

$\wedge$ These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C - or better.

Graphic Arts \& Design
Stephanie Knopp, Department Chairperson
Tyler School of Art Building
Administrative Suite Room 210V
215-777-9145
stephanie.knopp@temple.edu
The Graphic Arts and Design Department encompasses three distinct areas of study -- Graphic and Interactive Design, Photography, and Printmaking. Our mission is to prepare students for the challenges of each discipline and to help them maximize their potential as artists.

The Graphic Arts and Design faculty is made up of practicing artists and designers who are professionally active and able to teach the fundamental principles of their disciplines while keeping abreast of innovations in their fields. During the student's two-year program of
coursework in the major, conceptual thinking aimed at the development of the student's personal artistic vision is stressed; at the same time, technical skills using appropriate tools and techniques to solve creative problems are developed. Our majors are encouraged to integrate each discipline's traditional image-making techniques with rapidly-evolving 21st-century digital technologies. Upon graduation, our students are prepared to enter their respective fields as professionals and to continue their growth as artists.

## Graphic \& Interactive Design

Alice Drueding, Program Head
Tyler School of Art Building
Room 240
215-777-9890
drueding@temple.edu
Graphic Designers use creative combinations of ideas, art, and technology to inform and influence specific audiences. Graphic and Interactive Design at Tyler is a practice-based program that prepares students to work in both print and interactive media. From sophomore through senior year, students explore image making, typography, material, craft and technology-essential components of visual communication. Courses include assignments that represent different aspects of design practice such as identity and branding, packaging, publishing, poster design, advertising, signage, environmental design, illustration, and design for the web, mobile media and motion graphics. The program trains students to work on client-driven projects and in design authorship.

Please note that there may be minimum grade requirements in the courses required for the degree. Please confer with the faculty advisor and the advising staff.

## Major Requirements for B.F.A. in Graphic \& Interactive Design

## SOPHOMORE REQUIREMENTS:

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| GAD | 2001 | Graphic Design | 3 |  |
| GAD | 2021 | Computers for Design | 3 |  |
|  |  |  |  |  |

Note 1: A final grade of B-minus or better is required in GAD 2001: Graphic Design and in GAD 2021: Computers for Design in order to continue in the major at the junior level.
Note 2: Graphic and Interactive Design majors who plan to study abroad should do so in the second semester of their sophomore year if they plan to graduate in four years. These students should see the Area Head for advising prior to leaving.

## JUNIOR REQUIREMENTS:

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| GAD | 3001 | Advanced Graphic Design (Fall) | 3 |  |
| GAD | 3002 | Advanced Graphic Design (Spring) | 3 |  |
| GAD | 3011 | Typography | 3 |  |
| GAD | 3021 | Intermediate Computer Graphics | 3 |  |


| Electives strongly recommended: | Advanced Typography |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| GAD | 3013 or 3015 | Interactive Design | 3 |  |
|  | 3023 or 3025 | Digital Narratives | 3 |  |
|  | 3027 | Illustration | 3 |  |
|  | 3031 or 3033 | Advertising Design (Spring) | 3 |  |
|  | 3041 | The Business of Design (Fall or Spring) | 3 |  |
|  | 3096 | Collaborative Design Workshop in Rome | 3 | WI |
|  | 3101 |  | 3 |  |
|  |  |  |  |  |

Note 1: In the junior year, Advanced Graphic Design must be taken in sequence (3001 in Fall/3002 in Spring).
Note 2: The prerequisites for Senior level design courses are the four required courses at the junior level:
GAD 3001: Advanced Graphic Design (Fall), GAD 3002: Advanced Graphic Design (Spring), GAD 3011: Typography (Fall or Spring), and GAD 3021: Intermediate Computer Graphics (Fall or Spring). GAD 3023 or 3025: Interactive Design is strongly recommended for students taking GAD 3027: Digital Narratives. GAD 3023 or 3025: Interactive Design is required for GAD 4002: Senior Graphic Design: Hybrid Design or GAD 4007: Senior Interactive Design.
Note 3: Students who plan to have an interactive portfolio only should take GAD 3023 or 3025: Interactive Design in the junior year. GAD 3021: Intermediate Computer Graphics is the prerequisite for this course.
Note 4: GAD 3096: The Business of Design (Fall or Spring) is Writing Intensive and must be passed with a C- or better to be recognized as Writing Intensive credit. It can replace a Writing Intensive requirement in Art History. In that case the Art History requirement can be fulfilled with an Art History course that is not Writing Intensive.

## SENIOR REQUIREMENTS:

| Subje | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Select three specialized courses in Senior Graphic Design from the following: |  |  | 9 |  |
| GAD | 3013 or 3015 3027 3041 4000 or 4010 4001 4002 4003 4004 4005 4006 4007 4008 or 4009 4011 4111 or 4112 | ```Advanced Typography Digital Narratives Advertising Design Senior Design: Special Topics Senior Graphic Design: Senior Design Workshop Senior Graphic Design: Hybrid Design Senior Graphic Design: Art Direction Senior Graphic Design: Packaging Senior Graphic Design: Publishing Senior Graphic Design: Corporate Senior Interactive Design Senior Graphic Design: Projects in Authorship Senior Graphic Design: Design for the Public Good Senior Illustration``` |  |  |
| Select one specialized course in Senior Graphic Design from the list above or choose one GAD course from the following: |  |  | 3 |  |
| $\overline{\mathrm{GAD}}$ | 3031 or 3033 3023 or 3025 3096 3101 | Illustration Interactive Design <br> The Business of Design (WI) Collaborative Design Workshop in Rome |  |  |
| Capstone Requirement |  |  |  |  |
| GAD | 4196 | Senior Portfolio (Capstone-spring only) | 3 | WI |
| Note 1: Only one of the three specialized courses may be at the 3xxx level; additional 3xxx and 4xxx level GAD courses may be taken as studio electives |  |  |  |  |
| Note 2: The capstone GAD 4196: Senior Portfolio course, which must be taken in addition to the four required senior GAD courses, is offered only in the spring semester. |  |  |  |  |

## Suggested Semester-by-Semester Plan

For New Students Starting in Academic Year 2013-2014
Freshman Year - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| English | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Foundation | 1511 | Foundation Drawing ^ | 3 |  |
| Foundation | 1521 | 2-D Foundation Principles | 3 |  |
| Foundation | 1531 | 3-D Foundation Principles | 3 |  |
| Foundation | 1501 | Introduction to Art \& Design | 1 |  |
| Art History | 1155 | Art Heritage of the Western World I | 3 |  |
| Subtotal |  |  | $\mathbf{1 7}$ |  |

Freshman Year - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :---: |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Foundation | 1512 | Foundation Drawing | 3 |  |
| Foundation | 1522 | 2-D Foundation Principles | 3 |  |
| Foundation | 1532 | 3-D Foundation Principles | 3 |  |
| Art History | 1156 | Art Heritage of the Western World II $\wedge$ | 3 |  |
| Foundation | 1502 | Investigations of Art \& Design | 1 |  |
| Subtotal |  |  | $\mathbf{1 6}$ |  |

Sophomore Year - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | $08 \times x$ or 09xx | Quantitative Literacy | 4 | GQ |
| GAD | 2001 | Graphic Design (B-minus or better for major) | 3 |  |
| GAD | 2021 | Computers for Design | 3 |  |
| Crafts/GAD/PDS |  | Sophomore Studio Elective | 3 |  |
| Subtotal |  | $\mathbf{1 6}$ |  |  |

Sophomore Year - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08 xx or 09xx | U.S. Society | 3 | GU |
| Crafts/GAD/PDS |  | Sophomore Studio Elective | 3 |  |
| Crafts/GAD/PDS |  | Sophomore Studio Elective | 3 |  |
| Crafts/GAD/PDS |  | Sophomore Studio Elective | 3 |  |
| Subtotal |  | $\mathbf{1 5}$ |  |  |

Junior Year - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| GenEd | 08 xx or 09xx | Science \& Technology I | 3 | GS |
| GAD | 3001 | Advanced Graphic Design * | 3 |  |
| GAD | 3011 | Typography | 3 |  |
| GAD | 3021 | Intermediate Computer Graphics | 3 |  |


| Elective |  | Art History Elective | 4 |  |
| :---: | :---: | :---: | :---: | :---: |
| Subtotal |  |  | 16 |  |
| Junior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GAD | 3002 | Advanced Graphic Design ** | 3 |  |
|  |  | Studio Elective | 3 |  |
|  |  | Studio Elective | 3 |  |
| Elective |  | Art History Elective WI *** | 4 | WI |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Senior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| GAD | 3 xxx | Specialized Graphic \& Interactive Design course | 3 |  |
| GAD | 4xxx | Specialized Graphic \& Interactive Design course | 3 |  |
| GAD | 3xxx/4xxx | Specialized or Advanced GAD course (as per senior requirements) | 3 |  |
| Elective |  | Non-Studio Elective | 3 |  |
| Subtotal |  |  | 15 |  |

## Senior Year - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| GenEd | 08 xx or 09xx | Science \& Technology II | 3 | GS |
| GAD | 4 xxx | Specialized Graphic \& Interactive Design course | 3 |  |
| GAD | 4196 | Senior Portfolio **, **** | 3 | WI |
|  |  | Studio Elective | 3 |  |
| Subtotal | Open Elective | 3 |  |  |
|  |  |  | $\mathbf{1 5}$ |  |
| Total Credits for the B.F.A. in Graphic \& Interactive Design: |  |  |  |  |

1 These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better. * Course offered in Fall only
** Course offered in Spring only
*** OR GAD 3096: Business of Design to fulfill the Writing Intensive requirement. If taken, a non-Writing Intensive Art History course will fulfill the Art History requirement.
**** A minimum of 2 senior studios must be successfully completed before taking GAD 4196: Senior Portfolio. Senior studios are GAD 3013 (if taken in the senior year), 3015 (if taken in the senior year), 3027 (if taken in the senior year), 3041 (if taken in the senior year), 4000, 4001, 4002, 4003, 4004, 4005, 4006, 4007, 4008, 4009, 4010, 4011, 4111 and 4112.

## Photography

Byron Wolfe, Program Head
Tyler School of Art Building
215-777-9145

In addition to traditional black and white and color photography, Tyler's Photography Area will introduce you to various other creative approaches to the medium. Some of these include digital imaging techniques, large-format professional digital printing in black and white and color, handmade cameras, large format photography, historical alternative processes, critical theory, and career options for artists who wish to enter the field of photography. The emphasis in the Photography Major is on the development of personal vision for the artist.

Please note that there may be minimum grade requirements in the courses required for the degree. Please confer with the advising staff and review the DARS for information.

## Major Requirements for B.F.A. in Photography

## SOPHOMORE PREREQUISITE:

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| GAD | 2441 or 2451 | Photography I | 3 |  |
| GAD | 2461 | Digital Imaging (Prerequisite for Digital Photography) | 3 |  |

JUNIOR AND SENIOR REQUIREMENTS:

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| GAD | 3402 | View Camera | 3 |  |
| GAD | 3411 | Digital Photography (Prerequisite: Digital Imaging) | 3 |  |
| GAD | 3412 | Photography II | 3 |  |
| GAD | 3401 or 3431 | Color Photography I | 3 |  |
| GAD | 3441 or 3451 | Advanced Photography Workshop (Fall or Spring) | 3 |  |
| GAD | 3461 or 3471 | Photo Process Workshop | 3 |  |
| GAD | 4441 | Senior Photography (Fall) | 3 |  |
| GAD | 4496 | Senior Seminar in Photography (Capstone-Spring) | 3 | WI |
| GAD |  | Specialized Photography (choose one from electives below) | 3 |  |
| Electives: |  |  |  |  |
| GAD 3185: Field Internship |  |  |  |  |
| GAD 3413: Photographic Lighting (strongly recommended) <br> GAD 3421: Digital Projects <br> GAD 3422: Contemporary Photography <br> GAD 3432: Color Photography II |  |  |  |  |

## Suggested Semester-by-Semester Plan

## For New Students Starting in Academic Year 2013-2014

| Freshman Year - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Foundation | 1511 | Foundation Drawing ^ | 3 |  |
| Foundation | 1521 | 2-D Foundation Principles | 3 |  |
| Foundation | 1531 | 3-D Foundation Principles | 3 |  |
| Foundation | 1501 | Introduction to Art \& Design | 1 |  |
| Art History | 1155 | Art Heritage of the Western World I | 3 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Freshman Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Foundation | 1512 | Foundation Drawing | 3 |  |
| Foundation | 1522 | 2-D Foundation Principles | 3 |  |
| Foundation | 1532 | 3-D Foundation Principles | 3 |  |
| Art History | 1156 | Art Heritage of the Western World II ^ | 3 |  |
| Foundation | 1502 | Investigations of Art \& Design | 1 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| GAD | 2441 or 2451 | Photography I | 3 |  |
| Crafts/GAD/PDS |  | Sophomore Studio Elective | 3 |  |
| Crafts/GAD/PDS |  | Sophomore Studio Elective | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| GAD | 2461 | Digital Imaging | 3 |  |
| Crafts/GAD/PDS |  | Sophomore Studio Elective | 3 |  |
| Crafts/GAD/PDS |  | Sophomore Studio Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Junior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GAD | 3441 or 3451 | Advanced Photography Workshop | 3 |  |
| GAD | 3461 or 3471 | Photo Process Workshop | 3 |  |



## Printmaking

Richard Hricko, Program Head
Tyler School of Art Building
Room 260
215-777-9125
hricko@temple.edu
The Printmaking Area is housed in large, fully-equipped modern studios where you first learn the fundamentals of the three printmaking disciplines (silkscreen, lithography, and etching)
before exploring at least two of these disciplines in depth. After students master the basic technical aspects of printmaking, the faculty encourages the exploration of advanced subjects that include color and photo-etching, photo-lithography, metal engraving, mezzotint, woodcut, digital printmaking, large-scale printing, installation, and the full utilization of the computer as an image-creating tool.

Please note that there may be minimum grade requirements in the courses required for the degree. Please confer with the advising staff and review the DARS for information.

Major Requirements for B.F.A. in Printmaking

## SOPHOMORE PREREQUISITES:

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Select one Survey of Printmaking course from the following: | 3 |  |  |  |
| GAD | 2701 | Survey of Printmaking Techniques (Lithography and Serigraphy) <br> Survey of Printmaking Techniques (Relief Printing and Etching) |  |  |
| Select one introductory | Printmaking course from the following: | 3 |  |  |
| GAD | 2711 |  |  |  |
|  | 2731 or 2741 |  |  |  |
| 2751 or 2761 | Serigraphy (prerequisite for GAD 3711) <br> Etching (prerequisite for GAD 3731) <br> Lithography (prerequisite for GAD 3751) |  |  |  |

## JUNIOR REQUIREMENTS:

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Select two courses which were not taken as a sophomore prerequisite: |  |  | 6 |  |
| GAD | $\begin{aligned} & 2711 \\ & 2731 \text { or } 2741 \\ & 2751 \text { or } 2761 \end{aligned}$ | Serigraphy (prerequisite for GAD 3711) Etching (prerequisite for GAD 3731) <br> Lithography (prerequisite for GAD 3751) |  |  |
| Select one Advanced course from the following: |  |  | 3 |  |
| GAD | $\begin{aligned} & 3711 \\ & 3731 \\ & 3751 \end{aligned}$ | Advanced Serigraphy Advanced Etching Advanced Lithography |  |  |
| GAD | 3896 | Art Career Workshop (Capstone) | 3 | WI* |
| *Indicates Writing Capstone |  |  |  |  |

## SENIOR REQUIREMENTS:

| Subject Course \# |  | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Select one Advanced course from the following that was not previously taken: |  |  | 3 |  |
| GAD | 3711 | Advanced Serigraphy |  |  |
|  | 3731 | Advanced Etching |  |  |
|  | 3751 | Advanced Lithography |  |  |
| Select three Specialized Printmaking courses from the following: |  |  | 9 |  |
| GAD | 3811 or 3821 | Printmaking Workshop (Intermedia) |  |  |
|  | 3831 | Relief and Monoprint Workshop |  |  |
|  | 3841 | Color Print Workshop (Intermedia) |  |  |
|  | 4511 | Senior Projects Workshop/Seminar |  |  |

## Suggested Semester-by-Semester Plan

For New Students Starting in Academic Year 2013-2014

| Freshman Year - Fall Semester | Course Title | Hours | Attribute |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course \# | 4 | GW |  |
| English | 0802,0812 or 0902 | Analytical Reading \& Writing | 3 |  |
| Foundation | 1511 | Foundation Drawing ^ | 3 |  |
| Foundation | 1521 | 2-D Foundation Principles | 3 |  |
| Foundation | 1531 | 3-D Foundation Principles | 1 |  |
| Foundation | 1501 | Introduction to Art \& Design | 3 |  |
| Art History | 1155 | Art Heritage of the Western World I | $\mathbf{1 7}$ |  |
| Subtotal |  |  |  |  |

Freshman Year - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Foundation | 1512 | Foundation Drawing | 3 |  |
| Foundation | 1522 | 2-D Foundation Principles | 3 |  |
| Foundation | 1532 | 3-D Foundation Principles | 3 |  |
| Foundation | 1502 | Investigations of Art \& Design | 1 |  |
| Art History | 1156 | Art Heritage of the Western World II $\wedge$ | 3 |  |
| Subtotal |  |  | $\mathbf{1 6}$ |  |

## Sophomore Year - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | $08 \times x$ or 09xx | Quantitative Literacy | 4 | GQ |
| GAD | 2701 | Survey of Printmaking Techniques <br> (Lithography/Serigraphy) <br> or <br> Survey of Printmaking Techniques (Relief <br> Printing/Etching) | 3 |  |
| or | 2702 | Sophomore Studio Elective |  |  |
| Crafts/GAD/PDS | $2 \times x x$ | Sophomore Studio Elective | 3 |  |
| Subtotal | $2 x x x$ |  | $\mathbf{1 6}$ |  |

## Sophomore Year - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Select one introductory Printmaking course from the following: | 3 |  |  |  |
| GAD | Serigraphy (prerequisite for GAD 3711)  <br> Etching (prerequisite for GAD 3731)  <br> 2711  <br>  2731 or 2741 <br> Lithography (prerequisite for GAD 3751)  |  |  |  |
| Crafts/GAD/PDS | 2751 or 2761 | Sophomore Studio Elective |  |  |
| Crafts/GAD/PDS | 2 xxx | Sophomore Studio Elective |  |  |
| Subtotal |  | 3 |  |  |
|  |  |  |  |  |
| Junior Year - Fall Semester | $\mathbf{1 5}$ |  |  |  |


| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Select two of the following Printmaking courses not previously taken as a sophomore prerequisite: |  |  | 6 |  |
| GAD | $\begin{aligned} & 2711 \\ & 2731 \text { or } 2741 \\ & 2751 \text { or } 2761 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Serigraphy (prerequisite for GAD 3711) } \\ & \text { Etching (prerequisite for GAD 3731) } \\ & \text { Lithography (prerequisite for GAD 3751) } \\ & \hline \end{aligned}$ |  |  |
|  |  | Studio Elective | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Art History |  | Art History Elective | 4 | WI |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Junior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Select one course from the following list of Specialized Printmaking courses: |  |  | 3 |  |
| GAD | 3811 or 3821 <br> 3831 <br> 3841 <br> 4511 | Printmaking Workshop (Intermedia) <br> Relief and Monoprint Workshop <br> Color Print Workshop (Intermedia) <br> Senior Projects Workshop/Seminar |  |  |
| GAD | 3896 | Art Career Workshop (Capstone) | 3 | WI |
| GenEd | 08xx or 09xx | World Society | 3 | GG |
| Select one Advanced course for which you have completed the introductory course during the previous semester from the following list: |  |  | 3 |  |
| GAD | $\begin{aligned} & 3711 \\ & 3731 \\ & 3751 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Advanced Serigraphy } \\ & \text { Advanced Etching } \\ & \text { Advanced Lithography } \\ & \hline \end{aligned}$ |  |  |
|  |  | Studio Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| Elective |  | Studio Elective | 3 |  |
| Select at least one more course from the following list of Advanced courses: |  |  | 3 |  |
| GAD | $\begin{aligned} & \hline 3711 \\ & 3731 \\ & 3751 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Advanced Serigraphy } \\ & \text { Advanced Etching } \\ & \text { Advanced Lithography } \\ & \hline \end{aligned}$ |  |  |
| Select one more course from the following list of Specialized Printmaking courses not previously taken: |  |  | 3 |  |
| GAD | 3811 or 3821 <br> 3831 <br> 3841 <br> 4511 | Printmaking Workshop (Intermedia) <br> Relief and Monoprint Workshop <br> Color Print Workshop (Intermedia) <br> Senior Projects Workshop/Seminar |  |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Select one additional course from the Specialized Printmaking courses listed below: |  |  | 3 |  |



## Painting/Drawing/Sculpture

Margo Margolis, Department Chair<br>Tyler School of Art Building<br>Administrative Suite Room 210U<br>215-777-9176<br>margom@temple.edu

The Painting, Drawing, and Sculpture Department emphasizes art making as an ongoing discipline rooted in rich history. We provide our students with a rigorous experience of the disciplines of drawing, painting, and sculpture. This experience ranges through the aesthetic, the technical, and the well-formed idea. We are committed to providing our students with the understanding of the broad cultural and historical context in which art is made and experienced.

The Painting, Drawing, and Sculpture Department has a weekly schedule of visiting lectures. Our lectures include practicing studio artists, museum curators, and critics, all of national standing.

## Painting/Drawing

## Keith Morrison, Painting Area Head

Tyler School of Art Building
Room 300
215-777-9176
keitham@temple.edu
Tyler's Painting and Drawing program provides the skills and concepts essential to artistic growth. The faculty has designed studio and seminar courses that foster the development of pictorial concepts realized in the tangible form of painting and drawing.

The courses offer a range of both genre-based courses and advanced level courses. Upper level courses cover technical, formal, topical, and theory based issues. An extensive range of
approaches will be presented in the context of both historical precedent and contemporary practice. The faculty advises each student to participate in a variety of studio experiences to facilitate the integration of technique with personal vision.

Major Requirements for B.F.A. in Painting

SOPHOMORE REQUIREMENTS:

| Painting | Choose one: |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| PDS | 2011 or 2111 | Painting | 3 |  |


| Drawing | Choose one: |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Subject | Course \# | Course Title | Hours | Attribute |
| PDS | 2311 | Intermediate Drawing | 3 |  |
|  | 2321 | Intermediate Drawing |  |  |
|  | 2331 | Intermediate Figure Drawing |  |  |
|  | 2341 | Digital Drawing |  |  |
|  |  |  |  |  |

Note: PDS 3341: Digital Drawing may be substituted for PDS 2311, 2321, or 2331.
Note: PDS 2051: Painting Materials \& Techniques is suggested, but not required, for those interested in becoming a Painting major.
Note: PDS 2511: Art Matters is strongly recommended for students interested in Painting or Sculpture as a major.
Note: Students may only take 3 Painting/Drawing courses in the sophomore year; other 2000-level PDS courses may be used as electives for the junior/senior year.

## JUNIOR AND SENIOR REQUIREMENTS:

Eight courses totaling 24 credit hours. These courses must satisfy the following grade level requirements: Four (4) courses in Painting numbered 3000, and above; two (2) courses in Drawing numbered 3000 and above; and two (2) courses in either Painting or Drawing numbered 3000 and above (can include PDS 2051).

Any Painting or Drawing courses taken in excess of the required eight courses will count as studio electives. This is a common practice encouraged by the Painting Faculty.

| Painting |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Select four courses, $a$ total of 12 hours, from the following list: | $\mathbf{1 2}$ |  |  |  |
| PDS | 3021 or 4021 | Landscape (see note \#3) | 3 |  |
| PDS | 3041,3141 or 4041 | Color | 3 |  |
| PDS | 3031 or 4031 | Figure Painting | 3 |  |
| PDS | 3211,3221 | Painting on Paper | 3 |  |
| PDS | $3011,3111,4011,4111$ | Advanced Painting | 3 |  |
| PDS | 4072 and 4172 | Senior Painting Studio (see notes \#1 \& 2) | 6 |  |

Note 1: Students wishing to enroll in 4072 and 4172 must be jury-selected by the faculty and special approval is needed to register for these courses.
Note 2: 4072 and 4172 are team-taught by two faculty members and must be taken in the same semester.
Note 3: 3021 and 4021 may be taken for Painting and/or Drawing Credit.

|  |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
| Capstone Course |  |  |  |  |
| PDS | 3596 | PDS Seminar | $\mathbf{3}$ | WI |

Note: PDS Seminar counts as one of the two required writing intensive courses. The other writing intensive course must be an Art History course.

| Drawing |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Select two courses, a total of 6 hours, from the following list: | $\mathbf{6}$ |  |  |  |
| PDS | 3021 or 4021 | Landscape (see note \#2) | 3 |  |
| PDS | 3341 | Digital Drawing | 3 |  |
| PDS | 3451 | Interactive Projects | 3 |  |
| PDS | $3431,3441,4431$ or 4441 | Figure Drawing | 3 |  |
| PDS | 3411,3421 or 4411 | Advanced Drawing | 3 |  |
| PDS | 3351 | Rome Sketchbook | 3 |  |

Note 1: Any of the Painting or Drawing courses may be taken in excess of the required eight courses. Additional Painting and Drawing courses will count as studio electives. This is a common practice encouraged by the Painting Faculty.
Note 2: 3021 and 4021 may be taken for Painting and/or Drawing Credit.

Drawing or Painting

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Select two courses, a total of 6 hours, from the following list: | $\mathbf{6}$ |  |  |  |
| PDS | 2051 | Painting Materials and Techniques | 3 |  |
| PDS | 3011,3111 | Advanced Painting | 3 |  |
| PDS | $3031,3431,3441$ | Figure Painting, Figure Drawing | 3 |  |
| PDS | 3351 | Rome Sketchbook | 3 |  |
| PDS | 3411 | Advanced Drawing | 3 |  |
| PDS | 4072 and 4172 | Senior Painting Studio (see notes 3 and 4) | 6 |  |

Note 1: Any of the Painting or Drawing courses may be taken in excess of the required eight courses. Additional Painting and Drawing courses will count as studio electives. This is a common practice encouraged by the Painting Faculty.
Note 2: Do not duplicate any courses previously taken for Drawing or Painting credit
Note 3: Students wishing to enroll in 4072 and 4172 must be jury-selected by the faculty and special approval is needed to register for these courses.
Note 4: 4072 and 4172 are team-taught by two faculty members and must be taken in the same semester.

## Suggested Semester-by-Semester Plan

For New Students starting in Academic Year 2013-2014
Freshman Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| English | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Foundation | 1511 | Foundation Drawing $\wedge$ | 3 |  |
| Foundation | 1521 | 2-D Foundation Principles | 3 |  |
| Foundation | 1531 | 3-D Foundation Principles | 3 |  |
| Foundation | 1501 | Introduction to Art \& Design | 1 |  |


| Art History | 1155 | Art Heritage of the Western World I | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Subtotal |  |  | 17 |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Foundation | 1512 | Foundation Drawing | 3 |  |
| Foundation | 1522 | 2-D Foundation Principles | 3 |  |
| Foundation | 1532 | 3-D Foundation Principles | 3 |  |
| Art History | 1156 | Art Heritage of the Western World II ^ | 3 |  |
| Foundation | 1502 | Investigations of Art \& Design | 1 |  |
| Subtotal |  |  | 16 |  |
| 1 These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better. |  |  |  |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| PDS | 2011 or 2111 | Painting | 3 |  |
| PDS | 2311 or 2321 <br> or <br> 2331 <br> or <br> 2341 | ```Intermediate Drawing or Intermediate Figure Drawing or Digital Drawing``` | 3 |  |
| Crafts/GAD/PDS |  | Sophomore Studio Elective | 3 |  |
| Subtotal |  |  | 16 |  |
| Note: PDS 2321 can be taken in either fall or spring. PDS 2341 offered in fall semester only. |  |  |  |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Crafts/GAD/PDS |  | Sophomore Studio Elective | 3 |  |
| Crafts/GAD/PDS |  | Sophomore Studio Elective | 3 |  |
| Crafts/GAD/PDS |  | Sophomore Studio Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| PDS |  | Painting Course | 3 |  |
| PDS |  | Painting Course | 3 |  |
|  |  | Studio elective | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Art History |  | Art History Elective** | 4 |  |
| Subtotal |  |  | 16 |  |
| **Art History Elective may be taken either fall or spring. |  |  |  |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |


| GenEd | 08xx or 09xx | Global/World Society^^ | 3 | GG |
| :---: | :---: | :---: | :---: | :---: |
| PDS |  | Painting Course | 3 |  |
| PDS |  | Drawing Course | 3 |  |
|  |  | Studio elective | 3 |  |
| Art History |  | Art History Elective** | 4 | WI |
| Subtotal |  |  | 16 |  |
| $\wedge$ Study at Temple Rome counts toward GenEd Global/World Society requirement. |  |  |  |  |
| **Art History WI Elective may be taken either fall or spring. |  |  |  |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| PDS |  | Painting Course | 3 |  |
| PDS |  | Drawing Course | 3 |  |
| PDS | 3596 | PDS Seminar* | 3 | WI |
|  |  | Non-Studio elective | 3 |  |
| Subtotal |  |  | 15 |  |
| *PDS Seminar can be taken either spring or fall semester |  |  |  |  |
| Senior Studio (PDS 4072 and 4172) is offered in the senior year, fall and spring semesters. Senior Studio is a 6-credit course pair each semester. |  |  |  |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| PDS |  | Painting or Drawing Course | 3 |  |
| PDS |  | Painting or Drawing Course | 3 |  |
|  |  | Studio elective | 3 |  |
|  |  | Open elective | 3 |  |
| Subtotal |  |  | 15 |  |
| Senior Studio (PDS 4072 and 4172) is offered in the senior year, fall and spring semesters. Senior Studio is a 6-credit course pair each semester. |  |  |  |  |
|  |  |  |  |  |
| Total Credits for the B.F.A. in Painting: |  |  | 126 (minimum) |  |

## Sculpture

Jude Tallichet, Area Head
Tyler School of Art Building
Room 130
215-777-9155
jude@temple.edu
The Sculpture Program provides the skills and concepts essential to creative growth. Courses are designed to integrate the development of technical skills with critical discourse and theory, and knowledge of contemporary sculpture. Students are encouraged to explore a broad range of sculptural strategies through studio courses including installation, sound, video, robotics, public
art, and wood and metal fabrication. All courses provide intensive studio experience and intense critical dialogue combined with exhibition opportunities and field trips. The sculpture area includes a metal shop, wood shop, plaster and mold making facilities, a small sound studio and individual studios for undergraduate majors and for graduate sculpture students.

## Major Requirements for B.F.A. in Sculpture

## SOPHOMORE PREREQUISITE:

Students are encouraged to take Installation or Mold Making in the second semester of the sophomore year after Sophomore Sculpture.

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| PDS | 2611 or 2621 | Sculpture | 3 |  |

Note: A "B" grade or above is required in Sophomore Sculpture in order to enter the major.
JUNIOR AND SENIOR REQUIREMENTS:

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| PDS | Choose two courses: <br> $3611,3612,3621,3622$ | Advanced Sculpture | $\mathbf{6}$ |  |
| PDS |  | Specialized Sculpture | $\mathbf{3}$ |  |
| PDS |  | Specialized or Advanced Sculpture | $\mathbf{6}$ |  |
| PDS | 4611 | Senior Sculpture | $\mathbf{3}$ |  |

Note: Advanced Sculpture courses include special topics in: Sound, Performance, Metal Fabrication, and Robotics. These vary from semester to semester. More than the two required Advanced Sculpture courses are recommended in order to intensify creative development of sculptural practice.
Note: Specialized Sculpture Course list: PDS 2632/3631 Installation; PDS 3521 Advanced Video; PDS 2521 Video Workshop; PDS 3731 Sculpture Techniques \& Materials; PDS 2641/3641 Mold-Making Technology; PDS 2631 Figure Modeling; PDS 3721 Public Art Projects; PDS 4585 Field Internship*; PDS 4582 Independent Study.

* It is possible to do Field Internships with alternative arts organizations and art fabrication companies in the Philadelphia area.
Note: The faculty encourages taking sculpture courses in excess of the required. These additional courses can count as studio electives.

| Choose two advanced-level courses in Drawing from the following list: |  |  | $\mathbf{6}$ |  |
| :--- | :--- | :--- | :--- | :--- |
| PDS | 2341 | Digital Drawing |  |  |
| PDS | 2521 | Video Workshop |  |  |
| PDS | 3351 | Rome Sketchbook |  |  |
| PDS | $3411,3421,4411$ | Advanced Drawing** |  |  |
| PDS | $3431,3441,4431,4441$ | Figure Drawing** |  |  |
| PDS | 3451 | Interactive Projects |  |  |
| $* *$ These courses have a sophomore level prerequisite. Check the course descriptions online for more details. |  |  |  |  |


| Capstone <br> (students are advised to take the capstone in their Junior Year) |  |  |
| :--- | :---: | :---: |
| PDS | 3596 | PDS Seminar |

## Suggested Semester-by-Semester Plan

For New Students starting in Academic Year 2013-2014

| Freshman Year - 1st Semester | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Subject | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| English | 1511 | Foundation Drawing ^ | 3 |  |
| Foundation | 1521 | 2-D Foundation Principles | 3 |  |
| Foundation | 1531 | 3-D Foundation Principles | 3 |  |
| Foundation | 1501 | Introduction to Art \& Design | 1 |  |
| Foundation | Art Heritage of the Western World I | 3 |  |  |
| Art History |  |  | $\mathbf{1 7}$ |  |
| Subtotal |  |  |  |  |

Freshman Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Foundation | 1512 | Foundation Drawing | 3 |  |
| Foundation | 1522 | 2-D Foundation Principles | 3 |  |
| Foundation | 1532 | 3-D Foundation Principles | 3 |  |
| Art History | 1156 | Art Heritage of the Western World II $\wedge$ | 3 |  |
| Foundation | 1502 | Investigations of Art \& Design | 1 |  |
| Subtotal |  |  | $\mathbf{1 6}$ |  |

1 These 2 courses constitute the waiver for the GenEd Arts category if the courses are completed with a C- or better.

Sophomore Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| PDS | 2611 or 2621 | Sophomore Sculpture | 3 |  |
| Crafts/GAD/PDS |  | Sophomore Studio Elective | 3 |  |
| Crafts/GAD/PDS |  | Sophomore Studio Elective | 3 |  |
| Subtotal |  | $\mathbf{1 6}$ |  |  |

Sophomore Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Crafts/GAD/PDS |  | Sophomore Studio Elective* | 3 |  |
| Crafts/GAD/PDS |  | Sophomore Studio Elective | 3 |  |
| Crafts/GAD/PDS |  | Sophomore Studio Elective | 3 |  |
| Subtotal |  |  | 15 |  |
| *Intermediate Drawing 2311 or 2321 strongly encouraged |  |  |  |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| PDS | 3611 or 3621 | Advanced Sculpture | 3 |  |
| PDS |  | Specialized Sculpture | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| PDS | 3596 | PDS Seminar (Capstone) | 3 | WI |


|  |  | Studio Elective | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Subtotal |  |  | 15 |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Global/World Society^^ | 3 | GG |
| PDS | 3612 or 3622 | Advanced Sculpture | 3 |  |
| PDS |  | Advanced Drawing* | 3 |  |
|  |  | Studio Elective | 3 |  |
| Art History |  | Art History Elective | 4 | WI |
| Subtotal |  |  | 16 |  |
| M^ Study at Temple Rome counts toward GenEd Global/World Society requirement. |  |  |  |  |
| * Courses may have a sophomore level prerequisite. Check the course descriptions online for more details. |  |  |  |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| PDS | 4611 | Senior Sculpture | 3 |  |
| PDS |  | Advanced Drawing* | 3 |  |
|  |  | Studio Elective | 3 |  |
|  |  | Non-Studio Elective | 3 |  |
| Subtotal |  |  | 15 |  |
| * Courses may have a sophomore level prerequisite. Check the course descriptions online for more details. |  |  |  |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| PDS |  | Specialized or Advanced Sculpture | 3 |  |
| PDS |  | Specialized or Advanced Sculpture | 3 |  |
| Art History |  | Art History elective | 3 |  |
|  |  | Open Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Total Credits for the B.F.A. in Sculpture: |  |  | 126 (minimum) |  |

## Visual Studies

Nichola Kinch, Area Head
Tyler School of Art Building 230C
nmkinch@temple.edu
215-777-5191

The Bachelor of Arts in Visual Studies enables students to develop an interdisciplinary studio practice. The curriculum organizes multiple approaches to visual thinking that cut across various disciplines into a logical whole. Students in this major develop studio practices from a variety of aesthetic, theoretical, scientific, sociological, and historical viewpoints. Students learn to
consider medium, its impact on the image and message of a piece, and the work's social and cultural context. The major is comprised of a stimulating blend of studio and academic courses that provide graduates with a sound basis for pursuing graduate study in studio art, art history, art theory and criticism, or visual anthropology.

## Degree Requirements for the B.A. in Visual Studies

A minimum of 122 hours is required for the degree.

## University Requirements

- Students must complete the university's General Education curriculum.
- All Temple students must take a minimum of two writing-intensive courses at Temple University as part of the major. The writing-intensive courses are identified below, with a "WI" in the Attribute column.


## Visual Studies Major Foundations Requirements

- Visual Studies 1151, 1351, and 1651
- Tyler School of Art 1071
- Foundation Program 1501 (freshman seminar)


## Visual Studies Major Studio Requirements

- Select one Concept studio from Visual Studies at the 2xxx level
- Select 2 Hybrid studios from Visual Studies at the 3xxx level
- Select 1 Interdisciplinary studio from Visual Studies at the 4xxx level
- Select 5 studio electives from either Visual Studies, Community Arts (not 3011) or 2000 level Crafts, PDS, or GAD
- Visual Studies Interdisciplinary Seminars 1058, 2058, 3058, and 4098 (WI)
- GAD 3896 Art Career Workshop (WI)


## Visual Studies Major Art History Requirements

- Art History 1155 and 1156


## Visual Studies Major Academic Requirements

- Select 3 Academic Elective courses at any level from within the University (but outside of Tyler departments)
- Select 4 Upper Level Academic electives (2000+ level or above, from within the University but outside of Tyler)
- Students must complete the second level of a foreign language: Arabic 1002; Chinese 1002; French 1002, German 1002; Greek (ancient) 1002; Greek (modern) 1002; Hebrew 1002; Hindi 1002; Italian 1002; Japanese 1002; Korean 1002; Latin 1002; Portuguese 1002; Russian 1002; Spanish 1002,1902; Vietnamese 1002.


## Suggested Semester By Semester Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

## Bachelor of Arts in Visual Studies

Requirements for New Students starting in the 2013-2014 Academic Year
Freshman Year - Fall

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| English | 0802, 0812, or 0902 | Analytical Reading \& Writing | 4 | GW |
| Foundations | 1501 | Introduction to Art \& Design | 1 |  |
| Art History | 1155 or 1955 | Art Heritage of the Western World I | 3 |  |
| Tyler School of Art | 1071 | VS1 Introduction to Visual Studies: History, <br> Theory, Practice | 3 |  |
| Select two of the following Visual Studies Foundation courses: | 6 |  |  |  |
| Visual Studies | 1151 | VS1 Foundation: Drawing ^ |  |  |
| Visual Studies | 1351 | VS1 Foundation: 3D |  |  |
| Visual Studies | 1651 | VS1 Foundation: Digital Imaging |  |  |
| Semester Total |  | $\mathbf{1 7}$ |  |  |

## Freshman Year - Spring

| IH | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| :--- | :--- | :--- | :---: | :---: |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Art History | 1156 or 1956 | Art Heritage of the Western World II ^ | 3 |  |
| Visual Studies | 1058 | VS1 Interdisciplinary Studio Seminar 1 | 3 |  |
| Select one of the following Visual Studies Foundation courses that was not taken in the previous <br> semester: | 3 |  |  |  |
| Visual Studies | 1151 | VS1 Foundation: Drawing $\wedge$ |  |  |
| Visual Studies | 1351 | VS1 Foundation: 3D |  |  |
| Visual Studies | 1651 | VS1 Foundation: Digital Imaging |  |  |
| Semester Total |  | $\mathbf{1 6}$ |  |  |

Sophomore Year - Fall

| IH | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| :--- | :--- | :--- | :---: | :---: |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Visual Studies, Crafts, <br> GAD, PDS or ARTE | $2 \times x x$ | Studio elective** | 3 |  |
| Visual Studies | 2xxx | VS2 Concept Studio | 3 |  |
| Semester Total |  | $\mathbf{1 5}$ |  |  |
|  |  |  |  |  |
| Sophomore Year - Spring | 2058 | VS2 Interdisciplinary Studio Seminar 2 |  |  |
| Visual Studies | Academic Elective | 3 |  |  |
| Elective | Race \& Diversity | 3 |  |  |
| GenEd | Science \& Technology I | 3 | GD |  |
| GenEd | 08xx or 09xx | 08xx or 09xx |  | GS |



## BOYER COLLEGE OF MUSIC \& DANCE

Founded 1962

Dr. Robert T. Stroker, Dean<br>2001 N. 13th Street<br>Philadelphia, PA 19122<br>215-204-8301<br>music@temple.edu<br>www.temple.edu/boyer

## Mission

The Boyer College of Music and Dance is committed to nurturing and advancing music as a form of human expression, as an art, and as a subject for intellectual inquiry. Recognizing that music possesses unique powers -- to move the spirit, to excite the mind, to reveal the past, to chart the future, to instruct, to heal, and to foster communication -- the college seeks to perpetuate music in its myriad forms through creative and scholarly work, teaching, and service, according to the highest artistic and academic standards.

As an integral part of Temple University, the Boyer College shares the ideals of Russell Conwell upon which Temple was founded: to recognize talent and personal potential wherever they may be found; to provide educational opportunities for meritorious students of limited financial means; and to serve as a constructive presence in the wider Philadelphia community.

In carrying out its mission, the Boyer College seeks both to continue the long tradition of artistry and scholarship that we have inherited and to develop new insights, perspectives, and practices. This dual objective -- to explore both past and future, old and new -- should be broadly reflected in the life of the college: in curricula and instruction; institutional policy; professional activities of faculty; advisement of students; and musical performances.

For the art of music to remain vital, our culture must develop both highly-trained, professional musicians and informed, perceptive listeners. Accordingly, the college recognizes its responsibility to administer professional education to the student seeking a career in music, provide opportunities for the general university student to study and experience music, and share its musical life with the public.

The Boyer College provides a distinctive union of the best conservatory-type training with intense academically-oriented classroom teaching. Coupled with the performance opportunities of the university and the culturally-rich Philadelphia area, the Boyer College offers students the competitive edge in complete, comprehensive musical preparation. Many programs throughout the university offer minors. Students who wish to pursue a minor outside of music should contact the appropriate department.

## Accreditation

National Association of Schools of Music, National Association of Schools of Dance, Middle States Association, National Council for Accreditation of Teacher Education, Pennsylvania Department of Education, and American Music Therapy Association.

## Music Admission

The following requirements for admission to the college are to be considered minimal. Applicants who pass the following examinations may be recommended to the Director of Admissions as eligible for admission to the college. In addition, candidates must meet general requirements set by the Office of Undergraduate Admissions.

- An audition in the major performing medium must be completed before an applicant can be accepted into the Boyer College of Music and Dance.
- After submitting the completed application, the applicant is responsible for scheduling his/her audition. E-mail music@temple.edu to schedule your audition. Refer to the Boyer College web site (www.temple.edu/boyer/admissions/undergradadmissions/auditions.asp) for audition dates.
- The freshman application deadline is March 1. Applications for admission to the spring semester must be received no later than November 1. Call 215-204-6810, e-mail music@temple.edu or visit the Boyer College web site (www.temple.edu/boyer/admissions/index.asp) for specific audition dates.
- If the applicant is unable to be present because of distance, applicants should upload a video audition to Decision Desk. Please refer to the Boyer College web site (www.temple.edu/boyer/admissions/undergrad-admissions/auditions.asp\#Recorded) for specific details.
- Prescreening recordings are required for jazz guitar and for the B.M. Composition program.
- B.S. Music applicants must submit a statement of goals to music@temple.edu, and take a theory test.


## Transfer Credits

In addition to the university's statement regarding transfer credit (see Undergraduate Admissions), the Boyer College of Music and Dance will, during New Student Orientation, determine all transferred music credits through placement exams. Where deemed necessary, students may be tested in music theory, music history, and secondary piano. Tests in other music areas may be arranged through individual departments.

## Financial Aid

Financial aid is available to full-time undergraduates in the form of music grants, academic scholarships, loans, grants, music grants-in-aid, and work-study programs. Also see Financial Aid in this Bulletin.

Financial aid awards are made after the student has been admitted as a fully-matriculated student. Students are to be enrolled full-time, unless prior permission is granted to do otherwise by the Associate Dean.

Music Grants are awarded based on merit. No separate application is required. The Boyer College has application and audition deadlines for priority music scholarship consideration. Contact the Boyer College at 215-204-6810, or consult the Boyer College web site (www.temple.edu/boyer/) for current deadlines.

## Music and Dance scholarships and awards for currently enrolled and graduating undergraduate and graduate students include, but are not limited, to the following:

Bruce Archibald Memorial Fund

Max Aronoff Prize
Arronson Student Aid Fund
Anni Baker Scholarship in Music Therapy
James H. and Ethel L.M. Beach Book Award
Paul Beller Memorial Scholarship
Florence Berggren Voice Scholarship
Irving Berlin Scholarship
Stuart J. Best Memorial Scholarship
Dorothy Albert Bogusz Scholarship
Boyer College Alumni Association Award
Esther Boyer Scholarship Fund
Dr. Elaine Brown Tribute Award
Dr. B. Stimson Carrow Award
Howard Chivian Memorial Award
Dr. Jeffrey M. Cornelius Tribute Fund Award
Rida C. Davis Memorial Scholarship
Douty Foundation Scholarship
Richard M. Duris Scholarship for Excellence in Classical Music
Don Ewart Memorial Scholarship Fund
Else Fink Memorial Scholarship
Elizabeth K. Frescoln Award
Edwin B. Garrigues Scholarships
Olga Gagliardi Getto Award
Millard E. Gladfelter Scholarship
Professor Robert Grooters Memorial Scholarship
Jill D. Hamm Memorial Scholarship
Alan Harler Choral Award Fund

Frances Hutton Memorial Award
Jacobs Music Company Steinway Award
David M. Katz Scholarship
Michael S. Kavalhuna Scholarship
Julian F. King Jazz Studies Award
Helen Kwalwasser Prize
Ruth M. Lafferty Memorial Award
Helen Laird Tribute Award
Dr. Arthur Bennett Lipkin Memorial Fund
Frances G. Lumsden Memorial Scholarship
Klara Meyers Scholarship
Morton C. Meyers Memorial Scholarship
William T. and Carmen T. Middleberg Scholarship
New School Scholarship
Robert Page Graduate Choral Conducting Scholarship
H. E. Pike Memorial Award

Presser Foundation Scholarships
Armand I. and Ann McKernan Robinson Opera Scholarship Fund
Esther M. Schultz Award
Fred Schrader Memorial Scholarship Fund
William M. Singer Memorial
Elizabeth Smith String Scholarship
Glenn Steele Percussion Scholarship
David L. Stone Tribute Scholarship
Dr. Milton J. Sutter, Jr. Memorial Award
Alice Tully Scholarship
Louis and Peter Vennett Scholarship
Sidney and Mindelle Weinberg Voice Scholarship
Gerald Wingenroth Scholarship
Jeffrey Yagoda Memorial Award
Janet M. Yamron Scholarship
E. M. Yarnell Scholarship

Avedis Zildjian Scholarship

Dance Scholarships:
Terese Benzwie Dance in Education Award
Frances Bowden Scholarship
The Katherine Dunham Award for Creative Dance Research
Edrie Ferdun Award
Sarah Hilsendager Award
Rose Vernick Award

## Special Programs

## Music Technology Component

In addition to coursework leading to Bachelor's degrees in Music, the Boyer College of Music and Dance offers a 36 -credit component in Music Technology to qualified music majors. This component, which is distributed over a student's freshman through senior years, normally results in a five-year program.

The music technology component provides a structured sequence of courses for those students who desire to use new technologies to enhance their skills as performers, composers, teachers, and scholars. Courses focus on the creative, performance, and pedagogical aspects of music technology. See Music Technology Component under Programs and Music Education.

## Music Preparatory Division and Community Music Scholars Program of the Boyer College of Music and Dance

Mark Huxsoll, Director
www.temple.edu/boyer/community/music-prep/index.asp
215-204-1512
Temple Music Prep provides lifelong, non-credit learning opportunities in music and dance to the Greater Philadelphia community. As a division of Temple University’s Boyer College of Music and Dance, Music Prep is uniquely able to combine university expertise with Philadelphia's outstanding cultural assets, assuring excellence in experience and results.

Programming includes Early Childhood Music Foundations beginning with newborns, Movement and Dance Classes for children through teens, individual instruction in all instruments and voice, and classes specially designed for adults. Music Prep is also an authorized provider of Act 48 credits for Pennsylvania educators.

A major component is the Center for Gifted Young Musicians, which serves those students with exceptional ability and motivation. The Community Music Scholars Program serves students with need from over fifty public schools, allowing access to affordable quality instruction.

Temple Music Prep is a member of the National Guild for Community Arts Education and the Greater Philadelphia Cultural Alliance.

## Key Program Components:

- Individual lessons from an outstanding faculty in orchestral instruments, piano, guitar, voice, composition and jazz techniques are offered for children and adults.

Suzuki instruction in violin, cello, guitar, and piano is also offered for young children. In the "talent education method" of Dr. Shinichi Suzuki, children learn to play music with the same enjoyment and fluency with which they learn language.

- Early Childhood Music Foundations is an innovative program in early childhood music education that has a national reputation for excellence. In a carefully planned sequence of music learning, the program uses the natural human inclination for chanting, singing and movement as the first steps in the musical understanding of melody and rhythm.
- Movement and Dance classes take children through a sequential, age-specific dance program. Offerings include: Creative Movement (3 \& 4 yrs.), Music and Movement (5 through 7 yrs.), Modern Dance (8 yrs. through teens in three levels) and Ballet Technique (pre-teens \& teens).
- Basic Musicianship classes are offered in three progressive levels. The goal of these classes is to develop musicianship by integrating aural, written, vocal, and tactile skills. By using movable "Do" solfege, students learn to make the connection between musical notation and sound. Level three is also offered as an advanced standing music theory course, earning a high school senior college credit at the Boyer College of Music and Dance.
- Adult classes are designed to provide opportunities for personal growth and professional development. Offerings include: classes in learning to play piano, learning to play guitar, learning to sing, Speaking with Confidence, or in Suzuki piano teacher training; lectures to prepare music listeners for their next concert or opera; as well as individual study in instruments and voice. Pennsylvania educators are eligible to receive Act 48 credit for most of these offerings.
- The Center for Gifted Young Musicians is the component of Music Prep that focuses on the training of exceptionally-gifted students who have the ability and willingness to make a serious commitment to music. By audition only.


## Instrumental Division (for strings)

The Center's instrumental program provides a comprehensive package of music instruction and performance for young musicians who have demonstrated the greatest potential for musical achievement. Emphasis in this program is placed on the development of superior musical skills through large and small ensemble performance. The faculty is made up of the finest artist/teachers in the region, including members of The Philadelphia Orchestra and professors from Temple's own Boyer College of Music and Dance.

## Young Artists Harp Ensemble

The Young Artists Harp Ensemble offers pedal and lever harp students ages 10 through high school the opportunity to participate in a group ensemble experience with a conductor as well as in student-led chamber music settings. Participants are also eligible to attend monthly studio master classes by Philadelphia Orchestra principal harpist, Elizabeth Hainen at the Boyer College of Music and Dance. Students may also have the opportunity to collaborate with other Temple Music Prep ensemble groups.

## The Festival of Young Musicians

The Festival of Young Musicians has long been the centerpiece of the Center for Gifted Young Musicians. Held annually in late April/early May, it consists of a series of concerts throughout the region that feature all the performers in the Center.

- The Community Music Scholars Program: Upper Division provides weekly individual instruction, music theory and ensemble experience at a nominal fee for young instrumentalists. These Philadelphia school students with need are nominated by their school music teachers and accepted by audition.
- The Philadelphia String Project at Temple University is aligned with the National String Project Consortium (NSPC) a coalition of String Project sites at universities across the United States that exchange ideas and learn from each other but operate completely independently. The NSPC is dedicated to increasing the number of children playing stringed instruments, addressing the critical shortage of string teachers in the US and supporting public school string programs. Participating students receive twice weekly instruction taught by a Master Teacher and supported by Temple University undergraduate music education and performance string interns.

The Boyer College of Music Preparatory and Extension Division is located at Temple University's Center City Campus, 1515 Market Street, in the heart of metropolitan Philadelphia at the hub of the Regional Transit System.

For further information concerning curricula and fees, write to: Temple Music Preparatory Division, 1515 Market Street, Suite 501, Philadelphia, PA 19102, or e-mail: musicprep@temple.edu or phone: 215-204-1512. You can also visit the web site at: www.temple.edu/boyer/community/music-prep/index.asp.

## Facilities

Presser Hall, opened in 1967, is the center of musical activity at Temple University. This building houses practice rooms, classrooms, ensemble rehearsal rooms, teaching studios, faculty offices, a 16 -station computer classroom, student and faculty lounges, a large listening and viewing library, and the Presser Learning Center. Presser Hall's performance facilities include Klein Recital Hall and Arronson Rehearsal Hall. Presser Hall houses the Music Studies Department, the Music Education Department, the wind, brass, and Percussion programs of the Instrumental Department, the Choral Activities Department, the Department of Voice and Opera, and the programs in Music Therapy and Jazz Studies.

The nationally recognized Presser Center for Research and Creativity in Music, located on the first floor of Presser Hall, houses over 6,000 books, recordings, periodicals, videotapes, audio tapes, classroom instruments, and other materials used in the preparation of music teachers and music therapists. Included in the computer classroom is the hardware and software necessary for future teachers and therapists to become knowledgeable about the role of computers in music and administration.

The Presser Hall Listening Library houses a collection of more than 10,000 recordings and tapes, 6,000 compact discs, hundreds of video tapes and DVDs, reference books, and scores. Music listening and viewing assignments for courses in music history, theory, composition, jazz, education, and literature can be completed with this collection, which spans music history and performance from the earliest times to the present. A larger collection of music books and scores is found in Paley Library.

The Boyer College's Rock Hall was extensively renovated for music and dedicated in 1994 in recognition of the generous support of Dr. Milton Rock and the late Mrs. Shirley Rock. Located at Broad Street and Cecil B. Moore Avenue on Temple University's Main Campus, Rock Hall houses the Office of the Dean, the string and chamber music programs of the New School Institute, the programs in Music Composition, the Keyboard Department, the Early Music Program, the Alice Tully Library, three state-of-the-art computer/electronic laboratories for music and dance, practice rooms, classrooms, and a 325-seat chamber music recital hall.

The Experimental MIDI studio in Rock Hall features a variety of voice modules controlled by a computer workstation, a multi-channel mixer, and digital and analog recording facilities. Students are encouraged to design their own libraries of timbres for use in composition. The computer synthesis studio uses several computer workstations with expanded disk memory, digital and analog recording equipment, and a broad range of software for music synthesis. Most hardware and software titles in the Boyer College Computer Labs are identical to those in the new TECH Center's dedicated Music Lab, enabling students to work on projects in multiple venues.

The Boyer College added a 3-story addition to Presser Hall in 2009 which contains 21 additional practice rooms, three large classrooms, teaching studios, administrative offices, the Center for Arts and Quality of Life, and a recording studio.

The Boyer College's Department of Dance has its administrative, faculty, institute, and student offices housed in 1700 North Broad Street. Dance classes are held in three large dance studios in Pearson Hall where there are additional support spaces as well as two small teaching studios for smaller groups. Dance classes and performances are held in Conwell Dance Theater in Conwell Hall, a 125-seat black box theater.

As of the 2011-2012 academic year, the College presents its largest ensembles in performance in the Temple Performing Arts Center. This iconic building - formerly the Baptist Temple of Philadelphia - was specifically converted into a performing arts complex capable of housing a full symphony orchestra and choir. Boyer's symphony orchestra, choirs, wind symphony, percussion ensemble and other large ensembles all perform in this venue. In addition, the Temple Performing Arts Center is also available to the College for recording sessions, rehearsals, faculty concerts and other significant events.

Also utilized by the Boyer College is the third floor of Mitten Hall where the Temple Opera Theater's rehearsal, administrative and faculty offices are housed along with the Opera Listening and Study Library, and the scene, costume, and prop shops. Tomlinson Theater, located across the street from Presser Hall, is used for on-campus large ensemble performances and for the
twice yearly staged opera productions. A 55-seat smart classroom for music and dance instruction is housed in the Tuttleman Learning Center.

In July of 2012, the Boyer College of Music and Dance became part of Temple University's Center for the Arts, a comprehensive administrative restructuring of all of the Arts programs on Temple's campus. The combined programs now include the Boyer College of Music and Dance, Tyler School of Art, and the Division of Theater, Film and Media Arts. With the oversight of all these areas by the Vice Provost for the Arts and Dean of the Center, Dr. Robert Stroker, the possibilities for collaborations among all of the arts programs on Temple's campus have significantly increased.

## Academic Advising Center

All Bachelor of Music and Bachelor of Science in Music students will be assigned a faculty advisor. Students are required to meet with their advisor prior to registering for classes for the following semester.

Academic advisors attempt to avoid errors when advising students about their program requirements. Temple University's Schools and Colleges cannot assume liability for errors in advising; therefore, students must assume primary responsibility for understanding the requirements for their degree, and acquiring current information about their academic status.

## Boyer College of Music and Dance - ADVISING CONTACTS

Dr. Edward Flanagan, Associate Dean for Student Affairs<br>Presser Hall<br>215-204-8301<br>edward.flanagan@temple.edu<br>Dr. Beth Bolton, Associate Dean for Faculty and Academic Affairs<br>Rock Hall<br>215-204-5527<br>bbolton@temple.edu<br>Marguerite Jackson, Assistant Director of Advising<br>Presser Hall<br>215-204-2229<br>margo@temple.edu<br>Lesley Copans, Academic Advisor<br>Presser Hall<br>215-204-8372<br>lcopans@temple.edu

## Music Faculty Advisors

## Instrumental

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## Bachelor of Science in Music

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Merian Soto<br>Associate Professor of Dance<br>215-204-6281<br>msoto@temple.edu<br>Dr. Kariamu Welsh<br>Professor of Dance<br>215-204-6286<br>kariamu@temple.edu

## For information regarding University Resources and Services please utilize the following web links:


#### Abstract

About Boyer: www.temple.edu/bulletin/Academic_programs/schools_colleges/boyer/music/intro/generalinfo/ music_generalinfo.shtm


## Boyer Policies:

www.temple.edu/bulletin/Academic_programs/schools_colleges/boyer/music/intro/policies/musi c_policies.shtm

## Boyer Graduation Requirements:

www.temple.edu/bulletin/Academic_programs/schools_colleges/boyer/music/intro/gradreq/musi c_gradreq.shtm

## Boyer Resources:

www.temple.edu/boyer/index.asp

## Change of Concentration within Music

Students wishing to change their concentration or major may need to contact James Short, Director of Admissions and Recruitment, Presser Hall, 215-204-8598, to schedule an audition. An interview with the Department Chairperson, along with written authorization from your Department and Faculty advisor, is required.

Change of Program Request form: www.temple.edu/vpus/forms/index.htm\#advising If you are considering changing your major from music to another major within Temple University, please see Margo Jackson in Presser Hall. Many colleges require students to schedule Intra-University Transfer workshops.

Permission to Take a Course Outside of Temple University:
www.temple.edu/bulletin/Academic_policies/policies_part4/policies_part4.shtm\#another_inst
University Academic Resources:
www.temple.edu/vpus/resources/index.htm

New Student Orientation Information: www.temple.edu/studentaffairs/orientation/

Registration and Schedule Revision - Add/Drop:
www.temple.edu/bulletin/Enrolling/registration/enrolling_registration.shtm\#schedule_revision

## Boyer College Policies for Music Students

Please see Undergraduate Academic Policies. Students are responsible for complying with all university-wide academic policies as well as those of the Boyer College of Music and Dance that appear below.

## Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List policy for specific GPA and credit-hour requirements.

## Band Camp and Choir Retreat Policy

Each fall, prior to the opening of school, the Temple University Marching Band holds its annual band camp. In addition to having a concentrated four-day work period to prepare for the coming season, students get to know each other in both a working and social relationship. They also become acquainted with the group directors at both the personal and professional levels. Attendance at band camp is mandatory for group participation.

The Temple University Concert Choir often meets a few days prior to fall classes or during the first weekend of fall classes for extensive rehearsals.

## Ensemble Requirements

- Undergraduate students with a major or concentration in voice or keyboard are required to participate in a choral ensemble, as determined by the director of Choral Activities, throughout the undergraduate degree program where indicated by the curriculum. Participation begins in the first semester and continues until a baccalaureate degree is obtained. The requirement is waived during the semester of senior recital, internship, or student teaching.
- Music Education/Jazz Studies majors whose concentration is voice are required to participate in both classical and jazz vocal ensembles. After advisement to determine which kind of ensemble is appropriate, these students should go to the director of Choral Activities to be placed in a classical ensemble and to the coordinator of Jazz Studies to be placed in a jazz ensemble.
- Undergraduate students with a major or concentration in strings are required to play in the Temple University Symphony Orchestra. Participation begins in the first semester and continues until a baccalaureate degree is obtained. Qualified jazz strings and upright bass students are required to audition. This requirement is waived during the semester of student teaching or internship.
- All woodwind, brass, and percussion performance majors and concentrations must audition for instrumental ensembles, large and small, each semester. Continuing students will audition for ensemble placement through juries at the end of each semester. New students will audition for ensemble placement at the beginning of the first semester of study.
- Music education majors whose principal instrument is woodwind, brass, or percussion are required to play in the marching band for two semesters, normally during the fall semester of the freshman and sophomore years. Transfer students in this category must also register for Marching Band for two semesters unless they can show evidence of equivalent undergraduate experience at another college or university as determined by the director of athletic bands.
- All students taking private lessons (major or concentration) or Recital Extensions are required to participate in an ensemble each semester in attendance.
- Percussion majors are required to participate in Percussion Ensemble.
- Any instrumental student who does not play for a private lesson jury at the end of each semester must arrange for an audition for ensemble placement for the succeeding semester with the Department of Instrumental Studies.
- Students may perform in more than two ensembles only with permission of their advisor.
- All students must show evidence of ensemble experience in their performance medium.
- All students who concentrate in string, woodwind, and brass instruments who are registered for lessons must arrange their schedules in order to attend regularly-scheduled master/studio classes. Failure to do so may result in the lowering of the applied lesson grade.


## Independent Study Policy

Independent Study provides a special opportunity for juniors and seniors to work in a highlyindividualized setting with one or more faculty members.

Those who wish to design an Independent Study project must prepare a written proposal six months in advance of the semester in which the study is to be accomplished. This proposal is then submitted for the approval of a special Honors subcommittee of the Academic Planning and

Review Committee, which includes the dean and associate dean. Private lessons beyond those required in the curriculum are not an appropriate form of Independent Study.

## Professional Development Policy

All students in the college, in addition to passing the required subjects toward their degrees, are obligated to serve in a number of capacities in order to enrich their academic and musical expertise. The Boyer College believes that such experiences give impetus to successful professional careers. Among the duties that may be required are conducting laboratory classes, tutoring, teaching private lessons, coaching, participating in the distribution and inventory control of university-owned musical instruments and instructional materials, participating in ensembles, accompanying, supervising performance classes, performing at admission and open house events, and other academically-related activities. The Boyer College performances must be given priority over non-college commitments.

## Instrumental Jury Policy

All instrumental students, both performance majors and instrumental concentration students, must play a jury at the conclusion of each semester to show evidence of progress on their instrument. For string performance majors, the jury at the end of the sophomore year is the 'Junior Standing Jury,' which must be successfully passed in order for the student to continue in the performance program.

## Recital and Concert Attendance Policy

The dean and faculty of the Boyer College of Music and Dance consider recital and concert attendance to be a significant educational activity in the training of a musician. It is largely through the process of active listening that the young musician develops powers of discrimination and critical judgment with relation to musical performance. Therefore, attendance at a minimum of sixteen college recitals or concerts throughout the course of an academic year is mandatory for full-time undergraduate students. A maximum of 56 recitals is needed to complete the requirement. Of the eight required recitals attended in each semester by full-time students, one must be an official Boyer College World Music Recital or Multicultural Music LecturePerformance. Part-time, matriculated undergraduate students are also responsible for attending a specific number of concerts with the same World Music Recital or Multicultural Music LecturePerformance requirement. For part-time students the number of required recitals in a semester will be in a direct ratio to the number of credits for which they are registered. During student teaching, therapy internship, or senior recital, this requirement is waived. The requirement for full-time transfer students will be based on the number of semesters they attended the Boyer College. Failure to comply with this ruling may result in delay of graduation from the college.

## Senior Recital Policy

Students in the following curriculums are required to perform a senior recital: Piano Performance, Piano Pedagogy, Instrumental Performance, Voice Performance, Jazz Instrumental

Performance, Jazz Voice Performance, and Jazz Arranging/Composition. The senior recital provides the opportunity for the performance major to display his or her development and potential as a professional musician and should be considered the focal point for the semesters of private lessons which precede it. Before the senior recital is scheduled, the student (1) must have successfully completed private lessons during each semester prior to the recital and (2) must have achieved senior status academically. All grades of "incomplete" in private lessons must be cleared before the student may apply for the senior recital. Students should refer to the Boyer College of Music and Dance Undergraduate Handbook for further details and policies governing recitals.

After receiving approval from the jury and the major teacher in the applied area, a student should apply for the Senior Recital date and complete the necessary recital arrangements through the recital coordinator.

For students enrolled in the Instrumental Studies Department, the recital approval jury serves to demonstrate the student's ability to perform the degree recital successfully. Normally, this occurs at the preceding semester's jury. If by departmental approval this jury does not occur, then a jury must be scheduled at least four weeks prior to the recital. If the jury is not successfully completed by that time, the Instrumental Studies Department reserves the right to cancel the recital date. Most of the recital repertoire, with the exception of chamber ensemble works, should be available for performance at the jury and accompanied by the recital accompanist. Recital approval is dependent upon the time remaining between the approval jury and the actual recital date, as well as the degree of preparedness of the repertoire.

Except for non-sonata and complicated contemporary repertoire, string performance majors should perform from memory (and the recital program should include some portion that will be performed from memory). Students who wish an exception to this memorization policy must obtain prior approval from the department by indicating the request on the recital repertoire form when it is submitted to the department for approval of the program.

Senior Recitals are usually presented Monday through Friday at 5:15 PM or 7:30 PM.
Performance time should be 45 to 50 minutes, exclusive of an optional intermission of no more than 10 minutes.

## Recital Extension Policy

Some students may need to extend their applied study beyond the required number of semesters in order to complete the preparation for the Senior Recital. Students who do not present a recital during the recital semester will receive the grade of "Incomplete" and must register for Music 5000: Recital Extension for 2 semester hours of non-degree credit. Recital Extension must be taken each semester until the recital has been presented. The sole exceptions to this rule are as follows:

- Students who give their recitals during the first three weeks of the spring semester are not required to register for Recital Extension that semester.
- Students who register for Recital Extension or for private lessons during the summer may give their recitals during the first three weeks of the fall semester. However, if a student does not register for either Recital Extension or lessons during the summer, he or she may not present the recital in the fall semester -- regardless of the date -- without also registering for that semester of lessons or Recital Extension.
- Private applied lessons beyond the eight-semester requirement currently in effect for undergraduate performance majors may be taken by permission of the jury and/or the appropriate performance department chairman. Music 5000: Recital Extension carries a $\$ 500$ fee (subject to change without notice). Tuition scholarships do not cover this private lesson fee.


## Program Performance Policy

All music departments reserve the right to dismiss an undergraduate student at any time from a given undergraduate degree program, regardless of grade point average, if in the opinion of the major department, he or she is unable to meet departmental standards. The decision will receive automatic review by the Academic Review and Planning Committee. The student has the right to appeal the dismissal to the Academic Review and Planning Committee of the Boyer College of Music and Dance.

## Undergraduate Private Lesson Policy

Weekly one-hour private lessons are arranged for full-time matriculated undergraduates in the Boyer College for as many semesters as required by the particular curriculum. (A full-time student must be registered for at least 12 credits each semester.) A per semester lesson fee of $\$ 200$ (subject to change without notice) -- above and beyond the regular tuition -- will be automatically added to the tuition charge of each student for this study. Students who do not complete a minimum of 12 semester hours must pay a private lesson fee of $\$ 400$ for the succeeding semester of private lessons. Students who are accepted for a double concentration or a double major in performance must be fully accepted by both departments by audition. A private lesson fee of $\$ 400$ is assessed for the second instrument. Approval of the associate dean is required for all students desiring a double major or double concentration. Tuition scholarships granted by the Boyer College do not cover the private lesson fees.

## General College Graduation Requirements - Music

## University Requirements

## All students starting in the 2013-2014 academic year are required to complete the General Education (GenEd) curriculum.

## College Requirements

- All music education students must maintain a 3.0 GPA to obtain permission to student teach and qualify for state teacher certification.
- All music therapy students must receive a grade of B- or better in all music therapy classes. Grades below B- in any music therapy course may not be applied toward degree requirements in music therapy. Students may retake such courses only once, only with faculty approval. If a grade below B- is earned upon retaking the course, the students will not be permitted to continue as a music therapy major, but may be eligible to change to a different curriculum.
- All Boyer College music students must attend a minimum number of College recitals each semester to qualify for graduation. Refer to the Recital and Concert Attendance Policy for more detailed information.
- All Boyer College music students are required to participate in specific ensembles as determined by their department and program. Refer to the Ensemble Requirement Policy for more detailed information.
- Students in the following curriculums are required to perform a senior recital prior to graduation: Piano Performance, Piano Pedagogy, Instrumental Performance, Voice Performance, Jazz Instrumental Performance, Jazz Voice Performance, and Jazz Arranging/Composition. Refer to the Senior Recital Policy for more detailed information.
- All undergraduate music students must be cleared by the Assistant Director of Advising for graduation by the end of their junior year.

Please refer to the Boyer College Policy Section for a complete list of policies. Detailed requirements for each degree program are listed within the curriculum section of the Bulletin.

## Descriptions

1. Certain courses fulfill multiple requirements. In consultation with an advisor, students will be able to plan their curriculum more effectively.
2. The total number of credit hours required for graduation may be greater for some students based on placement exams, transfer evaluations, individual curricular choices, and academic progress.
3. Students must fulfill the necessary prerequisites for any given course or course sequence. See the Prerequisite and Co-requisite Policy in the University-wide Academic Policies section of this Bulletin.

## Student Contact Information

## Boyer College of Music and Dance - MUSIC CONTACTS

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## Music Faculty

## Administration

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Edward Flanagan, Associate Dean
Steven Kreinberg, Associate Dean
David Brown, Assistant Dean
Sue Alcedo, Director of Finance and Administration, Center for the Arts Millie Bai, Librarian, Alice Tully Library
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Scott Reynolds, Executive Director of Development for the Arts
Eric Schweingruber, Director of Instrumental Ensembles
James Short, Director of Admissions and Recruitment
Tara Webb-Duey, Director of Development

## Choral

## Associate Professor

Mitos Andaya, Associate Director of Choral Activities and Associate Professor, B.M.E. University of Northern Colorado; M.M. University of Kansas; D.M.A. University of Kansas. Rollo Dilworth, B.S. Case Western Reserve University; M.Ed. University of Missouri-St. Louis; D.M.A. Northwestern University.

Paul Rardin, Chair and Associate Professor, B.A. Williams College; M.M. University of Michigan; D.M.A. University of Michigan.

## Affiliate Faculty

John Sall, B.M. St. Olaf College; M.M. Temple University.

## Instrumental Studies

## Professor

Luis Biava, Director of the Temple University Symphony Orchestra; Post Graduate Diploma in conducting, Manhattan School of Music; Diploma: Atlantico University (Colombia) and

Academia Santa Cecilia (Rome); retired principal second violin and Conductor-in-Residence, The Philadelphia Orchestra.
Eduard Schmieder, (Violin), Laura H. Carnell Professor of Violin; Artistic Director for Strings; graduate of the Mussorgsky Musical College in Leningrad and the Gnessin Music Academy in Moscow.
Jeffrey Solow, (Cello), Ensembles Coordinator and Academic Advisor for Strings; B.A. in Philosophy from UCLA; advanced studies with and assistant to Gregor Piatigorsky at USC; 2time Grammy nominee; president of ASTA.
Terell Stafford, Laura H. Carnelle Professor; Chair, Instrumental Studies Department; B.S. University of Maryland; M.M. Rutgers University.

## Associate Professor

Emily Threinen, Director of Bands; Ensembles Coordinator for Woodwinds and Brass; D.M.A., University of Michigan; M.M. Northwestern University; B.M. University of Minnesota-Twin Cities.

## Assistant Professor

Matthew Brunner, Director of Athletic Bands; Academic Advisor for Woodwinds and Brass; D.M., Indiana University. Phillip O’Banion, (Percussion), Ensembles Coordinator and Academic Advisor for Percussion; Artist Diploma, Temple University; M.M., University of Colorado at Boulder; B.M. Southern Methodist University.

## Affiliate Faculty

## Flute

David Cramer, Lecturer; B.M., The Curtis Institute of Music; private studies with Murray Panitz, William Hebert, and James Pappoutsakis; associate principal flute of The Philadelphia Orchestra.
Loren Lind, Lecturer; member of The Philadelphia Orchestra and Conwell Woodwind Quintet. Kazuo Tokito, Lecturer; member of The Philadelphia Orchestra; graduate of Oberlin Conservatory and Indiana University School of Music.
Adeline Tomasone, Lecturer; B.M., The Curtis Institute of Music; private studies with Murray Panitz, Julius Baker, and Kenton F. Terry; principal flute with the Opera Company of Philadelphia, The Pennsylvania Opera Theater, and The Performance Organization; solo flute with the Davidsbund Chamber Players.

## Oboe

Jonathan Blumenfeld, Lecturer; B.A., Haverford College; graduate of The Curtis Institute of Music; private studies with Richard Woodhams; member of The Philadelphia Orchestra. Peter Smith, Lecturer; associate principal oboe of The Philadelphia Orchestra; member, Conwell Woodwind Quintet; graduate of The Curtis Institute of Music.
Richard Woodhams, Adjunct Professor; principal oboe of The Philadelphia Orchestra; private studies with John DeLancie at the Curtis Institute of Music.

## Clarinet

Sam Caveizel, Lecturer, Associate Principal Clarinet, The Philadelphia Orchestra; graduate, The Curtis Institute.
Paul Demers, Lecturer; M.M., DePaul University, member The Philadelphia Orchestra.
Ricardo Morales, Lecturer; Artist Diploma, Cincinnati College Conservatory; principal clarinet of The Philadelphia Orchestra.

## Bassoon

Angela Anderson, Lecturer; member of The Philadelphia Orchestra and Conwell Woodwind Quintet; graduate of University of New Mexico and University of Southern California. Daniel Matsukawa, Lecturer; Principal Bassoon, The Philadelphia Orchestra; graduate of The Curtis Institute.
Michelle Rosen, Lecturer; Principal Bassoon, Chamber Orchestra of Philadelphia; graduate of The Curtis Institute of Music.
Jacob Smith, Lecturer; M.M., Temple University, member of the Chamber Orchestra of Philadelphia.

## Saxophone

Frank Mazzeo, Lecturer; B.M. West Chester University; M.M. Temple University; lead alto, Walnut Street Theater.
Marshall Taylor, Lecturer; M.M., Northwestern University; attended Conservatoire Nationale Supérieur de Musique and Université de Paris.

## French Horn

Jeffrey Kirschen, Lecturer; B.M., Temple University; Graduate of The Curtis Institute of Music, member of The Philadelphia Orchestra.
Jeffrey Lang, Lecturer; Associate Principal Horn, The Philadelphia Orchestra; Principal Horn, American Symphony Orchestra; studied at Juilliard School and Temple University.
Jennifer Montone, Lecturer; Principal Horn, The Philadelphia Orchestra; graduate of the Juilliard School. (By special arrangement).
Shelley Showers, Lecturer; member of The Philadelphia Orchestra and Conwell Woodwind Quintet; graduate of The Curtis Institute of Music .
Daniel Williams, Lecturer; Diploma, The Curtis Institute of Music; member of The Philadelphia Orchestra.

## Trumpet

David Bilger, Lecturer; principal trumpet of The Philadelphia Orchestra. (By special arrangement).
Jeffrey Curnow, Lecturer; Associate Principal Trumpet, The Philadelphia Orchestra; former member, Empire Brass Quintet.
Robert Earley, Lecturer; member of The Philadelphia Orchestra.
Rodney Mack, Lecturer; principal trumpet, Chamber Orchestra of Philadelphia; graduate of The Curtis Institute.
Eric Schweingruber, Lecturer; Director of Instrumental Ensembles; B.M. Temple University; M.M. Temple University.

## Trombone

Blair Bollinger, Lecturer; graduate of The Curtis Institute of Music; bass trombone of The Philadelphia Orchestra. (By special arrangement)
Paul Bryan, Lecturer; M.M., Temple University; graduate of The Curtis Institute of Music. Nitzan Haroz, Lecturer; principal trombone of The Philadelphia Orchestra; graduate of The Juilliard School of Music.
Philip McClelland, Lecturer; graduate of The Curtis Institute of Music; private studies with Henry Smith and Dee Stewart.
Matthew Vaughan, Lecturer; Associate Principal Trombone, The Philadelphia Orchestra; graduate of the Indiana University School of Music.

## Tuba

Jay Krush, Lecturer; M.M., Northwestern University; private studies with Abe Torchinski, Cherry Beauregard, and Arnold Jacobs; founding member of The Chestnut Brass Company. Carol Jantsch, Lecturer; B.M., University of Michigan; Principal Tuba, The Philadelphia Orchestra

## Percussion

Alan Abel, Lecturer; Graduate of The Eastman School of Music; retired member of The Philadelphia Orchestra.
Christopher Deviney, Lecturer; B.M. Florida State University; M.M. Temple University. William Kerrigan, Lecturer; principal percussion of The Philadelphia Orchestra.
Rolando Morales-Matos, Lecturer.
Phillip O'Banion, Assistant Professor; B.M. Southern Methodist University; M.M. University of Colorado; performances with The Philadelphia Orchestra, Delaware Symphony, Boulder Philharmonic.
William Wozniak, Lecturer.
Angela Zator-Nelson, Lecturer; M.M., Temple University; Member of The Philadelphia Orchestra.

## Harp

Elizabeth Hainen, Lecturer; Principal Harp, The Philadelphia Orchestra.
Kimberly Rowe, Lecturer; B.M., M.M. Cleveland Institute; studies with Alice Chalifoux; performances with The Philadelphia Orchestra, Baltimore Symphony, Chamber Orchestra of Philadelphia.

## Violin

Millie Bai, Lecturer; M.M. Temple University
Vladimir Dyo, Lecturer; Chamber Ensemble Coordinator.
Kimberly Fisher, Lecturer; Principal Second Violin, The Philadelphia Orchestra.
Helen Kwalwasser, Private studies with Efrem Zimbalist at The Curtis Institute of Music and with Ivan Galamian at The Juilliard School; member of the New York Chamber Soloists; winner, Juilliard Award.
Diane Monroe, Lecturer; Member of Uptown String Quartet.
Hirono Oka, Lecturer; graduate of The Curtis Institute of Music; Member of The Philadelphia Orchestra.

Eduard Schmieder, Laura H. Carnell Professor of Violin; graduate of the Mussorgsky Musical College in Leningrad and the Gnessin Music Academy in Moscow.
Barbara Sonies, Lecturer; M.S., The Juilliard School of Music.
Valissa Willwerth, Lecturer; D.M.A., Rutgers University, M.M. and B.M., Cleveland Institute of Music; Frequent guest musician with The Philadelphia Orchestra; studies with Arnold Steinhardt, Linda Cerone, Martin Chalifour and David Kim.

## Viola

Che-Hung Chen, Lecturer; graduate of The Curtis Institute of Music; Acting Associate Principal Viola, The Philadelphia Orchestra.
Renard Edwards, Lecturer; member of The Philadelphia Orchestra.
Evelyn Jacobs Luise, Lecturer; graduate of Temple University and The Curtis Institute of Music; private studies with Max Aronoff; principal viola of The Opera Company of Philadelphia and the Bethlehem Bach Festival.
Kerri Ryan, Lecturer; graduate of The Curtis Institute of Music and the Cleveland Institute of Music; assistant principal of The Philadelphia Orchestra.
Ana Tsinadze, Lecturer.
Xiao Fu Zhou, Lecturer.
Cello
Ohad Bar-David, Lecturer; Member of The Philadelphia Orchestra.
John Koen, Lecturer; Member of The Philadelphia Orchestra.
Kathryn Picht-Read, Lecturer; M.M., Boston University; private studies with Lowell Creitz, Gabriel Magyar, and George Neikrug; member of The Philadelphia Orchestra.
Jeffrey Solow, Professor; B.A., University of California at Los Angeles; advanced studies with Gregor Piatigorsky.

## Double Bass

Joseph Conyers, Lecturer; graduate of The Curtis Institute of Music; Assistant Principal Bass, The Philadelphia Orchestra; Former member, Atlanta Symphony and Grand Rapids Symphony. John Hood, Lecturer; graduate of the University of Michigan; member of The Philadelphia Orchestra.
Robert Kesselman, Lecturer; graduate of The Curtis Institute of Music; member of The Philadelphia Orchestra.
Anne Peterson, Lecturer; Graduate of The New School of Music.

## Classical Guitar

Allen Krantz, Lecturer; M.A. in early music performance practice, Stanford University; private studies with Michael Lorimer, Robert Strizich, and Stanley Beautens. Duane Large, Lecturer; B.M. Temple University; M.M. Temple University.

## Jazz Studies

## Professor

Terell Stafford, (Trumpet), Director of Jazz Studies and Ensembles; M.M., Rutgers University. Dick Oatts, (Saxophone), Professor of Jazz Studies.

## Associate Professor

Edward Flanagan, Associate Dean for Student Affairs, Associate Professor Jazz Studies; Ph.D., Temple University.

## Affiliate Faculty

Bruce Barth, Lecturer in Jazz Piano and Jazz Composition; M.M., New England Conservatory. Julie Bishop, Lecturer in Jazz Voice; M.M., Temple University; D.M.A. Temple University.
Mike Boone, Lecturer in Jazz Bass; B.M., Eastman School of Music.
Carla Cook, Lecturer in Jazz Voice; B.S., Northeastern University.
Norman David, Lecturer in Jazz Arranging; D.M.A., Temple University.
Craig Ebner, Lecturer in Jazz Guitar; B.M., Harrt School of Music.
John Fedchock, Lecturer in Jazz Trombone.
Steve Fidyk, Lecturer in Jazz Drums; M.M., University of Maryland.
Michael Frank, Lecturer in Jazz Piano and Jazz Theory; M.M., The University of the Arts.
Tom Giacabetti, Lecturer in Jazz Guitar and Ensemble.
Greg Kettinger, Lecturer in Jazz Theory and Ensemble; B.M., Temple University.
Tom Lawton, Lecturer in Piano and Ensemble.
Tony Miceli, Lecturer in Jazz Vibraphone.
Dan Monaghan, Lecturer in Jazz Theory and Ensemble; B.M., Temple University.
Michael Natale, Lecturer in Trumpet, Ensemble, and Improvisation.
Joanna Pascale, Lecturer in Jazz Voice; B.M., Temple University.
Madison Rast, Lecturer in Jazz Bass; M.M., Virginia Commonwealth.
Josh Richman, Lecturer in Jazz Piano.
John Swana, Lecturer in Jazz Trumpet; B.M., Temple University.
Elio Villafranca, Lecturer in Jazz Piano.
Tim Warfield, Jr., Lecturer in Jazz Saxophone.
Walt Weiskopf, Lecturer in Jazz Saxophone.

## Keyboard

## Professor

Charles Abramovic, (Piano), Chair of Keyboard Studies, D.M.A., Temple University; private studies with Leon Fleisher and Harvey Wedeen.
Alexander Fiorillo, (Piano), M.M., The Catholic University of America; private studies with Victor Babin and Vladimir Horowitz. Joyce Lindorff, (Harpsichord and Piano), D.M.A., The Juilliard School of Music.

Lambert Orkis, (Piano), Coordinator of the Master of Music Piano Accompanying and Chamber Music Program; M.M., Temple University; private studies with Eleanor Sokoloff and Maryan Filar.
Maria del Pico Taylor, (Piano), Coordinator of Class Piano; M.M., Northwestern University; private studies with Pauline Lindsey, Paul Stassevich, Adele Marcus, and Dorothy Taubman. Harvey Wedeen, (Piano), M.S., The Juilliard School of Music; private studies with Robert and Gaby Casadesus, Alexander Borovsky, Adele Marcus, and Isabella Vengerova.

## Affiliate Faculty

Joann Marie Kirchner, Lecturer in Keyboard; Ph.D., University of Oklahoma; M.M., Temple University; Pedagogy studies with Reid Alexander and Jane Magrath; private studies with Harvey Wedeen.
Irina Yurkovskaya

## Music Education and Music Therapy

## Professor

Cheryl Dileo, Ph.D., Louisiana State University. Deborah A. Sheldon, Ph.D., Florida State University. Robert Stroker, Ph.D., Michigan State University.

## Associate Professor

Beth Bolton, Ph.D., Temple University.
Darlene Brooks, Director of Music Therapy, Ph.D., Temple University.
Rollo Dilworth, Chair of Music Education and Music Therapy; D.M.A., Northwestern
University.
Wendy Magee, Ph.D. University of Sheffield, UK.
Alison Reynolds, Ph.D., Temple University.

## Assistant Professor

Nathan Buonviri, Ph.D., Temple University.
Michael Zanders, Ph.D., Temple University.

## Affiliate Faculty - Lecturers

Brad Biederman M.M.T., Temple University - Guitar Methods.
Hannah Doucette
Kelly Meashey
McCarrick-Dix, Ph.D., Temple University - Music Education Methods.
Lindsay Weightman, D.M.A., Manhattan School of Music - Keyboard Harmony. Michael Viega

## Affiliate Faculty - Student Teacher Supervision

Michael Norris, B.S., West Chester University - Student Teaching Coordinator.

## Music Studies: Composition

## Professor

Matthew Greenbaum, Ph.D., City University of New York.
Jan Krzywicki, M.M., Philadelphia Musical Academy.
Maurice Wright, Coordinator of Music Composition; Laura H. Carnell Professor of Music; D.M.A., Columbia University.

## Associate Professor

Cynthia Folio, Ph.D., The Eastman School of Music.

## Assistant Professor

Alexander deVaron, B.A. Wesleyan University; M.M. Indiana University; D.M.A. Temple University.
David Pasbrig, D.M.A. Temple University.

## Music Studies: Music History

## Associate Professor

David Cannata, Ph.D., New York University.
Steven Kreinberg, Ed.D., Temple University.
Lindsay Weightman, D.M.A., Manhattan School of Music .
Stephen Willier, Ph.D., University of Illinois.
Steven Zohn, Coordinator of Music History; Ph.D., Cornell University.

## Music Studies: Theory

## Professor

John Johnson, M.M., University of Texas.
Jan Krzywicki, M.M., Philadelphia Musical Academy.

## Associate Professor

Cynthia Folio, Ph.D., The Eastman School of Music.
Michael Klein, Chair; Ph.D., SUNY, Buffalo.

Edward Latham, Ph.D., Yale University.
Assistant Professor

Alexander deVaron, B.A. Wesleyan University; M.M. Indiana University; D.M.A. Temple University

## Voice and Opera

## Associate Professor

Christine Anderson, Chair; D.M.A., College Conservatory of Music, University of Cincinnati; private studies with Andrew White, Lorenzo Malfatti, Helen Laird, and John Alexander. Lawrence Indik, D.M.A., Manhattan School of Music.
Valery Ryvkin, B.M. Mannes College of Music; M.M. The Juilliard School; Diploma, Leningrad State Conservatory.

## Affiliate Faculty

Youngjoo An, Lecturer in Voice.
David Arnold, Lecturer in Voice.
Elise Auerbach, Vocal Coach; M.M., College Conservatory of Music, University of Cincinnati.
Julie Bishop, Lecturer in Voice.
Laura Camp, Lecturer in Voice.
Andrew Chown, Lecturer in Voice.
Anna Fré, Vocal Coach.
Donna Gill, Vocal Coach.
Lorie Gratis, Lecturer in Voice; D.M.A., Temple University, M.M., Opera, The Curtis Institute of Music; M.M., Performance and Literature, The Eastman School of Music; M.M., West Chester University.
George Gray, Lecturer in Voice; B.M.E., Westminster Choir College, Mannes College of Music, Academy of Vocal Arts; M.M. (Opera), Temple University.
Roberta Knie, Lecturer in Voice.
Randi Marrazzo, Lecturer in Voice; M.M., Catholic University.
William M. Mayo, Lecturer in Voice; M.M., Temple University.
Eric Owens, Artist in Residence.
Hoejin Sim, Lecturer in Voice.
Donald St. Pierre, Lecturer in Voice.
Grant Uhle, Lecturer in Voice.
Benita Valente, Lecturer in Voice.
Sheryl Woods, Lecturer in Voice.
Injoon Yang, Lecturer in Voice.

## Emeritus Faculty

## Professor

David L. Stone (1916-2001), Founding Dean
Helen Laird, Dean Emeritus
Florence Berggren
Richard Brodhead
Kenneth Bruscia
Arthur Chodoroff
Matthew Colucci
Roger Dean
Marian Demand
Paul Epstein
Maryan Filar
Arthur Frank
Allen M. Garrett
Edwin E. Gordon
Alan Harler
Helen Kwalwasser
George McKinley
Eve R. Meyer
Klara B. Meyers
June Ottenberg
Mildred Parker
Gail Poch
George Sementovsky
Glenn Steele
William Stone
Jonathan Sternberg
Lawrence Wagner
Darrel Walters
Harvey Wedeen
Janet Yamron
Associate Professor
Sophia Melvin
Assistant Professor
Greta M. Csonka

## Music Technology Component

In addition to coursework leading to Bachelor's degrees in Music, the Boyer College of Music \& Dance offers a 36 -credit component in Music Technology to qualified music majors. This component, which is distributed over a student's freshman through senior years, normally results in a five-year program of study.

The music technology component provides a structured sequence of courses for those students who desire to use new technologies to enhance their skills as performers, composers, teachers, and scholars. Courses focus on the creative, performance, and pedagogical aspects of music technology. Students interested in adding the component to their curriculum should contact their respective chair for further information and specific curriculum guidelines.

## Performance, Vocal Instruction

Christine Anderson, Chair
215-204-8375
cla@temple.edu
The training provided by the Voice Department emphasizes vocal technique and repertoire in a challenging program of vocal development. Performance progress is closely guided through private lessons, juries, and recital performances. The program of study prepares singers for careers in concert and recital performance, opera, and private teaching.

Bachelor of Music: Voice Performance

| Freshman Year-1st Semester | Course Title | Hours | Attribute |  |  |
| :--- | :--- | :--- | :--- | :---: | :---: |
| Subject | Course \# | Voice Major | 3 |  |  |
| Music | 1203 | Secondary Piano for Music Majors | 1 |  |  |
| Music | 1405 | Choral Ensemble | 1 |  |  |
| Music | Varies | Theory I | 4 |  |  |
| Music Studies | 1711 | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 |  |
| English | Foreign Language I | 4 | GW |  |  |
|  |  |  | $\mathbf{1 7}$ |  |  |
| Subtotal |  |  |  |  |  |
|  |  |  |  |  |  |
| Freshman Year - 2nd Semester | Course \# | Course Title |  |  |  |
| Subject | Voice Major | 3 |  |  |  |
| Music | 1204 | Secondary Piano for Music Majors | 1 |  |  |
| Music | 1406 | Choral Ensemble | 1 |  |  |
| Music | Varies | Theory II | 4 |  |  |
| Music Studies | 1712 | Quantitative Literacy | 4 | GQ |  |
| GenEd | $08 x x$ or 09xx | Foreign Language II | 4 |  |  |
| Subtotal |  |  | $\mathbf{1 7}$ |  |  |
|  |  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |  |


| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Music | 2203 | Voice Major | 3 |  |
| Music | 2405 | Secondary Piano for Music Majors | 1 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music Studies | 2711 | Theory III | 4 |  |
| Music | 1225 | English Diction | 1 |  |
| Music Studies | 2703 | Music in History | 3 |  |
| IH | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 2204 | Voice Major | 3 |  |
| Music | 2406 | Secondary Piano for Music Majors | 1 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music Studies | 2712 | Theory IV | 4 |  |
| Music Studies | 2704 | Music in History | 3 |  |
| IH | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3203 | Voice Major | 3 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music | 3267 | Vocal Repertoire | 2 |  |
| Music | 4226 | Diction Skills | 1 |  |
| Music | 2323 | Basic Conducting | 1 |  |
| French | 1001 | French I | 4 |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3204 | Voice Major | 3 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music | 4227 | Diction Skills | 1 |  |
| Music | 3268 | Vocal Repertoire | 2 |  |
| French | 1002 | French II | 4 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 4203 | Voice Major | 3 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music | 4228 | Opera Workshop | 3 |  |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |


| Subtotal |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
|  |  |  | $\mathbf{1 3}$ |  |
| Senior Year - 2nd Semester | Course \# | Course Title |  |  |
| Subject | Voice Major | Hours | Attribute |  |
| Music | 4284 | Music in History | 3 |  |
| Music Studies | 3696 | Vocal Pedagogy | 3 | WI |
| Music | 4296 | Opera Workshop | 3 | WI |
| Music | 4229 | Global/World Society | 2 |  |
| GenEd | $08 x x$ or 09xx |  | 3 | GG |
| Subtotal |  |  | $\mathbf{1 4}$ |  |
|  |  |  | $\mathbf{1 2 4}$ |  |
| Degree Total |  |  |  |  |

## Performance, Keyboard/Piano Instruction

Charles Abramovic, Interim Chair, Keyboard Studies
215-204-7388
charles.abramovic@temple.edu

The Keyboard Department emphasizes training for careers in performance, piano accompaniment and chamber music, piano pedagogy, and piano and opera coaching.

Bachelor of Music: Piano Performance

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1403 | Piano Major | 4 |  |
| Music | 1428 | Accompanying \& Piano Ensemble | 1 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music Studies | 1711 | Theory I | 4 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1404 | Piano Major | 4 |  |
| Music | 1429 | Accompanying \& Piano Ensemble | 1 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music Studies | 1712 | Theory II | 4 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 2403 | Piano Major | 4 |  |


| Music | 1428 | Accompanying \& Piano Ensemble | 1 |  |
| :---: | :---: | :---: | :---: | :---: |
| Music | Varies | Choral Ensemble | 1 |  |
| Music Studies | 2711 | Theory III | 4 |  |
| Music Studies | 2703 | Music in History | 3 |  |
| IH | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 2404 | Piano Major | 4 |  |
| Music | 1429 | Accompanying \& Piano Ensemble | 1 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music Studies | 2712 | Theory IV | 4 |  |
| Music Studies | 2704 | Music in History | 3 |  |
| IH | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3403 | Piano Major | 4 |  |
| Music | 1428 | Accompanying \& Piano Ensemble | 1 |  |
| Music | 1415 | Introduction to Piano Pedagogy | 2 |  |
| Music | 3443 | Listening \& Learning Skills for Pianists I | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3404 | Piano Major | 4 |  |
| Music | 1429 | Accompanying \& Piano Ensemble | 1 |  |
| Music | 3415 | Pedagogy of Children | 2 |  |
| Music | 3444 | Listening \& Learning Skills for Pianists II | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 4403 | Piano Major | 4 |  |
| Music | 4510 | Instrumental Ensemble | 1 |  |
| Music | 3422 | Keyboard Literature | 3 |  |
| Music Studies | 3696 | Music in History | 3 | WI |
| Music Elective |  | Music Elective | 2 |  |
| Subtotal |  |  | 13 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 4484 | Piano Major | 4 |  |


| Music | 4510 | Instrumental Ensemble | 1 |  |
| :--- | :--- | :--- | :---: | :---: |
| Music | 3423 | Keyboard Literature | 3 |  |
| Music Studies | 3796 | Music in History | 3 | WI |
| Elective |  | Elective | 2 |  |
| Subtotal |  | $\mathbf{1 3}$ |  |  |
|  |  |  |  |  |
| Degree Total |  | $\mathbf{1 2 4}$ |  |  |

## Performance, Keyboard/Harpsichord Instruction

Charles Abramovic, Interim Chair, Keyboard Studies
215-204-7388
charles.abramovic@temple.edu
The Keyboard Department emphasizes training for careers in performance, piano accompaniment and chamber music, piano pedagogy, and piano and opera coaching.

Bachelor of Music: Harpsichord Performance

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1603 | Harpsichord Major | 4 |  |
| Music | 1428 | Accompanying \& Piano Ensemble | 1 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music Studies | 1711 | Theory I | 4 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1604 | Harpsichord Major | 4 |  |
| Music | 1429 | Accompanying \& Piano Ensemble | 1 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music Studies | 1712 | Theory II | 4 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 2603 | Harpsichord Major | 4 |  |
| Music | 1428 | Accompanying \& Piano Ensemble | 1 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music Studies | 2711 | Theory III | 4 |  |
| Music Studies | 2703 | Music in History | 3 |  |
| IH | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |


| Subtotal |  |  | 16 |  |
| :---: | :---: | :---: | :---: | :---: |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 2604 | Harpsichord Major | 4 |  |
| Music | 1429 | Accompanying \& Piano Ensemble | 1 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music Studies | 2712 | Theory IV | 4 |  |
| Music Studies | 2704 | Music in History | 3 |  |
| IH | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3603 | Harpsichord Major | 4 |  |
| Music | 1428 | Accompanying \& Piano Ensemble | 1 |  |
| Music | 1415 | Introduction to Piano Pedagogy | 2 |  |
| Music | 3443 | Listening \& Learning Skills for Pianists I | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3604 | Harpsichord Major | 4 |  |
| Music | 1429 | Accompanying \& Piano Ensemble | 1 |  |
| Music | 3415 | Pedagogy of Children | 2 |  |
| Music | 3444 | Listening \& Learning Skills for Pianists II | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 4603 | Harpsichord Major | 4 |  |
| Music | 4510 | Instrumental Ensemble | 1 |  |
| Music | 3422 | Keyboard Literature | 3 |  |
| Music Studies | 3696 | Music in History | 3 | WI |
| Music |  | Music Elective | 2 |  |
| Subtotal |  |  | 13 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 4684 | Harpsichord Major | 4 |  |
| Music | 4510 | Instrumental Ensemble | 1 |  |
| Music | 3423 | Keyboard Literature | 3 |  |
| Music Studies | 3796 | Music in History | 3 | WI |
| Music |  | Music Elective | 2 |  |
| Subtotal |  |  | 13 |  |

## Degree Total <br> Performance, Piano Pedagogy

The B.M. Piano Pedagogy program will not be accepting admissions applications for the Spring 2013, Fall 2013, and Spring 2014 semesters.

Charles Abramovic, Interim Chair, Keyboard Studies

215-204-7388
charles.abramovic@temple.edu
The Keyboard Department emphasizes training for careers in performance, piano accompaniment and chamber music, piano pedagogy, and piano and opera coaching.

Bachelor of Music: Piano Pedagogy

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1403* | Piano Major | 4 |  |
| Music | 1428 | Accompanying \& Piano Ensemble | 1 |  |
| Music | 1415 | Introduction to Piano Pedagogy | 2 |  |
| Music | 3421 | Suzuki for Pianists | 2 |  |
| Music Studies | 1711 | Theory I | 4 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1404* | Piano Major | 4 |  |
| Music | 1429 | Accompanying \& Piano Ensemble | 1 |  |
| Music | 2415 | Pedagogy of Technique | 2 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music Studies | 1712 | Theory II | 4 |  |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 2403* | Piano Major | 4 |  |
| Music | 1428 | Accompanying \& Piano Ensemble | 1 |  |
| Music Studies | 2711 | Theory III | 4 |  |
| Music Studies | 2703 | Music in History | 3 |  |
| IH | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |


| Music | 2404* | Piano Major | 4 |  |
| :---: | :---: | :---: | :---: | :---: |
| Music | 2416 | Creative Activities for the Piano Teacher | 2 |  |
| Music Studies | 2712 | Theory IV | 4 |  |
| Music Studies | 2704 | Music in History | 3 |  |
| IH | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3403* | Piano Major | 4 |  |
| Music | 3422 | Keyboard Literature | 3 |  |
| Music | 3415 | Pedagogy of Children | 2 |  |
| Music Studies | 4717 | Counterpoint | 3 |  |
| Music Studies | 3696 | Music in History | 3 | WI |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3404* | Piano Major | 4 |  |
| Music | 3423 | Keyboard Literature | 3 |  |
| Music | 3416 | Pedagogy of the College Non-Music Major | 2 |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 4403* | Piano Major | 4 |  |
| Music | 1428 | Accompanying \& Piano Ensemble | 1 |  |
| Music Studies | 2105 | Jazz Secondary Piano | 1 |  |
| Music Studies | 3741 | Keyboard Harmony | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 4484* | Piano Major | 4 |  |
| Music | 1429 | Accompanying \& Piano Ensemble | 1 |  |
| Music | 2406 | Secondary Piano for Music Majors (Jazz) | 1 |  |
| Music Studies | 3796 | Music in History | 3 | WI |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Degree Total |  |  | 124 |  |

*Piano major sequence (Music 1403, 1404, 2403, 2404, 3403, 3404, 4403, and 4484) requires a minimum of four (4) hours of daily practice.

# Instrumental Studies, Instrumental Performance 

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The Instrumental Major program centers on intensive coaching and private study with a renowned faculty of teachers, many of whom are members of The Philadelphia Orchestra and other professional performing organizations. Opportunity to perform a vast repertoire abounds in
the number and types of ensemble experiences available. The programs of study provide the training necessary to compete in the professional performance world.

## Bachelor of Music: Instrumental Performance

| Freshman Year-1st Semester | Course Title | Hours | Attribute |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
| Subject | Course | Instrumental Major | 4 |  |  |
| Music | 1503 | Instrumental Ensemble | 1 |  |  |
| Music | Varies | Instrumental Ensemble | 1 |  |  |
| Music | Varies | Secondary Piano for Music Majors | 1 |  |  |
| Music | 1405 | Theory I | 4 |  |  |
| Music Studies | 1711 | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 |  |
| English |  | $\mathbf{1 5}$ | GW |  |  |
| Subtotal |  |  |  |  |  |
|  |  |  |  |  |  |
| Freshman Year - 2nd Semester | Course \# | Course Title |  |  |  |
| Subject | Instrumental Major | 4 |  |  |  |
| Music | 1504 | Instrumental Ensemble | 1 |  |  |
| Music | Varies | Instrumental Ensemble | 1 |  |  |
| Music | Varies | Secondary Piano for Music Majors | 1 |  |  |
| Music | 1406 | Orchestral Repertoire | 1 |  |  |
| Music | 4570 | Theory II | 4 |  |  |
| Music Studies | 1712 | Quantitative Literacy | 4 | GQ |  |
| GenEd | $08 x x$ or 09xx |  | $\mathbf{1 6}$ |  |  |
| Subtotal |  |  |  |  |  |

Sophomore Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Music | 2503 | Instrumental Major | 4 |  |
| Music | Varies | Instrumental Ensemble | 1 |  |
| Music | Varies | Instrumental Ensemble | 1 |  |
| Music | 2405 | Secondary Piano for Music Majors | 1 |  |
| Music Studies | 2711 | Theory III | 4 |  |
| Music Studies | 2703 | Music in History | 3 |  |
| IH | Mosaic: Humanities Seminar I | 3 | GY |  |
| Subtotal |  |  | $\mathbf{1 7}$ |  |

Sophomore Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Music | 2504 | Instrumental Major | 4 |  |
| Music | Varies | Instrumental Ensemble | 1 |  |
| Music | Varies | Instrumental Ensemble | 1 |  |
| Music | 2406 | Secondary Piano for Music Majors | 1 |  |
| Music Studies | 2712 | Theory IV | 4 |  |
| Music Studies | 2704 | Music in History | 3 |  |
| IH | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |


| Music | 3503 | Instrumental Major | 4 |  |
| :---: | :---: | :---: | :---: | :---: |
| Music | Varies | Instrumental Ensemble | 1 |  |
| Music | Varies | Instrumental Ensemble | 1 |  |
| Music | 2323 | Basic Conducting | 1 |  |
| Music Studies | 3696 | Music in History | 3 | WI |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3504 | Instrumental Major | 4 |  |
| Music | Varies | Instrumental Ensemble | 1 |  |
| Music | Varies | Instrumental Ensemble | 1 |  |
| Music | 2324 | Conducting Intermediate | 1 |  |
| Music | 4570 | Orchestral Repertoire | 1 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| Subtotal |  |  | 14 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 4503 | Instrumental Major | 4 |  |
| Music | Varies | Instrumental Ensemble | 1 |  |
| Music | Varies | Instrumental Ensemble | 1 |  |
| Music |  | Music Electives | 3 |  |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 4584 | Instrumental Major | 4 |  |
| Music | Varies | Instrumental Ensemble | 1 |  |
| Music | Varies | Instrumental Ensemble | 1 |  |
| Music | 4570 | Orchestral Repertoire | 1 |  |
| Music Studies | 3796 | Music in History | 3 | WI |
| Elective |  | Electives | 4 |  |
| Subtotal |  |  | 14 |  |
|  |  |  |  |  |
| Degree Total |  |  | 124 |  |

Students must take at least one elective from List A and one from List B.

## Suggested Music Electives - List A

Music Studies 3713: Orchestration (3 s.h.)
Music Studies 4722: Advanced Orchestration (2 s.h.)

Music Studies 3741 or Music Education 3662: Keyboard Harmony (3 s.h.)
Music Studies 4717: Counterpoint (3 s.h.)
Music Studies 3748, 3749: Composition Junior Seminar (2 s.h.)
Music Studies 4718: Analysis (3 s.h.)

## Suggested Music Electives - List B

Music Studies 2114: History of Jazz (3 s.h.)
Music Studies 1118: Business of Music I(2 s.h.)
Music Technology courses
Music 4323 or 4324: Conducting (2 s.h.)
Music Education 2665: Music Learning \& Development (3 s.h.)
Instrumental Pedagogy (2 s.h.)
Choral Ensembles (1 s.h.)*
Music Studies 4710: Early Music Ensemble (1 s.h.)*
Music 4570: Orchestral Repertoire (1 s.h.)*
Music 1211, 1212: Voice Class (1 s.h.)*
*No more than 2 credit hours may be taken as music elective credit.
Bass performance majors must enroll for 8 credit hours of orchestra and 4 additional credit hours of ensembles. It is suggested that Early Music Ensemble be one of these credit hours. The remaining 4 credit hours of ensemble may be taken as free music electives.

Saxophone performance majors may register for up to 4 credit hours of ensembles in reading jazz ensembles (Jazz Band or Jazz Lab Band) with prior approval of the Instrumental Department chair and coordinator of the Jazz program. The 2 semester hours of orchestral repertoire classes are to be replaced by elective(s).

## Instrumental Studies, Classical Guitar Performance

Bachelor of Music: Classical Guitar Performance

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1503 | Instrumental Major | 4 |  |
| Music | 4560 | Seminar in Guitar Performance \& Literature | 1 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music Studies | 1711 | Theory I | 4 |  |
| Music | 1405 | Secondary Piano for Music Majors | 1 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1504 | Instrumental Major | 4 |  |


| Music | 4560 | Seminar in Guitar Performance \& Literature | 1 |  |
| :---: | :---: | :---: | :---: | :---: |
| Music | Varies | Choral Ensemble | 1 |  |
| Music Studies | 1712 | Theory II | 4 |  |
| Music | 1406 | Secondary Piano for Music Majors | 1 |  |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 2503 | Instrumental Major | 4 |  |
| Music | 4560 | Seminar in Guitar Performance \& Literature | 1 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music Studies | 2711 | Theory III | 4 |  |
| Music Studies | 2703 | Music in History | 3 |  |
| Music | 2405 | Secondary Piano for Music Majors | 1 |  |
| IH | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 2504 | Instrumental Major | 4 |  |
| Music | 4560 | Seminar in Guitar Performance \& Literature | 1 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music Studies | 2712 | Theory IV | 4 |  |
| Music Studies | 2704 | Music in History | 3 |  |
| Music | 2406 | Secondary Piano for Music Majors | 1 |  |
| IH | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3503 | Instrumental Major | 4 |  |
| Music | Varies | Instrumental Ensemble | 1 |  |
| Music Studies | 3696 | Music in History | 3 | WI |
| Music | 2323 | Basic Conducting | 1 |  |
| Music | Elective | Music Elective | 2 |  |
| Music | 4560 | Seminar in Guitar Performance \& Literature | 1 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3504 | Instrumental Major | 4 |  |
| Music | Varies | Instrumental Ensemble | 1 |  |
| Music | 2324 | Conducting Intermediate | 1 |  |
| Music | Varies | Music Elective | 2 |  |
| Music | 4560 | Seminar in Guitar Performance \& Literature | 1 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |


| Subtotal |  |  | 15 |  |
| :---: | :---: | :---: | :---: | :---: |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 4503 | Instrumental Major | 4 |  |
| Music | Varies | Instrumental Ensemble | 1 |  |
| Music | Elective | Music Elective | 3 |  |
| Music | 4560 | Seminar in Guitar Performance \& Literature | 1 |  |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 4584 | Instrumental Major | 4 |  |
| Music | Varies | Instrumental Ensemble | 1 |  |
| Music Studies | 3796 | Music in History | 3 | WI |
| Music | Elective | Music Elective | 3 |  |
| Music | 4560 | Seminar in Guitar Performance \& Literature | 1 |  |
| GenEd | 08xx | Global/World Society | 3 | GG |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Degree Total |  |  | 124 |  |

NOTE: You must take at least one elective from List A and one from List B.

## Suggested Music Elective-List A

Music Studies 3713: Orchestration (3 s.h.)
Music Studies 4722: Advanced Orchestration (2 s.h.)
Music Studies 3741 or Music Education 3662: Keyboard Harmony (3 s.h.)
Music Studies 4717: Counterpoint (3 s.h.)
Music Studies 3748, 3749: Composition Junior Seminar (2 s.h.)
Music Studies 4718: Analysis (3 s.h.)

## Suggested Music Electives - List B

Music Studies 2114: History of Jazz (3 s.h.)
Music Studies 1118: Business of Music I (2 s.h.)
Music Technology courses
Music 4323 or 4324: Conducting (2 s.h.)
Music Education 2665: Music Learning \& Development (3 s.h.)
Instrumental Pedagogy (2 s.h.)
Choral Ensemble (1 s.h.)*
Music Studies 4710: Early Music Seminar (1 s.h.)*
Music 4570: Orchestral Repertoire (1 s.h.)*
Music 1211, 1212: Voice Class (1 s.h.)
*No more than two (2) credit hours may be taken as music elective credit.

# Jazz Studies, Instrumental Performance 

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Students of Temple's Jazz Studies program have the opportunity to participate in both large and small ensembles. Jazz Band, Lab Band, Brass Ensemble, Fusion Ensemble, Percussion Ensemble, Guitar Ensemble, Vocal Ensemble, and New Music by Temple Composers provide a comprehensive performance experience in solo as well as ensemble playing for both instrumentalists and vocalists. All of the performing groups are coached by an experienced faculty of musician-educators. Graduates are prepared to begin a career as professional performers.

## Bachelor of Music: Jazz Instrumental Performance

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1503 | Instrumental Major | 4 |  |
| Music | 1405 | Secondary Piano for Music Majors | 1 |  |
| Music | 3100 | Small Jazz Ensemble | 1 |  |
| Music Studies | 1711 | Theory I | 4 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1504 | Instrumental Major | 4 |  |
| Music Studies | 1106 | Jazz Secondary Piano | 1 |  |
| Music | 3100 | Small Jazz Ensemble | 1 |  |
| Music Studies | 1712 | Theory II (Jazz) | 4 |  |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 2503 | Instrumental Major | 4 |  |
| Music Studies | 2105 | Jazz Secondary Piano | 1 |  |
| Music | 3100 | Small Jazz Ensemble | 1 |  |
| Music | Varies | Jazz Ensemble | 1 |  |
| Music Studies | 2711 | Theory III (Jazz) | 4 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| IH | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |


| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Music | 2504 | Instrumental Major | 4 |  |
| Music Studies | 2106 | Jazz Secondary Piano | 1 |  |
| Music | 3100 | Small Jazz Ensemble | 1 |  |
| Music Studies | 2712 | Theory IV (Jazz) | 4 |  |
| Music Studies | 4113 | Jazz Improvisation: Theory \& Practice I | 2 |  |
| IH | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Music | Varies | Ensemble | 1 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3503 | Instrumental Major | 4 |  |
| Music | 3100 | Small Jazz Ensemble | 1 |  |
| Music | Varies | Jazz Ensemble | 1 |  |
| Music Studies | 4112 | Jazz Arranging I | 3 |  |
| Music Studies | 4114 | Jazz Improvisation: Theory \& Practice II | 2 |  |
| Music Studies | 3196 | History of Pop | 3 | WI |
| Music Studies | 1118 | Business of Music I | 2 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3504 | Instrumental Major | 4 |  |
| Music | Varies | Small Ensemble | 1 |  |
| Music | Varies | Ensemble | 1 |  |
| Music Studies | 4111 | Jazz Style \& Analysis | 2 |  |
| Music Studies | 2114 | History of Jazz | 3 |  |
| Music Studies | 2704 | Music in History | 3 |  |
| Subtotal |  |  | 14 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 4503 | Instrumental Major | 4 |  |
| Music | 3100 | Small Jazz Ensemble | 1 |  |
| Music | Varies | Ensemble | 1 |  |
| Music | 2323 | Basic Conducting | 1 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Subtotal |  |  | 13 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 4584 | Instrumental Major | 4 |  |
| Music | 3100 | Small Jazz Ensemble | 1 |  |
| Music Studies |  | *Music Technology Elective | 3 |  |
| Music Studies | 3896 | Theory Seminar II | 3 | WI |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| Subtotal |  |  | 14 |  |


|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Degree Total |  |  |  |  |
|  |  |  | $\mathbf{1 2 4}$ |  |
| *Music Technology Electives | Computer Synthesis of Music (Spring) |  |  |  |
| Music Studies | 4712 | Sound Recording (Fall) | 3 |  |
| Music Studies | 4713 | Sound Editing (Spring) | 3 |  |
| Music Studies | 4714 | Composing Music for Films (Fall) | 3 |  |
| Music Studies | 4716 | MIDI (Fall) | 3 |  |
| Music Studies | 4719 | Music Technology (Spring) | 3 |  |
| Music Studies | 4762 |  | 3 |  |

## Jazz Studies, Jazz Arranging/Composing

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## Bachelor of Music: Jazz Arranging/Composing

| Freshman Year - 1st Semester | Course Title | Hours | Attribute |  |
| :--- | :--- | :--- | :--- | :---: |
| Subject | Course \# | Cecondary Piano for Music Majors | 2 |  |
| Music | 1201 or 1401 or 1501 | Concentration | 1 |  |
| Music | 1405 | Small Jazz Ensemble | 1 |  |
| Music | 3100 | Theory I | 4 |  |
| Music Studies | 1711 | Business of Music I | 2 |  |
| Music Studies | 1118 | Analytical Reading \& Writing | 4 | GW |
| English | 0802,0812 or 0902 | U.S. Society | 3 | GU |
| GenEd | $08 x x$ or 09xx |  | $\mathbf{1 7}$ |  |
| Subtotal |  |  |  |  |

Freshman Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Music | 1202 or 1402 or 1502 | Concentration | 2 |  |
| Music Studies | 1106 | Jazz Secondary Piano | 1 |  |
| Music | 3100 | Small Jazz Ensemble | 1 |  |
| Music Studies | 1712 | Theory II (Jazz) | 4 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

Sophomore Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Music | 2201 or 2401 or 2501 | Concentration | 2 |  |
| Music Studies | 2105 | Jazz Secondary Piano | 1 |  |
| Music | 3100 | Small Jazz Ensemble | 1 |  |
| Music | Varies | Ensemble | 1 |  |
| Music Studies | 2711 | Theory III (Jazz) | 4 |  |


| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| :--- | :--- | :--- | :---: | :---: |
| IH | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

Sophomore Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Music | 2202 or 2402 or 2502 | Concentration | 2 |  |
| Music Studies | 2106 | Jazz Secondary Piano | 1 |  |
| Music | 3100 | Small Jazz Ensemble | 1 |  |
| Music | Varies | Ensemble | 1 |  |
| Music Studies | 2712 | Theory IV (Jazz) | 4 |  |
| Music Studies | 4113 | Jazz Improvisation: Theory \& Practice I | 2 |  |
| Music Studies | 2704 | Music in History | 3 |  |
| IH | Mosaic: Humanities Seminar II | 3 | GZ |  |
| Subtotal |  |  | $\mathbf{1 7}$ |  |

Junior Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Music | 3201 or 3401 or 3501 | Concentration | 2 |  |
| Music Studies | 4112 | Jazz Arranging I | 3 |  |
| Music Studies | 4114 | Jazz Improvisation: Theory \& Practice II | 2 |  |
| Music | 3100 | Small Jazz Ensemble | 1 |  |
| Music Studies | 4110 | Seminar in Jazz Composition \& Arranging | 2 |  |
| Music | 2323 | Basic Conducting | 1 |  |
| GenEd | $08 x x$ or 09xx | Science \& Technology II | 3 | GS |
| Music Studies | 3196 | History of Pop | 3 | WI |
| Subtotal |  |  | $\mathbf{1 7}$ |  |

Junior Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Music | 3202 or 3402 or 3502 | Concentration | 2 |  |
| Music Studies | 4115 | Jazz Arranging II | 3 |  |
| Music | 3100 | Small Jazz Ensemble | 1 |  |
| Music Studies | 4111 | Jazz Style \& Analysis | 2 |  |
| Music Studies | 4110 | Seminar in Jazz Composition \& Arranging | 2 |  |
| Music Studies | 2114 | History of Jazz | 3 |  |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 4201 or 4401 or 4501 | Concentration | 2 |  |
| Music | 3100 | Small Jazz Ensemble | 1 |  |
| Music Studies | 4110 | Seminar in Jazz Composition \& Arranging | 2 |  |
| Music Studies | 4120 | Seminar in Advanced Jazz Composition \& Arranging | 2 |  |
| Music Studies | 3713 | Orchestration | 3 |  |
| Music Studies |  | *Music Technology Elective | 3 |  |
| Subtotal |  |  | 13 |  |


| Senior Year - 2nd Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 4202 or 4502 | Concentration | 2 |  |
| Music | 3100 | Small Jazz Ensemble | 1 |  |
| Music Studies | 4110 | Seminar in Jazz Composition \& Arranging | 2 |  |
| Music Studies | 4120 | Seminar in Advanced Jazz Composition \& Arranging | 2 |  |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Music Studies | 3896 | Theory Seminar II | 3 | WI |
| Subtotal |  |  | 13 |  |
|  |  |  |  |  |
| Degree Total |  |  | 123 |  |
|  |  |  |  |  |
|  |  |  |  |  |
| *Music Techn | ology Electives |  |  |  |
| Music Studies | 4712 | Computer Synthesis of Music (Spring) | 3 |  |
| Music Studies | 4713 | Sound Recording (Fall) | 3 |  |
| Music Studies | 4714 | Sound Editing (Spring) | 3 |  |
| Music Studies | 4716 | Composing Music for Films (Fall) | 3 |  |
| Music Studies | 4719 | MIDI (Fall) | 3 |  |
| Music Studies | 4762 | Music Technology (Spring) | 3 |  |

## Jazz Studies, Jazz Voice Performance

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Bachelor of Music: Jazz Voice Performance

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1203 | Voice Major | 3 |  |
| Music | 1405 | Secondary Piano for Music Majors | 1 |  |
| Music | 3100 | Small Jazz Ensemble | 1 |  |
| Music | 4520 | Ensemble | 1 |  |
| Music Studies | 1711 | Theory I | 4 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Subtotal |  |  | 14 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1204 | Voice Major | 3 |  |
| Music Studies | 1106 | Jazz Secondary Piano | 1 |  |
| Music | 3100 | Small Jazz Ensemble | 1 |  |
| Music Studies | 1712 | Theory II (Jazz) | 4 |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Subtotal |  |  | 16 |  |


| Sophomore Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 2203 | Voice Major | 3 |  |
| Music Studies | 2105 | Jazz Secondary Piano | 1 |  |
| Music | 3100 | Small Jazz Ensemble | 1 |  |
| Music | 4520 | Ensemble | 1 |  |
| Music Studies | 2711 | Theory III | 4 |  |
| Music Studies | 1118 | Business of Music I | 2 |  |
| IH | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 2204 | Voice Major | 3 |  |
| Music Studies | 2106 | Jazz Secondary Piano | 1 |  |
| Music | 3100 | Small Jazz Ensemble | 1 |  |
| Music | 4520 | Ensemble | 1 |  |
| Music Studies | 2712 | Theory IV | 4 |  |
| Music Studies | 4113 | Jazz Improvisation: Theory \& Practice I | 2 |  |
| IH | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3203 | Voice Major | 3 |  |
| Music Studies | 4112 | Jazz Arranging I | 3 |  |
| Music Studies | 4114 | Jazz Improvisation: Theory \& Practice II | 2 |  |
| Music | 3100 | Small Jazz Ensemble | 1 |  |
| Music | 4520 | Ensemble | 1 |  |
| Music | 2323 | Basic Conducting | 1 |  |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Music Studies | 3196 | History of Pop | 3 | WI |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3204 | Voice Major | 3 |  |
| Music | 3100 | Small Jazz Ensemble | 1 |  |
| Music | 4520 | Ensemble | 1 |  |
| Music Studies | 2704 | Music in History | 3 |  |
| Music Studies | 4111 | Jazz Style \& Analysis | 2 |  |
| Music | 2324 | Conducting Intermediate | 1 |  |
| Music Studies | 3896 | Theory Seminar II | 3 | WI |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |


| Music | 4203 | Voice Major | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Music | 3100 | Small Jazz Ensemble | 1 |  |
| Music | 4520 | Ensemble | 1 |  |
| Music Elective |  | Music Electives | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Music Studies | Elective | *Music Technology Elective | 3 |  |
| Subtotal |  |  | 14 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 4284 | Voice Major | 3 |  |
| Music | 3100 | Small Jazz Ensemble | 1 |  |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Music Studies | 2114 | History of Jazz | 3 |  |
| Music |  | Electives | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Degree Total |  |  | 124 |  |
|  |  |  |  |  |
|  |  |  |  |  |
| *Music Technology Electives |  |  |  |  |
| Music Studies | 4712 | Computer Synthesis of Music (Spring) | 3 |  |
| Music Studies | 4713 | Sound Recording (Fall) | 3 |  |
| Music Studies | 4714 | Sound Editing (Spring) | 3 |  |
| Music Studies | 4716 | Composing Music for Films (Fall) | 3 |  |
| Music Studies | 4719 | MIDI (Fall) | 3 |  |
| Music Studies | 4762 | Music Technology | 3 |  |

## Theory

Michael Klein, Chair, Music Studies
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The Music Theory Department prepares its majors to be well-rounded practical musicians able to apply skills and knowledge to performance, composition, analysis, research, and teaching.

## Bachelor of Music: Music Theory

| Freshman Year - 1st Semester | Course Title | Hours | Attribute |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Subject | Course \# | C | 2 |  |
| Music | 1201 or 1401 or 1501 | Concentration | 1 |  |
| Music | 1405 | Secondary Piano for Music Majors | 1 |  |
| Music | 1211 | Voice Class | 1 |  |
| Music | Varies | Choral/Instrumental Ensemble | 4 |  |
| Music Studies | 1711 | Theory I |  |  |


| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| :---: | :---: | :---: | :---: | :---: |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Subtotal |  |  | 17 |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1202 or 1402 or 1502 | Concentration | 2 |  |
| Music | 1406 | Secondary Piano for Music Majors | 1 |  |
| Music | 1212 | Voice Class | 1 |  |
| Music | Varies | Choral/Instrumental Ensemble | 1 |  |
| Music Studies | 1712 | Theory II | 4 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 2201 or 2401 or 2501 | Concentration | 2 |  |
| Music | 2405 | Secondary Piano for Music Majors | 1 |  |
| Music Studies | 2711 | Theory III | 4 |  |
| Music | Varies | Choral/Instrumental Ensemble | 1 |  |
| Music Studies | 2703 | Music in History | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| IH | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 2202 or 2402 or 2502 | Concentration | 2 |  |
| Music | 2406 | Secondary Piano for Music Majors | 1 |  |
| Music | Varies | Choral/Instrumental Ensemble | 1 |  |
| Music Studies | 2712 | Theory IV | 4 |  |
| Music Studies | 2704 | Music in History | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| IH | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3201 or 3401 or 3501 | Concentration | 2 |  |
| Music | Varies | Choral/Instrumental Ensemble | 1 |  |
| Music | 3405 | Secondary Piano for Music Majors | 1 |  |
| Music Studies | 3696 | Music in History | 3 | WI |
| Music Studies | 4717 | Counterpoint | 3 |  |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| German | 1001 | German I | 4 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |


| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Music | 3202 or 3402 or 3502 | Concentration | 2 |  |
| Music | 3406 | Secondary Piano for Music Majors | 1 |  |
| Music Studies | 3896 | Theory Seminar II | 3 | WI |
| Music Studies | 4718 | Analysis | 3 |  |
| German | 1002 | German II | 4 |  |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music Studies | 3749 | Composition Junior Seminar II | 2 |  |
| Music | 2323 | Basic Conducting | 1 |  |
| Music Studies | 3741 | Keyboard Harmony | 3 |  |
| Music Studies | 3713 | Orchestration | 3 |  |
| German | 1003 | German III | 3 |  |
| Subtotal |  |  | 12 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music Studies | 3896 | Theory Seminar II | 3 | WI |
| Music Studies | 4715 | World Music | 3 |  |
| Elective | Elective | Elective | 3 |  |
| German | 2001 | Intermediate German | 3 |  |
| Subtotal |  |  | 12 |  |
|  |  |  |  |  |
| Degree Total |  |  | 123 |  |

## Composition

Michael Klein, Chair, Music Studies
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The Composition Department offers courses in composition for various media, including electronic music. Creativity, the development of personal expression through music, and the assessment of music's role in the 21st-century societal context are the focal points for composition majors.

Bachelor of Music: Composition

| Freshman Year - 1st Semester | Course Title | Hours | Attribute |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course | Composition Lesson I | 3 |  |
| Music Studies | 1758 | Secondary Piano for Music Majors | 1 |  |
| Music | 1405 | Basic Conducting | 1 |  |
| Music | 2323 | Theory I | 4 |  |
| Music Studies | 1711 | Analytical Reading \& Writing | 4 | GW |
| English | 0802,0812 or 0902 |  |  |  |


| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| :---: | :---: | :---: | :---: | :---: |
| Subtotal |  |  | 16 |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music Studies | 1759 | Composition Lesson II | 3 |  |
| Music | 1406 | Secondary Piano for Music Majors | 1 |  |
| Music | 2324 | Conducting Intermediate | 1 |  |
| Music Studies | 1712 | Theory II | 4 |  |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| IH | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music Studies | 2758 | Composition Lesson III | 3 |  |
| Music | 2405 | Secondary Piano for Music Majors | 1 |  |
| Music Studies | 2711 | Theory III | 4 |  |
| Music Studies | 2703 | Music in History | 3 |  |
| IH | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music Studies | 2759 | Composition Lesson IV | 3 |  |
| Music | 2406 | Secondary Piano for Music Majors | 1 |  |
| Music Studies | 2712 | Theory IV | 4 |  |
| Music Studies | 2704 | Music in History | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music Studies | 3758 | Composition Lesson V | 3 |  |
| Music Studies | 3696 | Music in History | 3 | WI |
| Music Studies | 4717 | Counterpoint | 3 |  |
| Music Studies | 4719 | MIDI | 3 |  |
| Music | Varies | Ensemble | 1 |  |
| Music |  | Elective | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music Studies | 3759 | Composition Lesson VI | 3 |  |
| Music Studies | 4712 | Computer Synthesis | 3 |  |
| Music | Varies | Ensemble | 1 |  |
| Music Studies | 4723 | Score Reading | 3 |  |


| Music Studies | 3713 | Orchestration | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Subtotal |  |  | 16 |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music Studies | 4758 | Composition Lesson VII | 3 |  |
| Music Studies | 4724 | Printing Music Scores and Parts | 3 |  |
| Music Studies | 4720 | New Music Seminar | 1 |  |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
|  |  | Elective | 3 |  |
| Subtotal |  |  | 13 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music Studies | 4759 | Composition Lesson VIII | 3 |  |
| Music Studies | 3896 | Theory Seminar | 3 | WI |
| Music Studies | 4710 | Early Music Seminar | 1 |  |
| Music Studies | Elective | Music Composition Elective | 3 |  |
| Elective | Elective | Elective | 3 |  |
| Subtotal |  |  | 13 |  |
|  |  |  |  |  |
| Degree Total |  |  | 124 |  |

## Music History

Michael Klein, Chair, Music Studies
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The Music History Department emphasizes a historic and analytical approach to the study of music and the development of scholarly research skills.

## Bachelor of Music: Music History

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1201 or 1401 or 1501 | Concentration | 2 |  |
| Music | 1405 | Secondary Piano for Music Majors | 1 |  |
| Music | Varies | Choral/Instrumental Ensemble | 1 |  |
| Music Studies | 1711 | Theory I | 4 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1202 or 1402 or 1502 | Concentration | 2 |  |


| Music | 1406 | Secondary Piano for Music Majors | 1 |  |
| :---: | :---: | :---: | :---: | :---: |
| Music | Varies | Choral/Instrumental Ensemble | 1 |  |
| Music Studies | 1712 | Theory II | 4 |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 2201 or 2401 or 2501 | Concentration | 2 |  |
| Music | 2405 | Secondary Piano for Music Majors | 1 |  |
| Music | Varies | Choral/Instrumental Ensemble | 1 |  |
| Music Studies | 2711 | Theory III | 4 |  |
| Music Studies | 2703 | Music in History | 3 |  |
| IH | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 2202 or 2402 or 2502 | Concentration | 2 |  |
| Music | 2406 | Secondary Piano for Music Majors | 1 |  |
| Music | Varies | Choral/Instrumental Ensemble | 1 |  |
| Music Studies | 2712 | Theory IV | 4 |  |
| Music Studies | 2704 | Music in History | 3 |  |
| IH | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3201 or 3401 or 3501 | Concentration | 2 |  |
| Music | Varies | Choral/Instrumental Ensemble | 1 |  |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Music Studies | 4717 | Counterpoint | 3 |  |
| Music Studies | 3696 | Music in History | 3 | WI |
|  |  | Foreign Language I | 4 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3202 or 3402 or 3502 | Concentration | 2 |  |
| Music | Varies | Choral/Instrumental Ensemble | 1 |  |
| Music Studies | 3796 | Music in History | 3 | WI |
|  |  | Foreign Language II | 4 |  |
| Music |  | *Elective | 2 |  |
| Elective |  | **Elective | 3 |  |
| Subtotal |  |  | 15 |  |


|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 4201 or 4401 or 4501 | Concentration | 2 |  |
| Music | Varies | Ensemble | 1 |  |
| Music Studies | Elective | Music History | 3 |  |
| Elective |  | Elective | 3 |  |
| Music | 2323 | Basic Conducting | 1 |  |
|  |  | Foreign Language III | 3 |  |
| Subtotal |  |  | 13 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 4202 or 4402 or 4502 | Concentration | 2 |  |
| Music | Varies | Ensemble | 1 |  |
| Music Studies | Elective | *Elective | 2 |  |
| Music Studies | 4718 | Analysis | 2 |  |
| Elective |  | **Elective | 3 |  |
|  |  | Foreign Language IV | 3 |  |
| Subtotal |  |  | 13 |  |
|  |  |  |  |  |
| Degree Total |  |  | 124 |  |

*Keyboard Harmony (Music Studies 3741) and Orchestration (Music Studies 3713) are recommended.
**Art History strongly recommended.

## Music Education

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The Department of Music Education concentrates on developing music educators at the undergraduate level who will be ready for successful entry into the teaching profession.

Faculty recommendations for student teaching are not automatic. They must be earned by the student through demonstrated potential in the field, a 3.0 GPA, and passing of Praxis exams I and II. Students not recommended for student teaching may be permitted to graduate after successful completion of additional coursework, but will not be recommended for Pennsylvania State Music Teacher Certification.

Upon successful completion of the four-year program of study, the five-year double major program of study, or the five-year program with Jazz Component, and upon achieving passing scores on the Praxis Series Assessments (Professional Assessments for Beginning Teachers), students qualify for Pennsylvania state certification for public school music teachers, K-12.

## Music Education, Voice Concentration

## Bachelor of Music: Music Education

Voice Concentration

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1201 | Voice Concentration | 2 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music | 1405 | Secondary Piano for Music Majors | 1 |  |
| Music Studies | 1711 | Theory I | 4 |  |
| Music Education | Varies | Instrumental Pedagogy | 1 |  |
| Music | 1225 | English Diction | 1 |  |
| Music Education | 4666 | Assessment of Music Learning | 3 |  |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1202 | Voice Concentration | 2 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music | 1406 | Secondary Piano for Music Majors | 1 |  |
| Music Studies | 1712 | Theory II | 4 |  |
| Music Education | Varies | Vocal Pedagogy | 2 |  |
| Music Education | 3661 | Introduction to Teaching Students with Special Needs | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Subtotal |  |  | 17 |  |

Sophomore Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Music | 2201 | Voice Concentration | 2 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music | 2405 | Secondary Piano for Music Majors | 1 |  |
| Music Studies | 2711 | Theory III | 4 |  |
| Music Studies | 2703 | Music in History | 3 |  |
| Music | 2323 | Basic Conducting | 1 |  |
| Music Education | Varies | Instrumental Pedagogy | 2 |  |
| IH | Mosaic: Humanities Seminar I | 3 | GY |  |
| Subtotal |  |  | $\mathbf{1 7}$ |  |

## Sophomore Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Music | 2202 | Voice Concentration | 2 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music Studies | 2704 | Music in History | 3 |  |
| Music Studies | 2712 | Theory IV | 4 |  |
| Music | 2324 | Conducting Intermediate | 1 |  |
| Music Education | 2665 | Music Learning \& Development | 3 |  |
| IH | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |


| Subtotal |  |  | 17 |  |
| :---: | :---: | :---: | :---: | :---: |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3201 | Voice Concentration | 2 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music | 4323 | Conducting (Choral) | 2 |  |
| Music | 2406 | Secondary Piano for Music Majors | 1 |  |
| Music Education | 2696 | Teaching General Music to Inclusive Populations | 3 | WI |
| Music Education | 2674 | Jazz Education - Vocal | 2 |  |
| Music Education | 4669 | Teaching Choral Music to Inclusive Populations | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3202 | Voice Concentration | 2 |  |
| Music Studies | 3696 | Music in History | 3 | WI |
| Music | Varies | Choral Ensemble | 1 |  |
| Music Education | Varies | Vocal Pedagogy | 2 |  |
| Music Education | 3662 | Keyboard Harmony - Music Education | 3 |  |
| Music Education | 4667 | Teaching Instrumental Music to Inclusive Populations | 3 |  |
| Music Education | 1671 | Collaboration \& Creativity in the New Music Classroom | 3 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | Varies | Choral Ensemble | 1 |  |
| Music Education | Varies | Instrumental Pedagogy | 1 |  |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music Education | 4668 | Senior Student Teaching Seminar | 3 |  |
| Music Education | 4689 | Student Teaching-Elementary | 3 |  |
| Music Education | 4789 | Student Teaching-Secondary | 3 |  |
| Subtotal |  |  | 9 |  |
|  |  |  |  |  |
| Degree Total |  |  | 128 |  |

## Music Education, Piano Concentration, Choral/General Emphasis

## Bachelor of Music: Music Education

Piano Concentration, Choral/General Emphasis

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1401 | Piano Concentration | 2 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music Studies | 1711 | Theory I | 4 |  |
| Music Education | Varies | Vocal Pedagogy | 2 |  |
| Music Education | Varies | Instrumental Pedagogy | 1 |  |
| Music Education | 4666 | Assessment of Music Learning | 3 |  |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1402 | Piano Concentration | 2 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music Studies | 1712 | Theory II | 4 |  |
| Music Education | Varies | Vocal Pedagogy | 2 |  |
| Music Education | Varies | Instrumental Pedagogy | 1 |  |
| Music Education | 3661 | Introduction to Teaching Students with Special Needs | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 2401 | Piano Concentration | 2 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music Studies | 2711 | Theory III | 4 |  |
| Music Studies | 2703 | Music in History | 3 |  |
| Music | 2323 | Basic Conducting | 1 |  |
| Music Education | Varies | Instrumental Pedagogy | 2 |  |
| Music | 1428 | Accompanying \& Piano Ensemble | 1 |  |
| IH | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 2402 | Piano Concentration | 2 |  |
| Music | 1429 | Accompanying \& Piano Ensemble | 1 |  |
| Music | 2324 | Conducting Intermediate | 1 |  |
| Music Studies | 2712 | Theory IV | 4 |  |
| Music Studies | 2704 | Music in History | 3 |  |
| Music Education | 2665 | Music Learning \& Development | 3 |  |
| IH | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Subtotal |  |  | 17 |  |


| Junior Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3401 | Piano Concentration | 2 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music | 4323 | Conducting Choral | 2 |  |
| Music Education | 2696 | Teaching General Music to Inclusive Populations | 3 | WI |
| Music Education | 4669 | Teaching Choral Music to Inclusive Populations | 3 |  |
| Music Education | 2674 | Jazz Education: Vocal | 2 |  |
| Music Education | Varies | Instrumental Pedagogy | 1 |  |
| Music Education | 3662 | Keyboard Harmony - Music Education | 3 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3402 | Piano Concentration | 2 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music Studies | 3696 | Music in History | 3 | WI |
| Music Education | Varies | Instrumental Pedagogy | 1 |  |
| Music Education | 4667 | Teaching Instrumental Music to Inclusive Populations | 3 |  |
| Music Education | 1671 | Collaboration \& Creativity in the New Music Community | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | Varies | Choral Ensemble | 1 |  |
| Music | 1225 | English Diction | 1 |  |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music Education | 4668 | Senior Student Teaching Seminar | 3 |  |
| Music Education | 4689 | Student Teaching-Elementary | 3 |  |
| Music Education | 4789 | Student Teaching-Secondary | 3 |  |
| Subtotal |  |  | 9 |  |
|  |  |  |  |  |
| Degree Total |  |  | 127 |  |

\% Eight semester hours of ensembles are required: Choral Ensembles - 6 semester hours; Piano/Accompanying Ensembles - 2 semester hours.

## Music Education, Piano Concentration, Band/Orchestra Emphasis

## Bachelor of Music: Music Education

Piano Concentration, Band/Orchestra Emphasis

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1401 | Piano Concentration | 2 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music Studies | 1711 | Theory I | 4 |  |
| Music Education | Varies | Vocal Pedagogy | 2 |  |
| Music Education | Varies | Instrumental Pedagogy | 1 |  |
| Music Education | 4666 | Assessment of Music Learning | 3 |  |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1402 | Piano Concentration | 2 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music Studies | 1712 | Theory II | 4 |  |
| Music Education | Varies | Vocal Pedagogy | 2 |  |
| Music Education | Varies | Instrumental Pedagogy | 1 |  |
| Music Education | 3661 | Introduction to Teaching Students with Special Needs | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 2401 | Piano Concentration | 2 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music Studies | 2711 | Theory III | 4 |  |
| Music Studies | 2703 | Music in History | 3 |  |
| Music | 2323 | Basic Conducting | 1 |  |
| Music Education | Varies | Instrumental Pedagogy | 2 |  |
| Music | 1428 | Accompanying \& Piano Ensemble | 1 |  |
| IH | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 2402 | Piano Concentration | 2 |  |
| Music | 1429 | Accompanying \& Piano Ensemble | 1 |  |
| Music | 2324 | Conducting Intermediate | 1 |  |
| Music Studies | 2712 | Theory IV | 4 |  |
| Music Studies | 2704 | Music in History | 3 |  |
| Music Education | 2665 | Music Learning \& Development | 3 |  |
| IH | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Subtotal |  |  | 17 |  |


| Junior Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3401 | Piano Concentration | 2 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music | 4323 | Conducting Choral | 2 |  |
| Music Education | 2696 | Teaching General Music to Inclusive Populations | 3 | WI |
| Music Education | 4669 | Teaching Choral Music to Inclusive Populations | 3 |  |
| Music Education | 3662 | Keyboard Harmony - Music Education | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3402 | Piano Concentration | 2 |  |
| Music | Varies | Instrumental Ensemble | 1 |  |
| Music Studies | 3696 | Music in History | 3 | WI |
| Music Education | Varies | Instrumental Pedagogy | 2 |  |
| Music Education | 4667 | Teaching Instrumental Music to Inclusive Populations | 3 |  |
| Music Education | 1671 | Collaboration \& Creativity in the New Music Community | 3 |  |
| Music Education | 2674 | Jazz Education: Instrumental | 2 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | Varies | Instrumental Ensemble | 1 |  |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music Education | 4668 | Senior Student Teaching Seminar | 3 |  |
| Music Education | 4689 | Student Teaching-Elementary | 3 |  |
| Music Education | 4789 | Student Teaching-Secondary | 3 |  |
| Subtotal |  |  | 9 |  |
|  |  |  |  |  |
| Degree Total |  |  | 126 |  |

\% Eight semester hours of ensembles are required: Choral Ensembles - 4 semester hours; Instrumental Ensembles - 2 semester hours; Piano/Accompanying Ensembles - 2 semester hours.

## Music Education, Instrumental Concentration

## Bachelor of Music: Music Education

## Instrumental Concentration

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1501 | Instrumental Concentration | 2 |  |
| Music | Varies | +Instrumental Ensemble | 1 |  |
| Music Studies | 1711 | Theory I | 4 |  |
| Music | 1405 | Secondary Piano for Music Majors | 1 |  |
| Music Education | Varies | Instrumental Pedagogy | 2 |  |
| Music Education | 4666 | Assessment of Music Learning | 3 |  |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1502 | Instrumental Concentration | 2 |  |
| Music | Varies | + Instrumental Ensemble | 1 |  |
| Music | 1406 | Secondary Piano for Music Majors | 1 |  |
| Music Studies | 1712 | Theory II | 4 |  |
| Music Education | Varies | Instrumental Pedagogy | 2 |  |
| Music Education | 3661 | Introduction to Teaching Students with Special Needs | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Subtotal |  |  | 17 |  |

Sophomore Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Music | 2501 | Instrumental Concentration | 2 |  |
| Music | Varies | + Instrumental Ensemble | 1 |  |
| Music | 2405 | Secondary Piano for Music Majors | 1 |  |
| Music Studies | 2711 | Theory III | 4 |  |
| Music | 2323 | Basic Conducting | 1 |  |
| Music Education | Varies | Instrumental Pedagogy | 2 |  |
| Music Studies | 2703 | Music in History | 3 |  |
| IH | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Subtotal |  |  | $\mathbf{1 7}$ |  |

Sophomore Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Music | 2502 | Instrumental Concentration | 2 |  |
| Music | Varies | + Instrumental Ensemble | 1 |  |
| Music Studies | 2712 | Theory IV | 4 |  |
| Music Studies | 2704 | Music in History | 3 |  |
| Music | 2324 | Conducting Intermediate | 1 |  |
| Music Education | 2665 | Music Learning \& Development | 3 |  |
| IH | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Subtotal |  |  | $\mathbf{1 7}$ |  |


| Junior Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3501 | Instrumental Concentration | 2 |  |
| Music | Varies | +Instrumental Ensemble | 1 |  |
| Music Education | Varies | Vocal Pedagogy | 2 |  |
| Music | 2406 | Secondary Piano for Music Majors | 1 |  |
| Music | 4324 | Conducting (Instrumental) | 2 |  |
| Music Education | 2696 | Teaching General Music to Inclusive Populations | 3 | WI |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3502 | Instrumental Concentration | 2 |  |
| Music | Varies | +Instrumental Ensemble | 1 |  |
| Music Studies | 3696 | Music in History | 3 | WI |
| Music Education | 3662 | Keyboard Harmony - Music Education | 3 |  |
| Music Education | 2673 | Jazz Education - Instrumental | 2 |  |
| Music Education | 4667 | Teaching Instrumental Music to Inclusive Populations | 3 |  |
| Music Education | 1671 | Collaboration \& Creativity in the New Music Community | 3 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | Varies | +Instrumental Ensemble | 1 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music Education | 4669 | Teaching Choral Music to Inclusive Populations | 3 |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music Education | 4668 | Senior Student Teaching Seminar | 3 |  |
| Music Education | 4689 | Student Teaching-Elementary | 3 |  |
| Music Education | 4789 | Student Teaching-Secondary | 3 |  |
| Subtotal |  |  | 9 |  |
|  |  |  |  |  |
| Degree Total |  |  | 128 |  |

+ One semester of Marching Band is required for students whose principal instruments are woodwinds, brass, and percussion. Normally this requirement is fulfilled in the fall semester of freshman year. Although the requirement is only one semester, students may register for Marching Band as often as he or she would like.


## Music Education, Piano/Jazz Studies, Band/Orchestra Emphasis

## Bachelor of Music (5 Year): Music Education

Piano Concentration with Jazz Studies Component, Band/Orchestra Emphasis

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1401 | Piano Concentration | 2 |  |
| Music | Varies | \%Instrumental Ensemble | 1 |  |
| Music Studies | 1711 | Theory I (Traditional) | 4 |  |
| Music Education | 4666 | Assessment of Music Learning | 3 |  |
| Music Education | Varies | Vocal Pedagogy | 2 |  |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1402 | Piano Concentration | 2 |  |
| Music | Varies | \%Instrumental Ensemble | 1 |  |
| Music Studies | 1712 | Theory II (Jazz) | 4 |  |
| Music Education | Varies | Instrumental Pedagogy | 2 |  |
| Music Education | 3661 | Introduction to Teaching Students with Special Needs | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 2401 | Piano Concentration | 2 |  |
| Music Studies | 1134 | Harmony II (Jazz) | 4 |  |
| Music Studies | 2703 | Music in History | 3 |  |
| IH | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Music | Varies | \%Instrumental Ensemble | 1 |  |
| Music | 1428 | Accompanying \& Piano Ensemble | 1 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 2402 | Piano Concentration | 2 |  |
| Music | 1429 | Accompanying and Piano Ensemble | 1 |  |
| Music Studies | 2704 | Music In History | 3 |  |
| Music Studies | 2712 | Theory IV (Jazz) | 4 |  |
| Music | Varies | \%Instrumental Ensemble | 1 |  |
| Music Education | 2665 | Music Learning \& Development | 3 |  |
| IH | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |


| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Music | 3401 | Piano Concentration | 2 |  |
| Music Studies | 2711 | Theory III (Traditional) | 4 |  |
| Music | 2323 | Basic Conducting | 1 |  |
| Music Studies | 4717 | Counterpoint | 3 |  |
| Music | Varies | \% Jazz Ensemble | 1 |  |
| Music Education | Varies | Instrumental Pedagogy | 2 |  |
| Music Education | 2696 | Teaching General Music to Inclusive Populations | 3 | WI |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3402 | Piano Concentration | 2 |  |
| Music | Varies | \% Jazz Ensemble | 1 |  |
| Music Studies | 4113 | Jazz Improvisation: Theory \& Practice I | 2 |  |
| Music Studies | 3696 | Music in History | 3 | WI |
| Music Education | Varies | Instrumental Pedagogy | 2 |  |
| Music | 2324 | Conducting Intermediate | 1 |  |
| Music Education | 4669 | Teaching Choral Music to Inclusive Populations | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Fourth Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 4401 | Piano Concentration | 2 |  |
| Music Education | 3662 | Keyboard Harmony | 3 |  |
| Music | Varies | \% Jazz Ensemble | 1 |  |
| Music Studies | Varies | Jazz Elective | 3 |  |
| Music Studies | 4112 | Jazz Arranging I | 3 |  |
| Music | 4323 | Conducting (Choral) | 2 |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Fourth Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 4402 | Piano Concentration | 2 |  |
| Music | Varies | \%Jazz Ensemble | 1 |  |
| Music Education | 4667 | Teaching Instrumental Music to Inclusive Populations | 3 |  |
| Music Studies | 2114 | History of Jazz | 3 |  |
| Music Education | 1671 | Collaboration \& Creativity in the New Music Community | 3 |  |
| Music Education | 2673 | Jazz Education - Instrumental | 2 |  |
| Music Studies | Varies | Technology Elective | 3 |  |
|  |  | Senior Project | 0 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Fifth Year Senior - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music Studies | 3713 | Orchestration | 3 |  |
| Music Studies | 3196 | History of Pop | 3 | WI |


| Music | Varies | \%Choral Ensemble | 1 |  |
| :---: | :---: | :---: | :---: | :---: |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Fifth Year Senior - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music Education | 4668 | Senior Student Teaching Seminar | 3 |  |
| Music Education | 4689 | Student Teaching - Elementary | 3 |  |
| Music Education | 4789 | Student Teaching - Secondary | 3 |  |
| Subtotal |  |  | 9 |  |
|  |  |  |  |  |
| Degree Total |  |  | 158 |  |

\% Nine semesters of ensembles are required: Choral Ensembles - 1 semester hours; Instrumental Ensembles OR Piano/Accompanying Ensemble- 4 semester hours, including 1 semester hour of Marching Band; Jazz Ensembles - 4 semester hours.

## Music Education, Piano/Jazz Studies, Choral/General Emphasis

## Bachelor of Music (5 Year): Music Education

## Piano Concentration with Jazz Studies Component, Choral/General Emphasis

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1401 | Piano Concentration | 2 |  |
| Music | Varies | \%Choral Ensemble | 1 |  |
| Music Studies | 1711 | Theory I (Traditional) | 4 |  |
| Music Education | 4666 | Assessment of Music Learning | 3 |  |
| Music Education | Varies | Vocal Pedagogy | 2 |  |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1402 | Piano Concentration | 2 |  |
| Music | Varies | \%Choral Ensemble | 1 |  |
| Music Studies | 1712 | Theory II (Jazz) | 4 |  |
| Music Education | Varies | Instrumental Pedagogy | 2 |  |
| Music Education | 3661 | Introduction to Teaching Students with Special Needs | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 2401 | Piano Concentration | 2 |  |


| Music Studies | 1134 | Harmony II (Jazz) | 4 |  |
| :---: | :---: | :---: | :---: | :---: |
| Music Studies | 2703 | Music in History | 3 |  |
| IH | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Music | Varies | \%Choral Ensemble | 1 |  |
| Music | 1428 | Accompanying \& Piano Ensemble | 1 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 2402 | Piano Concentration | 2 |  |
| Music | 1429 | Accompanying and Piano Ensemble | 1 |  |
| Music Studies | 2704 | Music In History | 3 |  |
| Music Studies | 2712 | Theory IV (Jazz) | 4 |  |
| Music | Varies | \%Piano/Accompanying Ensemble | 1 |  |
| Music Education | 2665 | Music Learning \& Development | 3 |  |
| IH | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3401 | Piano Concentration | 2 |  |
| Music Studies | 2711 | Theory III (Traditional) | 4 |  |
| Music | 2323 | Basic Conducting | 1 |  |
| Music Studies | 4717 | Counterpoint | 3 |  |
| Music | Varies | \% Jazz Ensemble | 1 |  |
| Music Education | Varies | Instrumental Pedagogy | 2 |  |
| Music Education | 2696 | Teaching General Music to Inclusive Populations | 3 | WI |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3402 | Piano Concentration | 2 |  |
| Music | Varies | \% Jazz Ensemble | 1 |  |
| Music Studies | 4113 | Jazz Improvisation: Theory \& Practice I | 2 |  |
| Music Studies | 3696 | Music in History | 3 | WI |
| Music Education | Varies | Instrumental Pedagogy | 2 |  |
| Music | 2324 | Conducting Intermediate | 1 |  |
| Music Education | 4669 | Teaching Choral Music to Inclusive Populations | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Fourth Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 4401 | Piano Concentration | 2 |  |
| Music Education | 3662 | Keyboard Harmony - Music Education | 3 |  |
| Music | Varies | \% Jazz Ensemble | 1 |  |
| Music Studies | 3196 | History of Pop | 3 | WI |
| Music Studies | Varies | Jazz Elective | 3 |  |


| Music Studies | 4112 | Jazz Arranging I | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Music | 4323 | Conducting (Choral) | 2 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Fourth Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 4402 | Piano Concentration | 2 |  |
| Music | Varies | \%Jazz Ensemble | 1 |  |
| Music Education | 4667 | Teaching Instrumental Music to Inclusive Populations | 3 |  |
| Music Studies | 2114 | History of Jazz | 3 |  |
| Music Education | 1671 | Collaboration \& Creativity in the New Music Community | 3 |  |
| Music Education | 2674 | Jazz Education - Vocal | 2 |  |
| Music Studies | Varies | Technology Elective | 3 |  |
|  |  | Senior Project | 0 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Fifth Year Senior - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music Studies | 3713 | Orchestration | 3 |  |
| Music | Varies | \%Choral Ensemble | 1 |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Fifth Year Senior - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music Education | 4668 | Senior Student Teaching Seminar | 3 |  |
| Music Education | 4689 | Student Teaching - Elementary | 3 |  |
| Music Education | 4789 | Student Teaching - Secondary | 3 |  |
| Subtotal |  |  | 9 |  |
|  |  |  |  |  |
| Degree Total |  |  | 158 |  |

\% Nine semesters of ensembles are required: Choral Ensembles - 4 semester hours; Jazz Ensembles - 4 semester hours; Piano/Accompanying Ensemble - 1 semester hour.

## Music Education, Instrumental Concentration with Jazz Studies

## Bachelor of Music (5 Year): Major in Music Education

Instrumental Concentration with Jazz Studies Component

| Freshman Year - 1st Semester | Hours | Attribute |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Subject | Course \# | Course Title | 2 |  |
| Music | 1501 | Instrumental Concentration | 1 |  |
| Music | Varies | + Instrumental Ensemble |  |  |


| Music | 1405 | Secondary Piano for Music Majors | 1 |  |
| :--- | :--- | :--- | :---: | :---: |
| Music Studies | 1711 | Theory I (Traditional) | 4 |  |
| Music Education 4666 | Assessment of Music Learning | 3 |  |  |
| Music Education | Varies | Vocal Pedagogy | 2 |  |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Subtotal |  |  | $\mathbf{1 7}$ |  |

Freshman Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Music | 1502 | Instrumental Concentration | 2 |  |
| Music | Varies | + Instrumental Ensemble | 1 |  |
| Music Studies | 1106 | Jazz Secondary Piano | 1 |  |
| Music Studies | 1712 | Theory II (Jazz) | 4 |  |
| Music Education | 3661 | Introduction to Teaching Students with Special Needs | 3 |  |
| Music Education | Varies | Instrumental Pedagogy | 2 |  |
| English | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Subtotal |  |  | $\mathbf{1 7}$ |  |

Sophomore Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :---: |
| Music | 2501 | Instrumental Concentration | 2 |  |
| Music Studies | 2105 | Jazz Secondary Piano | 1 |  |
| Music | Varies | + Instrumental Ensemble | 1 |  |
| Music Studies | 1134 | Harmony II: Jazz | 4 |  |
| Music Studies | 2703 | Music in History | 3 |  |
| GenEd | $08 x x$ or 09xx | Science \& Technology I | 3 | GS |
| IH | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Subtotal |  |  | $\mathbf{1 7}$ |  |

Sophomore Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Music | 2502 | Instrumental Concentration | 2 |  |
| Music Studies | 2106 | Jazz Secondary Piano | 1 |  |
| Music Studies | 2704 | Music in History | 3 |  |
| Music Studies | 2712 | Theory IV (Jazz) | 4 |  |
| Music | Varies | +Instrumental Ensemble | 1 |  |
| IH | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Music Education | 2665 | Music Learning \& Development | 3 |  |
| Subtotal |  |  | $\mathbf{1 7}$ |  |
|  |  |  |  |  |
| Junior Year - 1st Semester | Course \# | Course Title |  |  |
| Subject | Instrumental Concentration | Hours | Attribute |  |
| Music | 3501 | Theory III (Traditional) | 2 |  |
| Music Studies | 2711 | + Jazz Ensemble | 4 |  |
| Music | Varies | Basic Conducting | 1 |  |
| Music | 2323 | Instrumental Pedagogy | 1 |  |
| Music Education | Varies | Teaching General Music to Inclusive Populations | 2 | WI |
| Music Education | 2696 | Counterpoint | 3 |  |
| Music Studies | 4717 |  |  |  |


| Subtotal |  |  | 16 |  |
| :---: | :---: | :---: | :---: | :---: |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3502 | Instrumental Concentration | 2 |  |
| Music Studies | 3696 | Music in History | 3 | WI |
| Music | Varies | +Jazz Ensemble | 1 |  |
| Music | 2324 | Conducting - Intermediate | 1 |  |
| Music Education | Varies | Instrumental Pedagogy | 2 |  |
| Music Education | 4669 | Teaching Choral Music to Inclusive Populations | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| Music Studies | 4113 | Jazz Improvisation: Theory \& Practice I | 2 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Fourth Year Senior - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 4501 | Instrumental Concentration | 2 |  |
| Music Studies | 4112 | Jazz Arranging I | 3 |  |
| Music | Varies | +Jazz Ensemble | 1 |  |
| Music Studies | 3196 | History of Pop | 3 | WI |
| Music Studies | Varies | Jazz Elective | 3 |  |
| Music Education | 1671 | Collaboration \& Creativity in the New Music Community | 3 |  |
| Music | 4324 | Conducting - Instrumental | 2 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Fourth Year Senior - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 4502 | Instrumental Concentration | 2 |  |
| Music | Varies | +Jazz Ensemble | 1 |  |
| Music Education | 3662 | Keyboard Harmony - Music Education | 3 |  |
| Music Education | 4667 | Teaching Instrumental Music to Inclusive Populations | 3 |  |
| Music Studies | 2114 | History of Jazz | 3 |  |
| Music Studies | Varies | Technology Elective | 3 |  |
| Music Education | 2673 | Jazz Education - Instrumental | 2 |  |
|  |  | Senior Project | 0 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Fifth Year Senior - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music Studies | 3713 | Orchestration | 3 |  |
| Music | Varies | +Choral Ensemble | 1 |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Fifth Year Senior - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours Attribute |  |


| Music Education 4668 | Senior Student Teaching Seminar | 3 |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Music Education 4689 | Student Teaching - Elementary | 3 |  |  |
| Music Education 4789 | Student Teaching - Secondary | 3 |  |  |
| Subtotal |  |  | $\mathbf{9}$ |  |
|  |  |  |  |  |
| Degree Total |  |  | $\mathbf{1 6 0}$ |  |

+ One semester of Marching Band is required. Normally this requirement is fulfilled in the fall term of the freshman year. Although the requirement is only one semester, students may register for Marching Band as often as he or she would like. A total of 8 credit hours of instrumental ensembles are required: Traditional Ensembles - 4 semester hours, including Marching Band - 1 semester hour; Jazz Ensembles - 4 semester hours; 1 credit hour of choral ensemble is required.


## Music Education, Voice Concentration with Jazz Studies

## Bachelor of Music (5 Year): Major in Music Education

Voice Concentration with Jazz Studies Component

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1201 | Voice Concentration | 2 |  |
| Music | 1405 | Secondary Piano for Music Majors | 1 |  |
| Music Studies | 1711 | Theory I | 4 |  |
| Music | Varies | \%Choral Ensemble | 1 |  |
| Music Education | 4666 | Assessment of Music Learning | 3 |  |
| Music Education | Varies | Vocal Pedagogy | 2 |  |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1202 | Voice Concentration | 2 |  |
| Music Studies | 1106 | Jazz Secondary Piano | 1 |  |
| Music Studies | 1712 | Theory II (Jazz) | 4 |  |
| Music | Varies | \%Choral Ensemble | 1 |  |
| Music Education | 3661 | Introduction to Teaching Students with Special Needs | 3 |  |
| Music Education | Varies | Instrumental Pedagogy | 2 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 2201 | Voice Concentration | 2 |  |
| Music Studies | 2105 | Jazz Secondary Piano | 1 |  |
| Music | Varies | \%Choral Ensemble | 1 |  |
| Music Studies | 1134 | Harmony II (Jazz) | 4 |  |
| Music Studies | 2703 | Music in History | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |


| IH | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| :---: | :---: | :---: | :---: | :---: |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 2202 | Voice Concentration | 2 |  |
| Music Studies | 2106 | Jazz Secondary Piano | 1 |  |
| Music Studies | 2712 | Theory IV (Jazz) | 4 |  |
| Music | Varies | \%Choral Ensemble | 1 |  |
| Music Studies | 2704 | Music in History | 3 |  |
| Music Education | 2665 | Music Learning \& Development | 3 |  |
| IH | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3201 | Voice Concentration | 2 |  |
| Music | 2323 | Basic Conducting | 1 |  |
| Music Studies | 2711 | Theory III (Traditional) | 4 |  |
| Music Education | Varies | Vocal Pedagogy | 2 |  |
| Music | Varies | \%Jazz Ensemble | 1 |  |
| Music Education | Varies | Instrumental Pedagogy | 1 |  |
| Music Education | 2696 | Teaching General Music to Inclusive Populations | 3 | WI |
| Music Studies | 4717 | Counterpoint | 3 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 3202 | Voice Concentration | 2 |  |
| Music Studies | 3696 | Music in History | 3 | WI |
| Music | 2324 | Conducting - Intermediate | 1 |  |
| Music Studies | 4113 | Jazz Improvisation: Theory \& Practice I | 2 |  |
| Music | 1225 | English Diction | 1 |  |
| Music | Varies | \%Jazz Ensemble | 1 |  |
| Music Education | Varies | Instrumental Pedagogy | 1 |  |
| Music Education | 4669 | Teaching Choral Music to Inclusive Populations | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Fourth Year Senior - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 4201 | Voice Concentration | 2 |  |
| Music | Varies | \%Jazz Ensemble | 1 |  |
| Music Studies | 4112 | Jazz Arranging I | 3 |  |
| Music | 2674 | Jazz Education - Vocal | 2 |  |
| Music Education | 4667 | Teaching Instrumental Music to Inclusive Populations | 3 |  |
| Music Studies | Varies | Jazz Elective | 3 |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Subtotal |  |  | 17 |  |


| Fourth Year Senior - 2nd Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 4202 | Voice Concentration | 2 |  |
| Music | Varies | \%Jazz Ensemble | 1 |  |
| Music Studies | 3741 | Keyboard Harmony | 3 |  |
| Music Education | 1671 | Collaboration \& Creativity in the New Music Community | 3 |  |
| Music Studies | Varies | Technology Elective | 3 |  |
| Music Studies | 2114 | History of Jazz | 3 |  |
| Music Education | 4323 | Conducting - Choral Advanced | 2 |  |
|  |  | Senior Project | 0 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Fifth Year Senior - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | Varies | \%Choral Ensemble | 1 |  |
| Music Studies | 3713 | Orchestration | 3 |  |
| Music Education | 3196 | History of Pop | 3 | WI |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Fifth Year Senior - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music Education | 4668 | Senior Student Teaching Seminar | 3 |  |
| Music Education | 4689 | Student Teaching - Elementary | 3 |  |
| Music Education | 4789 | Student Teaching - Secondary | 3 |  |
| Subtotal |  |  | 9 |  |
|  |  |  |  |  |
| Degree Total |  |  | 161 |  |

\% Nine semesters of vocal ensembles are required: Traditional Ensembles - 5 semester hours; Jazz Ensembles - 4 semester hours.

## Music Therapy

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Fully approved by the American Music Therapy Association, this bachelor's degree program is designed to prepare students for entry-level clinical positions in music therapy. Upon successful completion of the degree, graduates are eligible to take the national examination of the Certification Board for Music Therapists and thereby qualify for professional certification in the field.

The Music Therapy degree program is a four and a half year degree program, including postacademic clinical training. The Music Therapy clinical training continues one semester past the Second Semester of the Senior Year.

## Bachelor of Music: Music Therapy

Freshman Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Music | 1201 or 1401 or 1501 | Concentration | 2 |  |
| Music | 1405 | Secondary Piano for Music Majors | 1 |  |
| Music | 1211 | *Voice Class | 1 |  |
| Music Education | 4611 | Music Therapy Overview | 3 |  |
| Music Education | 1658 | *Guitar I | 1 |  |
| Music | Varies | Ensemble | 1 |  |
| Music Studies | 1711 | Theory I | 4 |  |
| English | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Subtotal |  |  | $\mathbf{1 7}$ |  |

Freshman Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Music | 1202 or 1402 or 1502 | Concentration | 2 |  |
| Music Studies | 1106 | Jazz Secondary Piano | 1 |  |
| Music | 1212 | *Voice Class | 1 |  |
| Music Education | 1659 | *Guitar II | 1 |  |
| Music | Varies | Ensemble | 1 |  |
| Music Studies | 1712 | Theory II | 4 |  |
| GenEd | $08 x x$ or 09xx | Quantitative Literacy | 4 | GQ |
| Psychology | 1061 | Psychology as a Social Science | 3 |  |
| Subtotal |  |  | $\mathbf{1 7}$ |  |
|  |  |  |  |  |

Sophomore Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Music | 2201 or 2401 or 2501 | Concentration | 2 |  |
| Music Studies | 2105 | *Jazz Secondary Piano | 1 |  |
| Music Education | 3635 | *Functional Guitar I | 1 |  |
| Music | 2323 | Basic Conducting | 1 |  |
| Music | Varies | Ensemble | 1 |  |
| Music Studies | 2711 | Theory III | 4 |  |


| Music Education | 4641 | Music Therapy Experiences I: Creative Methods | 1 |  |
| :---: | :---: | :---: | :---: | :---: |
| Music Education | 4616 | Developmental Music Therapy | 3 |  |
| IH | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 2202 or 2402 or 2502 | Concentration | 2 |  |
| Music Studies | 2106 | *Jazz Secondary Piano | 1 |  |
| Music Education | 3636 | *Functional Guitar II | 1 |  |
| Music | 2324 | Conducting Intermediate | 1 |  |
| Music | Varies | Ensemble | 1 |  |
| Music Studies | 2712 | Theory IV | 4 |  |
| IH | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Psychology | 2301 | Foundations of Developmental Psychology | 3 |  |
| Music Education | 4642 | Music Therapy Experiences II: Recreative Methods | 1 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music Education | 3633 | *Functional Piano I | 1 |  |
| Music Education | 3631 | *Functional Voice I | 1 |  |
| Music Studies | 2703 | Music in History | 3 |  |
| Music Education | 4614 | Psychiatric Music Therapy | 3 |  |
| Music Education | 4643 | Music Therapy Experiences III: Receptive Methods | 1 |  |
| Music Education | 3689 | *Fieldwork in Music Therapy | 2 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music Education | 3634 | *Functional Piano II | 1 |  |
| Music Education | 3632 | *Functional Voice II | 1 |  |
| Music Education | 3789 | *Fieldwork in Music Therapy II | 2 |  |
| Psychology | 2201 | Foundations of Psychopathology | 3 |  |
| Music Studies | 3696 | Music in History | 3 | WI |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music Education | 4696 | Music Therapy Research | 3 | WI |
| Music Studies | 3196 | History of Pop | 3 | WI |
| Music Education | 3889 | *Fieldwork in Music Therapy III | 2 |  |
| GenEd | 08xx or 09xx | World Society | 3 | GG |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Music Education | 4619 | Medical/Rehabilitative Music Therapy | 3 |  |


| Subtotal |  |  | $\mathbf{1 7}$ |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music Education | 4613 | Music Therapy Foundations | 3 |  |
| Music Studies | 3105 | Jazz Class Piano | 1 |  |
| Music Education | 4618 | Music Therapy Ethics | 2 |  |
| Music Education | 4685 | Music Therapy Clinical Internship | 6 |  |
| Subtotal |  |  | $\mathbf{1 2}$ |  |
|  |  |  |  |  |
| Degree Total |  |  | $\mathbf{1 3 0 - 1 3 1}$ |  |

## *NOTES

## Voice Concentrations

- In lieu of Music 1211-1212: Voice (2 s.h.), classical singers can take Music Studies 2112: Pop Songwriting (2 s.h.) or Music Studies 2114: History of Jazz (3 s.h.); jazz singers can take Music Studies 2112: Pop Songwriting (2 s.h.) or Music Studies 4112: Jazz Arranging I (3 s.h.).
- Classical and jazz singers must take Music Education 3631-3632: Functional Voice, unless waived by examination.


## Piano Concentrations

- In lieu of Music 1405: Secondary Piano (1 s.h.), classical pianists can take Music Studies 2112: Pop Songwriting (2 s.h.) or Music Studies 2114: History of Jazz (3 s.h.); jazz pianists can take Music Studies 2112: Pop Songwriting (2 s.h.) or Music Studies 4112: Jazz Arranging I (3 s.h.).
- In lieu of Music 1405: Secondary Piano and Music Studies 1106: Jazz Secondary Piano, classical pianists must take two credits of jazz piano; jazz pianists must take two credits of jazz electives.
- Both classical and jazz pianists must take Functional Piano (Music Education 36333634) unless waived upon examination by instructor.


## Guitar Concentrations

- In lieu of Music Education 1658-1659: Guitar (2 s.h.), classical guitarists can take Music Studies 2112: Pop Songwriting (2 s.h.) or Music Studies 2114: History of Jazz (3 s.h.); jazz guitarists can take Music Studies 2112: Pop Songwriting (2 s.h.) or Music Studies 4112: Jazz Arranging I (3 s.h.).
- Both classical and jazz guitarists must take Music Education 3635-3636: Functional Guitar, unless waived upon examination by the instructor.


## Clinical Training

A total of 1200 hours of supervised clinical training is required prior to graduation.

## Music Therapy Grades

Grades below B- in any music therapy course may not be applied toward degree requirements in music therapy. Students may retake such courses only once, and only with faculty approval. If a grade below B- is earned upon retaking the course, the student will not be permitted to continue as a music therapy major but may be eligible to change to a different curriculum.

## Music Therapy, Jazz Concentration

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## Bachelor of Music: Music Therapy Jazz Concentration

| Freshman Year - 1st Semester |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 1201 or 1401 or 1501 | Jazz Concentration | 2 |  |
| Music | 1405 | Secondary Piano for Music Majors | 1 |  |
| Music | 1211 | Voice Class | 1 |  |
| Music Education | 4611 | Music Therapy Overview | 3 |  |
| Music Education | 1658 | Guitar I | 1 |  |
| Music | varies | Ensemble | 1 |  |
| Music Studies | 1711 | Theory I | 4 |  |
| English | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Subtotal |  |  | $\mathbf{1 7}$ |  |
|  | Course \# | Course Title |  |  |
| Freshman Year -2 nd Semester | Vazz Concentration |  |  |  |
| Subject | Cors | 2 |  |  |
| Music | 1202 or 1402 or 1502 | Jazz | Attribute |  |
| Music Studies | 1106 | Jazz Secondary Piano | 1 |  |
| Music | 1212 | Voice Class | 1 |  |
| Music Education | 1659 | Guitar II | 1 |  |
| Music | Varies | Ensemble | 1 |  |
| Music Studies | 1712 | Theory II (Jazz) | 4 |  |
| Psychology | 1061 | Psychology as a Social Science | 3 |  |
| GenEd | $08 x x$ or 09xx | Quantitative Literacy | 4 | GQ |


| Subtotal |  |  | 17 |  |
| :---: | :---: | :---: | :---: | :---: |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 2201 or 2401 or 2501 | Jazz Concentration | 2 |  |
| Music Studies | 2105 | Jazz Secondary Piano | 1 |  |
| Music Education | 3635 | Functional Guitar I | 1 |  |
| Music | 2323 | Basic Conducting | 1 |  |
| Music | Varies | Ensemble | 1 |  |
| Music Studies | 2711 | Theory III (Jazz) | 4 |  |
| Music Education | 4641 | Music Therapy Experiences I: Creative Methods | 1 |  |
| Music Education | 4616 | Developmental Music Therapy | 3 |  |
| IH | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music | 2202 or 2402 or 2502 | Jazz Concentration | 2 |  |
| Music Studies | 2106 | Jazz Secondary Piano | 1 |  |
| Music Education | 3636 | Functional Guitar II | 1 |  |
| Music | 2324 | Conducting Intermediate | 1 |  |
| Music | Varies | Ensemble | 1 |  |
| Music Studies | 2712 | Theory IV (Jazz) | 4 |  |
| Psychology | 2301 | Foundations of Developmental Psychology | 3 |  |
| Music Education | 4642 | Music Therapy Experiences II: Recreative Methods | 1 |  |
| IH | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music Education | 3633 | Functional Piano I | 1 |  |
| Music Education | 3631 | Functional Voice I | 1 |  |
| Music Studies | 2703 | Music in History | 3 |  |
| Music Education | 4614 | Psychiatric Music Therapy | 3 |  |
| Music Education | 4643 | Music Therapy Experiences III: Receptive Methods | 1 |  |
| Music Education | 3689 | Fieldwork in Music Therapy | 2 |  |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music Education | 3634 | Functional Piano II | 1 |  |
| Music Education | 3632 | Functional Voice II | 1 |  |
| Music Education | 3789 | Fieldwork in Music Therapy II | 2 |  |
| Music Studies | 3696 | Music in History | 3 | WI |
| Psychology | 2201 | Foundations of Psychopathology | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |


| Subtotal |  |  | 16 |  |
| :---: | :---: | :---: | :---: | :---: |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music Education | 4696 | Music Therapy Research | 3 | WI |
| Music Education | 3889 | Fieldwork in Music Therapy III | 2 |  |
| Music Studies | 3196 | History of Pop | 3 | WI |
| Music Education | 4619 | Medical/Rehabilitative Music Therapy | 3 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music Education | 4613 | Music Therapy Foundations | 3 |  |
| Music Studies | 2105 | Jazz Secondary Piano | 1 |  |
| Music Education | 4618 | Music Therapy Ethics | 2 |  |
| Music Education | 4685 | Music Therapy Clinical Internship | 6 |  |
| Subtotal |  |  | 12 |  |
|  |  |  |  |  |
| Degree Total |  |  | 130-131 |  |

## NOTES

## Voice Concentration

- In lieu of Music 1211-1212: Voice (2 s.h.), classical singers can take Music Studies 2112: Pop Songwriting (2 s.h.) or Music Studies 2114: History of Jazz (3 s.h.); jazz singers can take Music Studies 2112: Pop Songwriting (2 s.h.) or Music Studies 4112: Jazz Arranging I (3 s.h.).
- Classical and jazz singers must take Music Education 3631-3632: Functional Voice, unless waived by examination.


## Piano Concentration

- In lieu of Music 1405: Secondary Piano (1 s.h.), classical pianists can take Music Studies 2112: Pop Songwriting (2 s.h.) or Music Studies 2114: History of Jazz (3 s.h.); jazz pianists can take Music Studies 2112: Pop Songwriting (2 s.h.) or Music Studies 4112: Jazz Arranging I (3 s.h.).
- In lieu of Music 1405: Secondary Piano and Music Studies 1106: Jazz Secondary Piano, classical pianists must take two credits of jazz piano; jazz pianists must take two credits of jazz electives.
- Both classical and jazz pianists must take Functional Piano (Music Education 3633-3634) unless waived upon examination by instructor.


## Guitar Concentration

- In lieu of Music Education 1658-1659: Guitar (2 s.h.), classical guitarists can take Music Studies 2112: Pop Songwriting (2 s.h.) or Music Studies 2114: History of Jazz (3 s.h.); jazz guitarists can
take Music Studies 2112: Pop Songwriting (2 s.h.) or Music Studies 4112: Jazz Arranging I (3 s.h.).
- Both classical and jazz guitarists must take Music Education 3635-3636: Functional Guitar, unless waived upon examination by the instructor.


## Clinical Training

A total of 1200 hours of supervised clinical training is required prior to graduation.

## Music Therapy Grades

Grades below B- in any music therapy course may not be applied toward degree requirements in music therapy. Students may retake such courses only once, only with faculty approval. If a grade below B- is earned upon retaking the course, the student will not be permitted to continue as a music therapy major, but may be eligible to change to a different curriculum.

## Bachelor of Science Program

## Bachelor of Science, Major in Music

Maurice Wright, Chair
215-204-8016
wright@temple.edu
This program is designed to prepare students for such fields as library science, the publishing industry, communications, the computer software industry, and other new and diverse areas of the music profession. Applicants must arrange to take examinations in the area of musicianship before qualifying for admission to the program. This may be done by contacting Mr. James Short (215-204-8598) at the Boyer College of Music.

## Bachelor of Science in Music Major



| GenEd | $08 x x$ or 09xx | U.S. Society | 3 | GU |
| :--- | :--- | :--- | :---: | :---: |
| Music Studies | 4715 | World Music | 3 |  |
| Subtotal |  |  | $\mathbf{1 6}$ |  |

Sophomore Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Music | 2405 | Secondary Piano for Music Majors | 1 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music Studies | 2711 | Theory III | 4 |  |
| Music Studies | 2703 | Music in History | 3 |  |
| IH | Mosaic: Humanities Seminar I | 3 | GY |  |
| GenEd | 0851 or 0951 | Global/World Society | 3 | GG |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

Sophomore Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Music | 2406 | Secondary Piano for Music Majors | 1 |  |
| Music | Varies | Choral Ensemble | 1 |  |
| Music Studies | 2712 | Theory IV | 4 |  |
| Music Studies | 2704 | Music in History | 3 |  |
| GenEd | 08xx or 09xx | Muman Behavior | 3 | GB |
| IH | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Subtotal |  |  | $\mathbf{1 5}$ |  |


| Junior Year - 1st Semester | Course Title | Hours | Attribute |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course \# | Choral Ensemble | 1 |  |
| Music | Varies | Basic Conducting | 1 |  |
| Music | 2323 | Music in History | 3 | WI |
| Music Studies | 3696 | Orchestration | 3 |  |
| Music Studies | 3713 | Foreign Language I | 4 |  |
|  |  | Science \& Technology I | 3 | GS |
| GenEd | $08 \times x$ or 09xx |  | $\mathbf{1 5}$ |  |
| Subtotal |  |  |  |  |

Junior Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Music | Varies | Choral Ensemble | 1 |  |
| Music | 2324 | Conducting Intermediate | 1 |  |
| Music Studies | 4717 | Counterpoint | 3 |  |
| Music Studies | 3741 | Keyboard Harmony | 3 |  |
|  |  | Foreign Language II | 4 |  |
| Music Studies | 3796 | Music in History | 3 | WI |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

Senior Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Music | Varies | Choral Ensemble | 1 |  |
| Music | 4323 | Conducting (Choral) | 2 |  |
| Music Studies | 3196 | History of Pop | 3 | WI |


|  | $\begin{array}{\|c} \hline \text { or } \\ 2114 \end{array}$ | $\begin{array}{\|c} \text { or } \\ \text { History of Jazz } \end{array}$ |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Music Studies | 1704 | Music in American Society | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
|  |  | Foreign Language III | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - | nd Semester |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Music Studies | 4718 | Analysis | 3 |  |
| Music Elective |  | Music Electives | 8 |  |
| Music Studies | Elective | Music Theory | 3 |  |
|  |  | Foreign Language IV | 3 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Degree Total |  |  | 124 |  |

## Department of Dance General Information

Founded 1974
Dr. Robert T. Stroker, Dean
Temple University Department of Dance
1700 N. Broad Street, Suite 309
Philadelphia, PA 19122-0843
215-204-8710
dance@temple.edu
www.temple.edu/boyer/academicprograms/dance/index.asp

## Mission

The Dance Department is committed to artistic and scholarly excellence through fostering a creative, reflective and inclusive learning environment. Through embodied practice, the Dance Faculty and students seek to honor traditions while exploring new ways of knowing dance. In recognition that we experience through the body, the programs encourage students to consider how bodies in motion contribute to knowledge, transform our social world and facilitate community engagement.

## Accreditation

Full accredited Member of the National Association of Schools of Dance (NASD).

## Admissions

Admission into the dance program requires the submission of four items:

- A general university application submitted to the Office of Undergraduate Admissions.
- Official transcripts / standardized test scores submitted to the Office of Undergraduate Admissions.
- A dance application submitted to the Department of Dance.
- Attendance at an audition located on Temple University Main Campus in Philadelphia, or other arrangements to complete the audition requirements.

A dance audition cannot be scheduled until all other required application materials have been submitted. Please note that Temple University will not make an admission decision until applicants attend a dance audition.

The dance audition consists of technique classes divided into sections of ballet, modern, and African dance; a one minute solo of an applicant's own choreography; and an interview. The faculty attempts to choose students with physical, artistic, and intellectual potential to enter and complete the dance program and the university curriculum. The faculty is concerned that potential students' goals and aspirations are supported by the department philosophy, maximizing success in the program.

For additional information regarding dance admissions and for an application, please visit: www.temple.edu/boyer/admissions/index.asp

## Financial Aid

Entering Student Scholarships are offered by the Dance Department following successful entrance auditions and are based on artistic talent and potential for success in the dance curriculum. No separate application is necessary.

## Awards

BFA Performance Award - Honors a graduating B.F.A. student who has demonstrated excellence in dance performance during the academic year.
BFA Choreography Award - Honors a graduating B.F.A. student who has demonstrated excellence in choreography during the academic year.
BFA Scholar Award - Honors a graduating B.F.A. student who has demonstrated excellence in overall academic achievement during the academic year.

## Dance Academic Advising Center

Academic advisors attempt to avoid errors when advising students about their program requirements, but schools and colleges cannot assume liability for errors in advising. Therefore, students must assume primary responsibility for knowing the requirements for their degree and
for acquiring current information about their academic status. It is not the responsibility of the advisor to monitor the academic rosters of individual students for errors in registration.

## Dance Program Academic Policies

Please see the Undergraduate Academic Policies. Students are responsible for complying with all university-wide academic policies that apply to their individual academic status. Additional and unique policies, or exceptions for the Boyer College of Music, Department of Dance, appear below.

## Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List policy for specific GPA and credit-hour requirements.

## Leave of Absence

Students must submit the Leave of Absence form to the Undergraduate Program Coordinator in advance of the semester in which the leave is to take place, stating the reason(s) why the leave is necessary. A Leave of Absence must be authorized by the Undergraduate Program Coordinator and Department Chairperson, who will process the leave in accordance with the university's leave of absence policy. (Policy \# 02.10.16)

## Injury Policy

An injury may affect a student's ability to successfully continue in a course. A student who is injured is expected to immediately contact their instructor and the Undergraduate Program Coordinator to discuss the possibility of continuance in the course. Injured students are responsible for seeking appropriate medical attention for their injuries. Students must provide an official doctor's note recommending non-participation in class to their instructors. Failure to provide a doctor's note verifying an injury may result in the student's violation of applicable absence policies or may otherwise impact the student's grade.

Any student who is advised by a doctor to refrain from dancing for three weeks or more may be required to withdraw from studio courses that focus on dance technique, composition, repertory and improvisation. For students who will miss fewer than three weeks of classes due to their injury, and who are physically able to do so, must attend all classes to observe and take notes. Instructors may assign additional written work if appropriate. If a student is unable to participate in midterm or final examinations due to an injury, the student is responsible for working with their instructor to develop alternate assignments at the discretion of the faculty member.

Persons subject to this policy may have the option for a medical withdrawal or an incomplete in their courses. Students should review Temple University policy number 02.10.14 (Withdrawal from Classes) and policy number 02.10.13 (Incomplete Coursework Policy).

## Independent Study and Field Experience

Students who wish to register for Independent Study or Field Experience must submit a written proposal to the Undergraduate Program Coordinator no later than two months in advance of the semester in which the study is to be accomplished. A student who is on academic probation may not register for Independent Study or Field Experience. Credits will not be granted retroactively, and no more than 4 credits will be awarded over the course of a student's undergraduate study.

## Full-Time/Part-Time Status:

The semester load for full-time undergraduate students is 17 credits. Undergraduate students must carry at least 12 credit hours to be classified as full-time. The Bachelor of Fine Arts (BFA) in Dance requires matriculated students to attend on a full-time basis each semester. Students who have been full-time for at least four semesters may petition the Undergraduate Program Coordinator no later than two months in advance for approval to enroll in the subsequent semester on a part-time basis. All requests for part-time status must be approved by the dance faculty. Part-time status is granted for one semester only. Students who are on academic probation are not eligible for part-time status. If a student is granted part-time status and is then placed on academic probation, part-time status will be revoked.

## Academic Overloads (18 or more semester hours)

Academic overloads need special approval from the Associate Dean for Student Affairs. Students interested in pursuing an academic overload should contact their Faculty Advisor no later than 2 months prior to the start of the semester in which they desire to overload. Students who are on academic probation are not eligible for academic overloads.

## Technique Standards

Temple University's Department of Dance recognizes the necessity of technical training in building professional quality performers, choreographers, and teachers. Our technique classes include a diverse range of dance forms, including ballet, modern, jazz, and African. Each of our technique teachers draws from an array of influences and styles, preparing students for the eclecticism found within the contemporary dance world today. Through four years of technical training, our students gain an understanding of and apply the following principles in reaching their expressive potential and minimizing injury:

- Alignment and Core Connection
- Physical Strength and Flexibility
- Upper and Lower Body Integration
- Clarity in Articulating Various Body Parts
- Sensitivity to Qualitative Range and Expressivity Inside Movement
- Rhythmic Awareness and Musicality
- Incorporation of Weight and Breath
- Spatial Awareness
- Critical Thinking
- Self Motivation and Discipline

Modern Technique represents the core of our students' technical training. Students in the Performance \& Choreography Focus are required to advance to Modern Technique IV, while students in the Dance Education Focus are required to advance to at least Modern Technique III. In all technique classes, video evaluations occur at the mid-term and final periods of each semester. Following these evaluations, students receive verbal and written feedback from their instructors. This process provides a method of looking at a student's progress in developing the target competencies for each level of technique.

## Technique Placement Class

All entering undergraduates are placed into modern and ballet technique levels based on their audition and supplemental dance application. Adjustments to level placement may be made during the first week of classes. Returning undergraduates should consult with their faculty advisor about level placement prior to registering for classes. Students may repeat a level up to two times, and are not allowed to regress in level.

## First Semester Program Review

At the end of the first semester, each student's progress will be formally evaluated in the following categories to determine suitability for continued study within the dance program.

## Academic Progress

Students must meet and maintain the minimum academic standards listed below:

- $\quad 2.50$ grade point average (GPA) in dance courses each semester.
- 2.25 grade point average (GPA) overall each semester.
- No more than one grade below B- in a dance course is permitted.
- No withdrawals or incompletes are permitted in dance courses.
- Successful completion of the following dance courses:

1. Dance 1801: First Year Seminar in Dance
2. Dance 1811: Movement Improvisation I
3. Dance 1813: Dance Repertory I or Dance 1819: Dance Production
4. Dance 1841: Music for Dancers or Dance 1851: Global Dance Traditions
5. At least two modern technique classes
6. At least one ballet technique class

## Technical Growth

Students must be able to demonstrate and articulate verbally a conceptual understanding of alignment, strength, and mobility. They must be able to assimilate sequential movement materials, and successfully perform basic movement phrases.

## Improvisation

Students must demonstrate their ability to spontaneously create solo movement, and demonstrate their understanding of basic partnering techniques and improvising in groups. Students will be able to generate movement material that both explores and expands their expressive range as dancers.

## Creative Engagement

Over the course of the first semester, students must:

- Participate in one performance or audition one finished work for the student concert.
- Demonstrate consistent attendance, focus, intellectual curiosity, and openness to new approaches, as reflected in faculty evaluations of student coursework.
- Demonstrate receptivity to feedback and in-class evaluation from instructors, and apply this information in subsequent work.
- Demonstrate healthy life practices as part of a disciplined approach towards one's work as a dancer.
- Maintain positive professional interactions with peers and faculty.


## Second Semester Program Review

At the end of the second semester, each student's progress will be formally evaluated in the following categories to determine suitability for continued study within the dance program.

## Academic Progress

Students must meet and maintain the minimum academic standards listed below:

- 2.50 grade point average (GPA) in dance courses each semester.
- 2.25 grade point average (GPA) overall each semester.
- No more than one grade below B- in a dance course is permitted.
- No withdrawals or incompletes are permitted in dance courses.
- Successful completion of the following dance courses:

1. Dance 1801: First Year Seminar in Dance
2. Dance 1811: Movement Improvisation I
3. Dance 1813: Dance Repertory I
4. Dance 1819: Dance Production
5. Dance 1841: Music for Dancers
6. Dance 1851: Global Dance Traditions
7. At least four modern technique classes
8. At least two ballet technique classes

## Technical Growth

Students must be able to apply, demonstrate, and articulate verbally a conceptual understanding of alignment, strength, and mobility. They must be able to assimilate sequential movement materials, and successfully perform movement phrases that deal with the following elements:

- Movement efficiency and proper alignment
- Shifting off the vertical line of balance and returning to center
- Basic rhythmic structures and patterns
- Basic locomotor movement and some inverted movement
- Variable spatial planes, directions, and levels
- Assimilation of sequential movement material
- Concepts of body organization: such as breath support, core to distal/head to tail patterning, upper-lower/body half integration, and cross-lateral patterning
- Differing energy qualities: how energy is directed within the body and projected out into space


## Creative Engagement

Over the course of the second semester, students must:

- Participate in one performance or audition one finished work for the student concert.
- Demonstrate consistent attendance, focus, intellectual curiosity, and openness to new approaches, as reflected in faculty evaluations of student coursework.
- Demonstrate receptivity to feedback and in-class evaluation from instructors, and apply this information in subsequent work.
- Demonstrate healthy life practices as part of a disciplined approach towards one's work as a dancer.
- Maintain positive professional interactions with peers and faculty.


## Third Semester Program Review

At the end of the third semester, each student's progress will be formally evaluated in the following categories to determine suitability for continued study within the dance program. As part of this process, students apply for entrance into either the Dance Education Focus or the Performance \& Choreography Focus.

## Artistic Portfolio

By December 1st, students will submit to the Undergraduate Program Coordinator a portfolio containing the following:

- Concert Programs: copies for each production in which the student has participated as a performer or stage crew.
- DVD: videos of all choreography and performances in previous three semesters.
- Essay: a personal statement of 1-2 pages that identifies the track the student wishes to pursue, how that track will impact their professional goals and development, and assesses their artistic and professional development within the curriculum to date.


## Academic Progress

Students must meet and maintain the minimum academic standards listed below:

- 2.50 grade point average (GPA) in dance courses each semester.
- 2.25 grade point average (GPA) overall each semester.
- No more than one grade below B- in a dance course is permitted.
- No withdrawals or incompletes are permitted in dance courses.
- Successful completion of the following dance courses, in addition to those listed for the first and second semester reviews:

1. Dance 2813: Dance Composition I
2. Dance 2814: Dance Composition II
3. Dance 2872: Foundations of Dance Education or Dance 3851: Lighting Design for Dance
4. Dance 4874: Dance Repertory III or Dance 4811: African Dance Repertory
5. At least six modern technique classes
6. At least three ballet technique classes

## Technical Growth

Students must demonstrate awareness of alignment issues and articulate personal strategies for addressing them. They must be able to assimilate and retain movement material sequentially and qualitatively, and successfully perform movement phrases that deal with the following elements:

- Increased movement efficiency and proper alignment
- Basic kinesiological principles in technique and conditioning contexts
- Increased facility in shifting off the vertical line of balance and returning to center
- Incorporation of weight into on-balance and off-balance movement involving momentum and weight release
- Increased rhythmic acuity: ability to work with shifting accents, structures \& patterns
- Embodiment of musicality and more complex phrasing
- Movement initiation and follow-through
- Ability to risk and expand one's spatial parameters: demonstration of an increased drive through space
- Modulation between different energy states with breath support inside metric and nonmetric phrasing
- Developing confidence in one's creative engagement with movement material
- Ability to adapt when experiencing new teaching methods and styles


## Choreography

Students must also be able to discuss their work and the process by which they created it. Students must be able to create and perform a dance that:

- Successfully communicates an idea of personal significance;
- Demonstrates the ability to develop thematic movement material;
- Investigates movement imaginatively;
- Explores a range of dynamic qualities; and,
- Reflects a basic understanding of choreographic structure.


## Creative Engagement

By the end of the third semester, students must:

- Audition one piece of their choreography for a student concert and participate in three performances.
- Demonstrate consistent attendance, focus, intellectual curiosity, and openness to new approaches as reflected in faculty evaluations of student coursework.
- Demonstrate receptivity to feedback and in-class evaluations from instructors, and apply this information in subsequent work.
- Maintain positive, professional interactions with peers and faculty.
- Demonstrate healthy life practices as part of a disciplined approach towards one's work as a dancer.
- Participate in one audition or recruitment event.


## Special Course Sequences

The courses listed below must be taken in the specified sequence, and cannot be taken out of order or during the same semester. All courses must be completed before students register for Senior Choreographic Project or Dance Education Project.

- Composition: Movement Improvisation I, Composition I, Composition II, Creative Process
- History: Dance Modernism, Dance Post-Modernism
- Repertory: Dance Repertory I, Dance Repertory II, Dance Repertory III*
- Technical Theater: Dance Production, Lighting Design for Dance
*Enrollment in Dance Repertory III is by audition, and only required in the Performance \& Choreography Focus.


## General College Graduation Requirements

1. Dance required GPA for graduation: 2.25 cumulative, 2.5 in dance major
2. Dance Contact Information: 1700 N. Broad Street, Suite 309 / Main Office Phone: 215-204-8710
3. Dance Requirements \& Special Course Sequences: Please see dance program of study

- Must be taken in the required sequence
- Cannot be taken out of order or during the same semester
- All must be completed before students register for Senior Choreographic Projects.


## University Requirements

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

All Temple students must take a minimum of two writing-intensive courses as part of the major. See the Dance Major page for the specific courses that are required for dance majors.

## Important Student Contact Information

Contact information for the Dance Department is listed below. Contact information for other Boyer College of Music and Dance departments can be found on the college's Student Contact Information page.

## Dance Department

## Department Chairperson

Dr. Sherril Dodds
1700 N. Broad Street, Suite 309
215-204-5169
sherril.dodds@temple.edu
Undergraduate Program Coordinator
Dr. Laura Katz Rizzo
1700 N. Broad Street, Suite 309
215-204-2328
lkatz@temple.edu

## Recruitment \& Admissions

Mary Garcia
1700 N. Broad Street, Suite 309C
215-204-0533
dance@temple.edu
Academic Advising
Margo Jackson
Presser Hall, 2001 N. 13th Street, Main Office
215-204-2229
margo@temple.edu

## Conwell Dance Theater

Nanette Hudson Joyce
1700 N. Broad Street, Suite 309
215-204-6177
njoyce@temple.edu

## Department Coordinator

Gloria Scott
1700 N. Broad Street, Suite 309
215-204-5169
gscott71@temple.edu

## Faculty

# Dance Department (Full-time Faculty) 

Dr. Karen Bond, Associate Professor<br>Dr. Sherril Dodds, Chair and Professor<br>Dr. Mark Franko, Professor<br>Jillian Harris, Assistant Professor<br>Kun-Yang Lin, Associate Professor<br>Dr. Joellen Meglin, Associate Professor<br>Merián Soto, Professor<br>Dr. Kariamu Welsh, Professor<br>Dr. Laura Katz Rizzo, Assistant Professor (Instructional)

Faculty contact information and biographies can be found at:
www.temple.edu/boyer/about/people/faculty.asp\#dance.

## Dance Major

Dr. Sherril Dodds<br>Department Chairperson<br>215-204-5169<br>sherril.dodds@temple.edu

Laura Katz Rizzo
Undergraduate Program Coordinator
laura.katz@temple.edu
www.temple.edu/boyer/dance
The Bachelor of Fine Arts in Dance emphasizes modern dance technique, performance, choreography, and education. The program provides a two-year foundation for all undergraduate dance majors that supports the development of skill, strength and stamina. The two-year foundation program will be followed by two years of specialized study, during which students focus on either Performance \& Choreography or Dance Education. Third and fourth year students in the Performance \& Choreography focus will experience intensive training that will prepare them to enter professional dance companies, create a company, or pursue an individual career in choreography. Third and fourth year students in the Dance Education focus will continue dance training and will experience intensive coursework in education and pedagogy, including opportunities to observe and work with dance teachers, that prepares them to teach in a variety of settings.

## The degree program in dance aims to:

- Guide students toward a balance of cognitive, analytic, intuitive, and creative skills.
- Aid students in development of their creative potential through technique, choreography, performance, research, and other creative media.
- Educate students about the various forms and purposes of dance within their historical, social, and cultural contexts.
- Provide intensive training in a range of dance techniques and styles as represented by the faculty and selected guest artists.
- Prepare students for professional careers as performing artists, choreographers, teachers, scholars, and informed and responsible leaders in academic and other professional settings.

The Bachelor of Fine Arts degree in Dance is conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 124 semester hours of credit and completion of the required Dance and university requirements.

Dance Resources: The Dance Department, with its three studios, rehearsal room, Pilates room, black-box theater, video library, and assorted classrooms, embraces a broad array of activities. The Philadelphia Dance Collection at Temple University (PDCAT) provides access to the dance legacy of the region through a permanent collection of multi-format archival resources related to the history of Philadelphia dance.

Special Opportunities: The Conwell Dance Theater season provides many opportunities for students to perform and choreograph. A typical season features two student concerts, two Master of Fine Arts thesis concerts, two Bachelor of Fine Arts senior concerts, a faculty dance concert, and an alumni concert. Added to this are performances by guest artists, repertory showings, and informal student choreography performances. Recent guest artists have included Kyle Abraham; Rennie Harris Puremovement; Cornelius Carter; Ruth Andrien, former soloist with the Paul Taylor Dance Company; and Nina Watt, member of the José Limón Dance Company.

## Summary of Requirements for the Dance Major

## University Requirements

All new students starting in the 2013-2014 academic year and beyond are required to complete the university's General Education (GenEd) curriculum.

All Temple students must take a minimum of two writing-intensive courses as part of the major. See below for a list of the technique courses, some of which are required for dance majors.

## Theory - Required Courses

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Dance | 1801 | First-Year Seminar in Dance | 1 |  |
| Dance | 1819 | Dance Production | 1 |  |


| Dance | 1841 | Music for Dancers | 3 |  |
| :--- | :--- | :--- | :---: | :---: |
| Dance | 1852 | Ways of Knowing Dance | 2 |  |
| Dance | 3896 | Dancing Cultures | 3 | WI |
| Dance | 4897 | Creating Dance Histories | 3 | WI |
| Dance | 3812 | Creative Process in Dance | 3 |  |
| Dance | 3851 | Lighting Design for Dance | 3 |  |
| Dance | 3897 | Making Meaning in Dance | 3 | WI |
| Dance | 4896 | Senior Seminar | 3 | WI |
| Subtotal |  |  | $\mathbf{2 5}$ |  |

Technique Courses

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Dance | 1815 | Modern Dance Technique I A | 2 |  |
| Dance | 1817 | Modern Dance Technique I B | 2 |  |
| Dance | 2815 | Modern Dance Technique II A | 2 |  |
| Dance | 2817 | Modern Dance Technique II B | 2 |  |
| Dance | 3817 | Modern Dance Technique III A | 2 |  |
| Dance | 3818 | Modern Dance Technique III B | 2 |  |
| Dance | 4815 | Modern Dance Technique IV A | 2 |  |
| Dance | 4817 | Modern Dance Technique IV B | 2 |  |
| Dance | 1831 | Ballet Technique I A | 2 |  |
| Dance | 1832 | Ballet Technique I B | 2 |  |
| Dance | 2831 | Ballet Technique II A | 2 |  |
| Dance | 2832 | Ballet Technique II B | 2 |  |
| Dance | 3831 | Ballet Technique III A | 2 |  |
| Dance | 3832 | Ballet Technique III B | 2 |  |
| Dance | 4832 | Ballet Technique IV A | 2 |  |
| Dance | 4833 | Ballet Technique IV B | 2 |  |
| Dance | 1804 | Jazz Dance I | 2 |  |
| Dance | 4842 | Jazz Dance II | 2 |  |
| Dance | 4843 | Jazz Dance III | 2 |  |
| Dance | 2853 | African Dance I | 2 |  |
| Dance | 3853 | African Dance II | 2 |  |
| Subtotal |  |  | 42 |  |

Note on Required Dance Techniques: First year dance majors are required to take four modern technique courses and two ballet technique courses. Second year dance majors are required to take four modern technique courses. Third and fourth year dance majors determine their technique requirements based upon their selected focus. As a result of the different requirements for each focus, the minimum required hours is not a mathematical total of the courses listed above.

Choreography, Performance \& Repertory Courses

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Dance | 1811 | Movement Improvisation I | 2 |  |


| Dance | 1813 | Dance Repertory I | 2 |  |
| :--- | :--- | :--- | :---: | :---: |
| Dance | 2813 | Dance Composition I | 2 |  |
| Dance | 2814 | Dance Composition II | 2 |  |
| Dance | 3812 | Creative Process in Dance | 3 |  |
| Dance | 3813 | Dance Repertory II | 3 |  |
| Dance | 4811 | African Dance Repertory | 3 |  |
| Dance | 4874 | Dance Repertory III (by audition only) | 3 |  |
| Dance | 4864 | Dance Education Project | 3 |  |
| Dance | 4884 | Senior Choreographic Project | 3 |  |

University General Education - Required Courses

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| IH | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| IH | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| GenEd | 08xx or 09xx | World Society | 3 | GG |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| Subtotal |  |  | $\mathbf{3 2}$ |  |

*Note: Dance students may be waived from the GenEd Arts requirement upon the completion of Dance 1811, 2813, 2814 and 3812 with a C- or better in each course.

## Dance and Other Electives

Remaining credits can be used for electives within the Dance Department or for courses in other academic areas. Within the department, students can take dance technique courses listed below or dance academic courses.

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Dance | 1807 | Hatha Yoga I | 2 |  |
| Dance | 3811 | Field Experience in Dance | $1-8$ |  |
| Dance | 3882 | Independent Study in Dance | $1-4$ |  |
| Dance | 4871 | Movement Improvisation II | 2 |  |
| Dance | 4875 | Contact Improvisation | 2 |  |
| Subtotal | $\mathbf{8 - 1 8}$ |  |  |  |

## Bachelor of Fine Arts (BFA) in Dance - Suggested Semester-by-Semester Plan

## Dance Foundation - Year One \& Year Two

Freshman Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Dance | 1801 | First-Year Seminar in Dance | 1 |  |
| Dance | 1811 | Movement Improvisation I | 2 |  |
| Dance | 1815 | Modern Dance Technique I A | 2 |  |
| Dance | 1817 | Modern Dance Technique I B | 2 |  |
| Dance | 1819 | Dance Production * | 1 |  |
| Dance | 1831 | Ballet Technique I A | 2 |  |
| Dance | 1841 | Music for Dancers * | 3 |  |
| English | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Subtotal |  |  | $\mathbf{1 7}$ |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |


| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Dance | 1813 | Dance Repertory I * | 2 |  |
| Dance | 1815 | Modern Dance Technique I A | 2 |  |
| Dance | 1817 | Modern Dance Technique I B | 2 |  |
| Dance | 1832 | Ballet Technique I B | 2 |  |
| Dance | 1852 | Ways of Knowing Dance * | 2 |  |
| GenEd | $08 x x$ or 09xx | Quantitative Literacy | 4 | GQ |
| IH | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Subtotal |  |  |  |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |


| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Dance | 2813 | Dance Composition I | 2 |  |
| Dance | 2815 | Modern Dance Technique II A | 2 |  |
| Dance | 2817 | Modern Dance Technique II B | 2 |  |
| Dance | 2831 | Ballet Technique II A | 2 |  |
| Dance | 2853 | African Dance I | 2 |  |
| Dance | 3851 | Lighting Design for Dance * | 3 |  |
| IH | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Subtotal |  |  | $\mathbf{1 6}$ |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |


| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Dance | 2814 | Dance Composition II | 2 |  |
| Dance | 2815 | Modern Dance Technique II A | 2 |  |
| Dance | 2817 | Modern Dance Technique II B | 2 |  |
| Dance | 2832 | Ballet Technique II B | 2 |  |
| Dance | 2872 | Foundations of Dance Education * | 3 |  |
| Dance | 3813 <br> or <br> 4811 | Dance Repertory II <br> or <br> African Dance Repertory | 3 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |



* These courses are offered in both the Fall and Spring semesters.

Performance \& Choreography Focus - Year Three \& Year Four

| Junior Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Dance | \|3896 | Dancing Cultures | 3 | WI |
| Dance | \|3817 | Modern Dance Technique III A | 2 |  |
| Dance | 3818 | Modern Dance Technique III B | 2 |  |
| Dance | 3897 | Making Meaning in Dance | 3 | WI |
| Dance | 4861 | Dance Science \& Somatics | 3 |  |
| GenEd | 08xx | Human Behavior | 3 | GB |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Dance | 4897 | Creating Dance Histories | 3 | WI |
| Dance | 3812 | Creative Process in Dance | 3 |  |
| Dance | 3817 | Modern Dance Technique III A | 2 |  |
| Dance | 3818 | Modern Dance Technique III B | 2 |  |
| Dance | 4874 | $\begin{aligned} & \text { Dance Repertory III ** } \\ & \text { or } \\ & \text { Alternate Elective } \end{aligned}$ | 3 |  |
| GenEd | 08xx | World Society | 3 | GG |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Dance | 4884 | Senior Choreographic Project * | 3 |  |
| Dance | 4815 | Modern Dance Technique IV A | 2 |  |
| Dance | 4817 | Modern Dance Technique IV B or <br> Dance Technique Elective | 2 |  |
| Dance | xxxx | Elective | 2 |  |
| GenEd | 08xx | Science \& Technology I | 3 | GS |
| Subtotal |  |  | 12 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Dance | 4896 | Senior Seminar * | 3 | WI |
| Dance | 4815 | Modern Dance Technique IV A | 2 |  |
| Dance | 4817 | ```Modern Dance Technique IV B or Dance Technique Elective``` | 2 |  |
| GenEd | 08xx | U.S. Society | 3 | GU |
| GenEd | 08xx | Science \& Technology II | 3 | GS |
| Subtotal |  |  | 13 |  |
|  |  |  |  |  |


| Degree Total |  |  | 124 |  |
| :--- | :--- | :--- | :--- | :--- |

* These courses are offered in both the Fall and Spring semesters. ** Enrollment in Dance 4874: Dance Repertory III is by audition only.

Dance Education Focus - Year Three \& Year Four

| Junior Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Dance | \|3896 | Dancing Cultures | 3 | WI |
| Dance | \|3817 | Modern Dance Technique III A | 2 |  |
| Dance | \|3818 | Modern Dance Technique III B or Dance Technique Elective | 2 |  |
| Dance | 4861 | Dance Science \& Somatics | 3 |  |
| Dance | 3897 | Making Meaning in Dance | 3 | WI |
| GenEd | 08xx | Human Behavior | 3 | GB |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Dance | 4897 | Creating Dance Histories | 3 | WI |
| Dance | 3812 | Creative Process in Dance | 3 |  |
| Dance | 3817 | Modern Dance Technique III A | 2 |  |
| Dance | 3818 | ```Modern Dance Technique III B or Dance Technique Elective``` | 2 |  |
| Dance | 3871 | Dance and The Child | 3 |  |
| GenEd | 08xx | World Society | 3 | GG |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Dance | 3811 | Field Experience in Dance | 2 |  |
| Dance | 3818 | Modern Dance Technique III B or <br> Dance Technique Elective | 2 |  |
| Dance | xxxx | Elective | 2 |  |
| GenEd | 08xx | U.S. Society | 3 | GU |
| GenEd | 08xx | Science \& Technology I | 3 | GS |
| Subtotal |  |  | 12 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Dance | 3818 | Modern Dance Technique III B or <br> Dance Technique Elective | 2 |  |
| Dance | 4864 | Dance Education Project | 3 |  |
| Dance | 4896 | Senior Seminar | 3 | WI |
| Dance | xxxx | Elective | 2 |  |


| GenEd | 08xx | Science \& Technology II | 3 | GS |
| :--- | :--- | :--- | :---: | :---: |
| Subtotal |  |  | 13 |  |
|  |  |  |  |  |
| Degree Total |  |  | $\mathbf{1 2 4}$ |  |

- The total number of credit hours may be greater for some students based on initial placement exams, transfer evaluations, individual curricular choices, and academic progress.
- Certain courses fulfill multiple requirements. In consultation with an academic advisor, students will be able to plan their curriculum more effectively.
- Students must fulfill the necessary prerequisites for any given course or course sequence. See the Prerequisite and Co-Requisite Policy in the university-wide Academic Policies section in this Bulletin.


## DIVISION OF THEATER, FILM \& MEDIA ARTS

## Dr. Robert T. Stroker, Dean and Vice Provost for the Arts at Temple University

http://www.temple.edu/theater
http://smc.temple.edu/fma
The Division of Theater, Film and Media Arts is part of the Center for the Arts at Temple University.

The Department of Film and Media Arts is located in Annenberg Hall, which includes television and film production areas (studios and editing, graphics, and film labs) as well as extensive video and film editing areas, a 75-seat multimedia screening room, photographic labs, two news writing labs and smart classrooms.

The Department of Theater is located in Tomlinson Hall, which features two theaters, as well as rehearsal rooms, costume, and scene shops.

## History

The study of communication began formally at Temple University with the founding of the Department of Journalism in 1927. It was the first such department in the Commonwealth.

Theater was an extracurricular activity at Temple until 1931, when formal courses were developed.

Radio-Television became an instructional division in 1947, and extensive film offerings were added in 1967. That year, Journalism and Radio-Television-Film joined Theater to form the School of Communications and Theater. In 1987 the highly-respected Department of Speech
moved to the school from the College of Arts and Sciences. A year later, Speech became two departments: Rhetoric and Communication, and Speech-Language-Hearing.

The school was restructured in 1995. Radio-Television-Film became the Department of Film and Media Arts and the Department of Broadcasting, Telecommunications, and Mass Media; Journalism became Journalism, Public Relations, and Advertising; Rhetoric and Communication became Speech Communication. In 1998, the Department of Communication Sciences (Speech-Language-Hearing) moved to the College of Health Professions.

Effective Fall 2004, a change occurred with the Departments of Journalism, Public Relations and Advertising, and Speech Communication. Advertising became a separate department. The Department of Speech Communication changed its name to Strategic and Organizational Communication and includes Public Relations as one of three concentrations: Public Communication (formerly Speech Communication), Public Relations, and Organizational Leadership. In 2010, the Department of Strategic and Organizational Communication changed its name to the Department of Strategic Communication.

On July 1, 2012, the School of Communications and Theater was renamed the School of Media and Communication. It houses the departments of Advertising; Journalism; Media Studies and Production (formerly Broadcasting, Telecommunications, and Mass Media); and Strategic Communication. The Communication Studies program remains a part of the School of Media and Communication. The Departments of Theater and Film and Media Arts form the Division of Theater, Film \& Media Arts and join the Boyer School of Music and Dance and the Tyler School of Art to form the Center for the Arts.

## Special Programs

## Internship Program

Although the requirements may vary, internships are available to junior and senior students. Internships are for academic credit and must involve professional activity related to the student's course of study. The internships must be approved by the administrator or faculty member charged with supervising internships.

## Los Angeles Internship \& Study Program

Offered by the Film and Media Arts Department, the Los Angeles Internship \& Study Program is open to students from any major on both the upper-level undergraduate (63 credit hours completed) and graduate levels who have an interest in working within the Hollywood entertainment industry. This program is offered as an 8 -credit summer program that runs from May through the end of July. It includes an on-site internship and ten weeks of concurrent coursework. Additionally, the program is offered in the fall and spring semesters as a full-time program of study combined with an internship component. For more information, please contact Alison Crouse at 215-204-5910.

## Advising

Center for the Arts Academic Advising
Tyler Building, Suite 212
2001 N. 13th Street
Philadelphia, PA 19122
For appointments, please contact:
TFMAadvising@temple.edu
Students in Theater and Film and Media Arts are advised by professional academic advisors and faculty advisors. Students make advising appointments in the Center for the Arts Academic Advising Office located on the second floor of the Tyler building, Suite 212. Consult your departmental office for assignment to the appropriate advisor.

Academic advisors attempt to avoid errors when advising students about their program requirements, but schools and colleges cannot assume liability for errors in advising. Therefore, students must assume primary responsibility for knowing the requirements for their degree and for acquiring current information about their academic status.

Most students will be eligible to register for classes online via Self Service Banner through the TU Portal. However, all students should meet with an advisor prior to the eligible registration period.

Students preparing to graduate must file the necessary paperwork one semester prior to the graduation date. At that time, an appointment should be made with an academic advisor to complete a graduation review and application for graduation.

## Academic Policies \& Regulations

Please see the Undergraduate Academic Policies section of this Bulletin. Students are responsible for complying with all university-wide academic policies as well as those of the Center for the Arts' Division of Theater, Film \& Media Arts that appear below.

## Academic Standing

A matriculated undergraduate student in the university is in Academic Good Standing if enrolled in a baccalaureate degree-seeking program.

Please see the University's policy on Academic Standing for detailed information about Academic Warning, Academic Probation, and Academic Dismissal.

## Credits Not Applied Toward the Degree

Credits earned in the following courses are not applied toward a degree in the Center for the Arts' Division of Theater, Film \& Media Arts: lower-level courses in Military Science, Topical Studies, RCC, ELECT, and Mathematics 0015.

## Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List policy for specific GPA and credit-hour requirements.

## Re-enrollment

Students returning to Temple University after an absence of one semester (unless an approved Leave of Absence form was filed prior to the leave) must use the Undergraduate Bulletin in effect at the time of readmission or any subsequent Undergraduate Bulletin. Credits more than 10 years old may not be applied toward a degree. For application deadlines and the re-enrollment form, please visit: www.temple.edu/vpus/documents/request_to_reenroll.pdf.

## Transfer Students

Refer to the Undergraduate Admissions section of this Bulletin for general information on transferring courses to Temple. In addition to these criteria, each department will evaluate any credit to be transferred into a major. This evaluation generally is done at the first meeting with a faculty advisor during the first semester. The maximum number of credit hours allowed to transfer in the major are: 21 hours in Film and Media Arts and 20 hours in Theater.

## Requirements for Graduation

The Division of Theater, Film \& Media Arts requires 124 credits to graduate; completion of the university General Education (GenEd) requirements; completion of departmental requirements, including two writing-intensive courses in the major; a minimum of 2.00 GPA, both cumulative and in the major; and completion of a maximum of 71 credits within the School of Media and Communication and the Division of Theater, Film \& Media Arts and a minimum of 53 credits outside of the School of Media and Communication and the Division of Theater, Film \& Media Arts.

Minimum and maximum credit requirements within each major are listed with the departmental requirements.

Students who are planning to graduate must schedule an official graduation review with an academic advisor and complete the application for graduation one semester prior to the
anticipated graduation date. Appointments may be made in the Center for the Arts Academic Advising Office, Tyler building, Suite 212.

## Program Descriptions

1. The total number of credit hours at graduation may be greater for some students based on initial placement exams, transfer evaluations, individual curricular choices, and academic progress.
2. Students must fulfill the necessary prerequisites for any given course or course sequence. See the Prerequisites and Co-requisites Policy in the university-wide Academic Policies section of this Bulletin.

## Student Contact

## Division of Theater, Film and Media Arts

Prof. Douglas C. Wager
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## Film \& Media Arts

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## Faculty

## Film \& Media Arts

Nora Alter, Professor
Allan Barber, Assistant Professor
Warren Bass, Professor
Chris Cagle, Assistant Professor
Franklin Cason, Jr., Assistant Professor
Roderick Coover, Associate Professor
Peter D'Agostino, Professor
Sarah Drury, Associate Professor
LeAnn Erickson, Associate Professor
Rodney Evans, Visiting Assistant Professor
Michael J. Kuetemeyer, Associate Professor
David Parry, Professor
Eran Preis, Associate Professor
Mark Rosenthal, Assistant Professor
Jeff Rush, Associate Professor
Michael Ryan, Professor

Elisabeth Subrin, Assistant Professor<br>Paul Swann, Professor<br>Rea Tajiri, Assistant Professor

## Theater

Maggie Anderson, Assistant Professor
Nancy Boykin, Assistant Professor
Marie Anne Chiment, Professor
Fred Duer, Associate Professor
Robert Hedley, Professor
John Hoey, Assistant Professor
David Ingram, Associate Professor
Lynne Innerst, Associate Professor
Melanie Julian, Assistant Professor
Dan Kern, Professor
Andrew Laine, Assistant Professor
Matthew Miller, Assistant Professor
Peter Reynolds, Associate Professor
Lee Kenneth Richardson, Associate Professor
Edward Sobel, Assistant Professor
Donna Snow, Associate Professor
Douglas Wager, Professor
Kimmika Williams-Witherspoon, Associate Professor

## Film \& Media Arts

Nora Alter, Ph.D., Chair
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http://smc.temple.edu/fma/
The Film and Media Arts (FMA) Program focuses on the development of creative and technical skills in film, video, audio, digital media, and new technologies, and the theoretical understanding of media and culture. The program recognizes and explores the creative tension between individual expression and the social, political, and economic forces that shape culture at large through the creation and study of film, video, and new media.

Students are trained in developing meaningful content as well as craft, theory, and practice. In learning independent and mainstream approaches to production and theory, graduates will be prepared to develop their own independent productions and to assume a creative role in the motion picture, television and media industries.

FMA faculty have received the Oscar, Emmy, Guggenheim, Rockefeller, NEA, Fulbright, Sundance and international film awards and are authors of some of the important texts in the field. The department also brings in guest media makers and visiting professors from diverse backgrounds for special lectures and workshops. Students may select elective courses from throughout the university, including other departments in the School of Media and Communication, in such areas as journalism and theater. A highly-recognized graduate program offers undergraduates numerous opportunities to work on advanced productions and participate in advanced research, exhibition and creative work in the field.

## Faculty Mentoring

FMA faculty strongly believe in the importance of close mentoring. This is particularly important in a department that focuses on individual and collaborative expression. Upon entering the department, each student will be assigned a faculty mentor who will guide the student through his/her four years at Temple. The faculty and external jurors review student work submitted to yearly screenings and as portfolios for Senior Project.

## Special Programs and Internships

The Film and Media Arts Department offers special programs for study and research in London, Rome, and Tokyo. FMA has an extensive internship program throughout the year in Philadelphia and Los Angeles. Additionally, many organizations in New York, New Jersey, Delaware and Washington, D.C. provide regular opportunities for student professional internships.

## Summary of Requirements for the Degree of Bachelor of Arts in Film and Media Arts

 The Bachelor of Arts degree may be conferred upon a student majoring in Film and Media Arts by recommendation of the faculty and upon satisfactory completion of a minimum of 124 credit hours. Students must complete:1. University requirements:

- New students starting in the 2013-2014 academic year are required to complete the General Education (GenEd) curriculum.
- All students must take a minimum of two writing-intensive courses. The specific writingintensive courses required for this major are listed below and identified with the code "WI" in the Attribute column.

2. School of Media and Communication requirements
3. At least 42 credits and a maximum of 58 credits earned in one of the Film and Media Arts sequences.
4. No more than 21 FMA credits can be transferred to the major.

The number of credits taken in the School of Media and Communication is limited to 71 credits. A student must earn a grade of " C " or better in all Film and Media Arts courses that count towards the degree.

## Maintaining Program Performance

Prerequisites to entrance and graduation from the Creative and Media Studies Thesis sequences require students to maintain a GPA of at least 3.0 calculated in all courses taken in the university. Students who have earned at least a 2.0 GPA may enter and graduate in the General sequence. Students with an average under 2.0 may not continue in the FMA program. Students may take up to 4 of the 42 FMA credits as an internship.

## FMA Foundation Courses

Film and Media Arts students will complete the following courses by the end of the sophomore year:

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :--- |
| Film \& Media Arts | 1141 | Media Arts I | 4 |  |
| Film \& Media Arts | 1142 | Media Arts II | 4 |  |
| Film \& Media Arts | 1171 | Media \& Culture | 3 |  |
| Film \& Media Arts | 1172 | Introduction to Film \& Video Analysis | 3 |  |

At the completion of these courses, students will choose to enter either the General sequence (a self designed program with no thesis required), the Media Studies Thesis, or the Creative Thesis (leading to a supervised Senior Project or a feature length screenplay).

## Creative Thesis Sequence

Mark Rosenthal, Sequence Director
215-204-3395
mark.rosenthal@temple.edu
This sequence educates prospective media makers, writers, and new technology practitioners to take creative control of their own work. It emphasizes students' initiative in creating individual or collaborative projects that serve as an expression of their personal vision and voice. Students can enter this sequence to work on their own project or as a collaborator with equal creative responsibility as screenwriter or director.

The Creative Thesis sequence builds to a two-semester senior capstone course in which each student, working with close faculty guidance, finishes an advanced film/video project and production book or a feature length screenplay. Media work must be presented publicly at the end-of-the-year program screenings.

Students may enter this sequence if they earn a 3.0 or higher in the FMA foundation courses and in all of their other FMA classes. Completion of this sequence requires Senior Project I and II or Screenwriting Master Class I and II and is based on the grade requirements listed above, along with faculty acceptance of the Senior Project application portfolio (which includes a proposal or script and a work sample) submitted in April of the student's junior year).

Creative Thesis Sequence (Production)

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Film \& Media Arts | $\begin{aligned} & 2241 \\ & 2242 \\ & 2451 \end{aligned}$ | Filmmaking <br> or <br> Videography <br> or <br> Experimental Video \& Multi-Media | 4 |  |
| Film \& Media Arts | 2396 | Screenwriting I | 4 | WI |
| Film \& Media Arts |  | Production Elective | 4 |  |
| Film \& Media Arts |  | Studies Elective | 3-4 |  |
| Film \& Media Arts | 4241 | Senior Project I | 4 |  |
| Film \& Media Arts | 4242 | Senior Project II | 4 |  |
| Film \& Media Arts |  | Advanced Writing Intensive Elective | 4 | WI |

Creative Thesis Sequence (Screenwriting)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Film \& Media Arts | 2241 | Filmmaking <br> or <br> Videography <br> or <br> Experimental Video \& Multi-Media |  |  |
|  | 2242 |  |  |  |
|  | 2451 | Screenwriting I | 4 | WI |
| Film \& Media Arts | 2396 | $2000+$ Studies Elective | $3-4$ |  |
| Film \& Media Arts |  | $3000+$ Studies Elective | $3-4$ |  |
| Film \& Media Arts |  | Screenwriting II | 4 | WI |
| Film \& Media Arts | 3396 | Screenwriting Master Class I | 4 | WI |
| Film \& Media Arts | 4397 | 4398 | Screenwriting Master Class II | 4 |
| Film \& Media Arts | WI |  |  |  |

## Media Studies Thesis Sequence

## Paul Swann, Sequence Director

215-204-1735
pswann@temple.edu
This sequence explores the role of media in American and international cultures. The critical exploration of technology, ethics, economic and legal factors, social history, and institutions highlights the processes through which media culture affects identity construction and social change. Students who choose this sequence develop critical, analytical, and organizational skills in linking media culture to such arenas as community-based organizations and museums, schools, media resource centers, and the multicultural community of independent film and video producers.

The Media Studies Thesis sequence builds to a two-semester capstone course in which each student completes a written research-based thesis on media culture criticism and/or history or a producible script for research-based media programming. Students may enter this sequence if they earn at least a 3.0 GPA in the FMA foundation courses.

Students who do not meet the above requirement may petition to enter this sequence based on a review of their written work. The petition must be received by the Media Studies sequence director no later than the seventh week of the semester prior to the semester when the student would be taking the senior thesis course.

Media Studies Thesis Sequence

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Film \& Media Arts | 2241 | Filmmaking <br> or <br> Videography <br> or <br> Experimental Video \& Multi-Media <br> or <br> Screenwriting I* | 4 |  |
|  | 2242 |  |  |  |
| Film \& Media Arts | 23961 | Theory \& Practice of Media Culture | 4 | WI |
| Film \& Media Arts |  | 2000+ level Production or Studies Elective* <br> (with faculty advisor's approval) | 4 | WI |
| Film \& Media Arts |  | 2000 or higher level Production or Studies Elective* <br> (with faculty advisor's approval) | 4 |  |
| Film \& Media Arts | 4671 | Senior Media Culture Thesis I | 4 |  |
| Film \& Media Arts | 4696 | Senior Media Culture Thesis II** | WI |  |
| Film \& Media Arts |  | 3000 or higher level Production or Studies Elective | $3-4$ |  |
|  |  |  |  |  |
| * A middle-level Writing-Intensive course is required (Film \& Media Arts 2396 would fulfill this requirement). |  |  |  |  |
| ** Serves as a required advanced Writing-Intensive course. |  |  |  |  |

## General Sequence

Allan Barber, Sequence Director
215-204-8399
allanbar@temple.edu
This sequence is designed for students who wish to have a more general approach to the major or wish to conclude the degree with something other than a year-long capstone film, feature length screenplay or a supervised written thesis. After completing the FMA core, students must take one production or writing course in either Filmmaking, Videography, Experimental Video or Screenwriting, along with one 2000-level or higher studies course. Students then design their own program with approval of their advisors, choosing a range of middle- and upper-level courses that complete a balanced approach to media study and production or a self directed emphasis in camera, lighting, sound, animation, directing, writing, producing or new media studies or production. The program requires at least one middle-level writing-intensive course, one advanced writing-intensive course, one advanced studies course and one advanced course in studies or production. Students may progress through the General sequence if they have a 2.0 cumulative average and grades of C or better in the FMA foundation courses.

General Sequence


* If 2396 is not taken, then one of the 2000+ Studies or Production electives must be Writing Intensive.


## Suggested Semester By Semester Plans

Please note that these are suggested academic plans. Depending on your situation, your academic plan may look different.

## For students following the Creative Thesis Sequence (Production):

Requirements for New Students starting in the 2013-2014 Academic Year

| Year 1 - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Film \& Media Arts | 1141 | Media Arts I | 4 |  |
| Film \& Media Arts | 1171 | Media \& Culture | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Semester Total |  |  | 15 |  |
| Year 1 - Spring |  |  |  |  |
| Film \& Media Arts | 1142 | Media Arts II | 4 |  |
| Film \& Media Arts | 1172 | Introduction to Film \& Video Analysis | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Elective |  | Elective | 3 |  |
| Semester Total |  |  | 16 |  |


| Film \& Media Arts | $\begin{aligned} & 2241 \\ & 2242 \\ & 2451 \end{aligned}$ | ```Filmmaking or Videography or Experimental Video \& Multi-Media``` | 4 |  |
| :---: | :---: | :---: | :---: | :---: |
| Film \& Media Arts |  | Studies Elective | 3-4 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Semester Total |  |  | 16-17 |  |
| Year 2 - Spring |  |  |  |  |
| Film \& Media Arts | 2396 | Screenwriting I | 4 | WI |
| Film \& Media Arts or <br> Elective |  | FMA Elective or Elective | 3-4 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| Semester Total |  |  | 16-17 |  |
| Year 3-Fall |  |  |  |  |
| Film \& Media Arts |  | Production Elective | 3-4 |  |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| Electives |  | Electives | 9 |  |
| Semester Total |  |  | 15-17 |  |
| Year 3 - Spring |  |  |  |  |
| Film \& Media Arts | 3000+ | Advanced Writing Intensive Elective | 3-4 | WI |
| Electives |  | Electives | 12 |  |
| Semester Total |  |  | 15-16 |  |
| Year 4 - Fall |  |  |  |  |
| Film \& Media Arts | 4241 | Senior Project I | 4 |  |
| Electives |  | Electives | 12 |  |
| Semester Total |  |  | 16 |  |
| Year 4 - Spring |  |  |  |  |
| Film \& Media Arts | 4242 | Senior Project II | 4 |  |
| Electives |  | Electives | 8 |  |
| Semester Total |  |  | 12 |  |
| Total Hours for Creative Thesis (Production): |  |  | 124 (minimum) |  |

## For Students following the Creative Thesis Sequence (Screenwriting):

Requirements for New Students starting in the 2013-2014 Academic Year

| Year 1 - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Film \& Media Arts | 1141 | Media Arts I | 4 |  |
| Film \& Media Arts | 1171 | Media \& Culture | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Year 1 - Spring |  |  |  |  |
| Film \& Media Arts | 1142 | Media Arts II | 4 |  |
| Film \& Media Arts | 1172 | Introduction to Film \& Video Analysis | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Elective |  | Elective | 3 |  |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Year 2-Fall |  |  |  |  |
| Film \& Media Arts | 2396 | Screenwriting I | 4 | WI |
| Film \& Media Arts | 2000+ | Studies Elective | 3-4 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Semester Total |  |  | 16-17 |  |
|  |  |  |  |  |
| Year 2-Spring |  |  |  |  |
| Film \& Media Arts | $\begin{array}{r} 2241 \\ 2242 \\ 2451 \\ \hline \end{array}$ | Filmmaking <br> or <br> Videography <br> or <br> Experimental Video \& Multi-Media | 4 |  |
| Film \& Media Arts |  | Elective | 3 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Year 3-Fall |  |  |  |  |
| Film \& Media Arts | 3396 | Screenwriting II | 4 | WI |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| Electives |  | Electives | 8 |  |
| Semester Total |  |  | 15-16 |  |
|  |  |  |  |  |
| Year 3 - Spring |  |  |  |  |
| Film \& Media Arts | 3000+ | Studies Elective | 3-4 |  |
| Electives |  | Electives | 11 |  |
| Semester Total |  |  | 14-15 |  |


| Year 4 - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Film \& Media Arts | 4397 | Screenwriting Master Class I | 4 | WI |
| Electives |  | Electives | 11 |  |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Year 4 - Spring |  |  |  |  |
| Film \& Media Arts | 4398 | Screenwriting Master Class II | 4 | WI |
| Electives |  | Electives | 11 |  |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Total Hours for Creative Thesis (Screenwriting): |  |  | 124 (minimum) |  |

For Students following the General Sequence:

## Requirements for New Students starting in the 2013-2014 Academic Year

| Year 1 - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Film \& Media Arts | 1141 | Media Arts I | 4 |  |
| Film \& Media Arts | 1171 | Media \& Culture | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Year 1 - Spring |  |  |  |  |
| Film \& Media Arts | 1142 | Media Arts II | 4 |  |
| Film \& Media Arts | 1172 | Introduction to Film \& Video Analysis | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Elective |  | Elective | 3 |  |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Year 2-Fall |  |  |  |  |
| Film \& Media Arts | $\begin{array}{r} 2241 \\ 2242 \\ 2451 \\ 2396 \end{array}$ | Filmmaking <br> or <br> Videography <br> or <br> Experimental Video \& Multi-Media <br> or <br> Screenwriting I | 4 | WI |
| Film \& Media Arts | 2000+ | Studies Elective | 3-4 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Semester Total |  |  | 16-17 |  |
|  |  |  |  |  |
| Year 2 - Spring |  |  |  |  |
| Film \& Media Arts | 2000+ | Studies or Production Elective | 3-4 |  |
| Film \& Media Arts | 2000+ | Studies or Production Elective | 3-4 | WI (if FMA 2396 not taken) |



## For Students following the Media Studies Sequence

Requirements for New Students starting in the 2013-2014 Academic Year


| Film \& Media Arts | $\begin{aligned} & 2241 \\ & 2242 \\ & 2451 \\ & 2396 \\ & \hline \end{aligned}$ | ```Filmmaking or Videography or Experimental Video \& Multi-Media or Screenwriting I``` | 4 | WI |
| :---: | :---: | :---: | :---: | :---: |
| Film \& Media Arts | 2000+ | Elective | 3-4 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Semester Total |  |  | 16-17 |  |
|  |  |  |  |  |
| Year 2 - Spring |  |  |  |  |
| Film \& Media Arts | 3671 | Theory \& Practice of Media Culture | 4 |  |
| Film \& Media Arts |  | Elective | 3-4 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| Semester Total |  |  | 16-17 |  |
|  |  |  |  |  |
| Year 3-Fall |  |  |  |  |
| Film \& Media Arts | 2000+ | Studies or Production Elective | 3-4 | WI (if FMA 2396 not taken) |
| Film \& Media Arts | 2000+ | Studies or Production Elective | 3-4 |  |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| Electives |  | Electives | 6 |  |
| Semester Total |  |  | 15-17 |  |
|  |  |  |  |  |
| Year 3 - Spring |  |  |  |  |
| Film \& Media Arts | 3000+ | Production or Studies Elective | 3-4 |  |
| Electives |  | Electives | 12 |  |
| Semester Total |  |  | 15-16 |  |
|  |  |  |  |  |
| Year 4 - Fall |  |  |  |  |
| Film \& Media Arts | 4671 | Senior Media Culture Thesis I | 4 |  |
| Electives |  | Electives | 12 |  |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Year 4 - Spring |  |  |  |  |
| Film \& Media Arts | 4696 | Senior Media Culture Thesis II | 4 | WI |
| Electives |  | Electives | 9 |  |
| Semester Total |  |  | 13 |  |
|  |  |  |  |  |
| Total Hours for Media Studies Sequence: |  |  | 124 (minimum) |  |

## Theater

Robert Hedley, MFA, Chair

Tomlinson Theater 201
215-204-8413
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Peter Reynolds, MFA, Director of Theater Undergraduate Affairs/Assistant Chair
Tomlinson Theater 210B
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The Theater Department is accredited by the National Association of Schools of Theatre (NAST) and is a member of the University Resident Theater Association (U/RTA). These affiliations characterize it as amongst an elite group of highly-recognized Theater Programs. The Theater Department was recently ranked by U.S. News \& World Report among the top 25 theater programs in the nation.

As a theater department in the heart of a culturally-rich urban setting, Temple University's Theater Department is immersed in and among some of the most important regional and national theaters in the country. This bountiful artistic environment benefits our undergraduate students. Many of our faculty and staff are also working industry professionals, several of whom have distinguished national career profiles. Year after year, an impressive number of Temple Theater graduates are actively involved at every level in nearly every major theater endeavor produced in the Philadelphia metropolitan area.

The undergraduate curriculum in theater is designed to provide the highest quality professional training within a rigorous comprehensive liberal arts setting. Through the study and practice of the arts, craft and scholarship of theater, we aspire to instill in our students a passion for artistic leadership, creativity, collaboration, communication and lifelong learning. Characterized by an unswerving commitment to professional excellence, academic depth and breadth, community involvement, and international engagement, our program strives to be a vital cultural force in the diverse community of Temple University, the Philadelphia region, the nation, and the world.

With a strong pedagogical emphasis on experiential learning, students are challenged to learn and create in a wide variety of classroom, studio, and production situations. In addition, Philadelphia has a storied history as one of the top three centers for professional theater in the country, providing a host of opportunities for student observation and engagement during their time here.

The objective of the undergraduate curriculum is to develop within students the creative, cognitive, communication and entrepreneurial skills that will prepare them as citizens of the world and artists contributing to the development of the future of theater in the 21st century. We hope to inspire our students to fulfill their creative potential within an ever more interdisciplinary artistic environment that is responsive to tomorrow's marketplace and the future needs of our multiple communities.

The undergraduate curriculum is intended to combine outstanding academic liberal arts classes with intensive theater craft and studio class studies. The department requires that all undergraduate students take a foundation of broad-based theater classes and also have the opportunity for more specialized theater studies as they progress through the program. The department main season production program serves as the hub of our pedagogy and is a natural and important extension of classroom work. Students are encouraged to participate in the extensive department production programs on some level each semester, ranging from performance opportunities, to design/technical production work, stage management and running crew, as well as dramaturgical research, box office and front-of-the-house patron management.

In summary, the successful theater student graduates from our program with excellent communication and collaboration skills, a broad-based and substantive liberal arts background, developed abilities within the discipline of theater, a peerless commitment to achieving and appreciating artistic excellence, and a passion for life-long learning that will enable success in a wide variety of future endeavors. Our alumni are not only successful artists in theater and all of the entertainment industries, but they are also leaders in many other fields. We strive to graduate well-educated and enlightened "Citizen Artists" who possess the creative capacity and commitment to make a difference in the quality of community life regardless of their chosen field of endeavor.

## Faculty Advising and Mentoring

Students in Theater and Film and Media Arts are advised by professional academic advisors and faculty advisors. Students make advising appointments in the Center for the Arts Academic Advising Office located on the second floor of the Tyler building, Suite 212. Consult the Directors of Undergraduate Affairs in Film and Media Arts or Theater for assignment to the appropriate advisor.

Academic advisors attempt to avoid errors when advising students about their program requirements, but schools and colleges cannot assume liability for errors in advising. Therefore, students must assume primary responsibility for knowing the requirements for their degree and for acquiring current information about their academic status.

Most students will be eligible to register for classes online via Self Service Banner through the TUportal. However, all students should meet with an advisor prior to the eligible registration period.

Students preparing to graduate must file the necessary paperwork one semester prior to the graduation date. At that time, an appointment should be made with an academic advisor to complete a graduation review and application for graduation.

## Summary of Requirements for the Degree of Bachelor of Arts in Theater

The Bachelor of Arts degree in Theater may be conferred upon a student by recommendation of the faculty and by satisfactory completion of a minimum of 124 credit hours. Students must complete:

- University requirements: All students starting in the 2013-2014 academic year and beyond are required to complete the university's General Education (GenEd) curriculum.
- All students must take a minimum of two writing-intensive courses. The specific writingintensive courses required for this major are listed below and identified with the code "WI" in the Attribute column.
- Theater Department foundation courses with a grade of C or better in each course
- Completion of a minimum of 53 semester hours outside of the School of Media and Communication.
- No more than 20 credits of work in the major field may be transferred from another institution. Students must complete at least 16 semester hours in Theater courses at Temple University.
- All Theater majors must take placement tests in English and mathematics. If a student places into English 0701 or Mathematics 0701 or 0702, these courses must be completed prior to taking the General Education requirement for English and Quantitative Literacy.


## Theater Foundation Courses

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :---: |
| Theater | 1003 | Creativity: Basic | 3 |  |
| Theater | 1096 | Introduction to Theater Process | 3 | WI |
| Theater | 1231 | Acting I | 3 |  |
| Theater | 1411 | Welcome Backstage | 3 |  |
| Theater | 2411 | Introduction to Design | 3 |  |
| Theater | 3001 | History of the Theater I | 3 |  |
| Theater | 3002 | History of the Theater II | 3 |  |
| Theater | 4097 | World of the Play | 3 | WI |
| Theater | 1087 | Production Practicum (1 s.h. each semester the student is <br> enrolled as a major.) | Up to 8 |  |
| Art History | Elective | One course (may also satisfy the University General Education Arts <br> requirement.) | 3 |  |
| Required <br> Elective | One course in non-dramatic literature | 3 |  |  |
| Required |  |  |  |  |
| Elective |  |  |  |  |
| Concentration |  |  |  |  |

Note: *The concentration may include the required course in art history or the required course in non-dramatic literature. It may not include English 0802, 0812, 0902, 1002, 1012 or 1022.

Theater majors are advised to select courses that will best prepare them to succeed in the future. Toward this end, students may select courses according to their particular interests through the Theater Studies Sequence or choose from five Theater Concentrations: Acting, Design, Directing, Musical Theater, or Theater Education.

## Theater Studies Sequence

The Theater Studies Sequence prepares students to enter graduate programs or pursue careers in theater, other entertainment industries, or other fields. It is within this sequence that entrepreneurial students, the student who wishes to explore future interdisciplinary linkages, or those most interested in playwriting, might best fit. The student who follows the Theater Studies Sequence may select any courses offered by the department as long as required prerequisites are completed with applicable proficiencies as indicated in some courses, by a grade of B or better.

Theater Studies Sequence students must complete the Theater Foundation Courses. However, they are encouraged to meet with a Theater Department faculty member to discuss their goals and what selection of courses might best prepare them to achieve their professional aspirations after graduation.

## Acting Concentration

The Acting Concentration prepares students to enter graduate acting programs or pursue professional careers in theater, television and film. The coursework provides the highest caliber of training possible within the context of a liberal arts education, so students can thrive either in a graduate conservatory program or in the profession. Through intensive and varied classes in acting, combined with experiential work in minimalist to full-scale productions, students develop the skills needed for creative communication and artistic leadership, tools they will need to pursue their professional goals.

## Notes:

1. In order for the student to progress to the next level of study, prerequisites for admission to some classes are required.
2. In order for the student to take Acting courses beyond Theater 2261 (Acting II), qualifying through an audition process is required. Therefore, a student is not officially a part of the Acting Concentration until successfully advancing from Acting II to Acting III. At this time, the student may declare the Acting Concentration in the Theater Department or through SMC Student Affairs.
3. Some Voice, Movement, Speech, and Acting classes may be repeated for credit.
4. Performance courses are available to those students electing the Acting Concentration and to other students in the department who meet the prerequisite requirements.
5. Certification officials from the Society of Fight Directors are invited to the final projects of Swordplay for the Actor classes, and some students receive certification in various combat specialties.

## Required Courses in addition to the Foundation Courses:

| Subject | Course | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Theater | 2221 | Voice for the Actor | 3 |  |
| Theater | 2231 | Speech for the Actor | 3 |  |
| Theater | 2241 | Basic Movement | 3 |  |
| Theater | 2261 | Acting II | 3 |  |
| Theater | 3279 | Acting III | 3 |  |
| Theater | 4212 | Acting IV | 3 |  |
| Theater | 4222 | Acting V | 3 |  |

Plus an additional four required electives from the following list of Acting Concentration courses:

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :--- |
| Theater | 1202 | Fundamentals of Voice \& Movement | 3 |  |
| Theater | 2251 | Dance for the Actor | 3 |  |
| Theater | 2252 | Alexander Technique | 3 |  |
| Theater | 2271 | Dialects for the Actor | 3 |  |
| Theater | 3132 | Musical Theater Voice \& Acting | 3 |  |
| Theater | 3210 | Theater Workshop | 3 |  |
| Theater | 3220 | Theater Workshop | 3 |  |
| Theater | 3241 | Combat \& Stunts for the Actor | 3 |  |
| Theater | 3278 | Acting for Film \& TV | 3 |  |
| Theater | 3301 | Introduction to the Director's Art | 3 |  |
| Theater | 4241 | Swordplay for the Actor | 3 |  |
| Theater | 4299 | Thesis for Acting Emphasis | 4 |  |

For students who transfer from other departments, schools and universities, there are several alternative routes to fulfill the Acting Concentration that can be discussed with your Theater advisor and/or the head of the Acting Program.

## Design/Technology Concentration

The Design/Technology Concentration prepares students to enter graduate Design or Technology Programs or pursue professional careers in theater, television and film. The coursework provides the highest caliber of training possibilities within the context of a liberal arts education, so students can thrive either in a graduate conservatory program or in the profession. Through intensive and varied classes in design and technology, combined with experiential hands-on work with creative teams for full-scale and minimalist productions, students develop the skills needed for creative communication and artistic leadership - tools they will need to pursue their professional goals.

Note: In order for the student to progress to the next level of study, prerequisites for admission to some classes are required.

## Required Courses in addition to the Foundation Courses:

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Theater | 2711 | Drawing \& Rendering Techniques I | 3 |  |
| Theater | 2712 | Drawing \& Rendering Techniques II | 3 |  |
| Theater | 3611 | Visual History I | 3 |  |
| Theater | 3612 | Visual History II | 3 |  |
| Theater | 4711 | History of Modern Scenic Design | 3 |  |
| Theater | 2511 | Lighting for the Theater | 3 |  |
| Theater | 2721 | Scene Design I | 4 |  |
| Theater | 2612 | Costume Design I | 3 |  |
| Theater | 3191 | Research | 1 |  |

## An additional 9 credits must be taken from the following courses:

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Theater | 2441 | Stage Management I | 3 |  |
| Theater | 2611 | Make-Up | 3 |  |
| Theater | 4511 | Creativity in Lighting | 3 |  |
| Theater | 2421 | Creative Sound Technique | 3 |  |
| Theater | 3421 | Technical Direction for the Theater | 3 |  |
| Theater | 2442 | Propcraft | 3 |  |
| Theater | 2713 | Design Drafting | 3 |  |
| Theater | 3431 | Scene Painting I | 3 |  |
| Theater | 3432 | Scene Painting II | 3 |  |
| Theater | 3621 | Costume Production | 3 |  |
| Theater | 3622 | Draping \& Flat Pattern Drafting | 3 |  |
| Theater | 4582 | Lighting Design | 3 |  |
| Theater | 4611 | Costume Design II | 4 |  |
| Theater | 4782 | Scene Design | 3 |  |

Note: The concentration must total a minimum of 35 semester hours beyond the Foundation Courses.

## Directing Concentration

The Directing Concentration prepares students to enter graduate directing programs or pursue professional careers in theater, television and film. The coursework provides the highest caliber of training possible within the context of a liberal arts education, so students can thrive either in a graduate conservatory program or in the profession. Through intensive and varied classes combined with experiential work in minimalist to full-scale productions, students develop the skills needed for creative communication and artistic leadership, tools they will need to pursue their professional goals.

## Notes:

In order for the student to progress to the next level of study, prerequisites for admission to some classes are required.

The Directing Concentration culminates with a Senior Research class production project to be proposed and approved in consultation with the Head of Directing.

Additional Courses Required for the Directing Concentration:

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Theater | 4511 | Creativity in Lighting | 3 |  |
| Theater | 1202 <br> or <br> 2241 | Fundamentals of Voice \& Movement <br> or <br> Basic Movement | 3 |  |
| Theater | 2261 <br> or <br> 3132 | Acting II <br> or <br> Musical Theater Voice \& Acting | 3 |  |
| Theater | 3241 | Combat \& Stunts for the Actor | 3 |  |
| Theater | 2441 | Stage Management I | 3 |  |
| Theater | 3051 | Modern Directions | 3 |  |
| Theater | 3301 | Introduction to the Director's Art | 3 |  |
| Theater | 4301 | Advanced Directing | 4 |  |
| Theater | 3191 | Research | 2 |  |
| Theater | 4711 | History of Modern Scenic Design <br> or <br> or | or <br> Scene Design I <br> or | or <br> Costume Design I |
| Theater | 4003 | Production Dramaturgy | 4 |  |

## Musical Theater Concentration

The Musical Theater Concentration prepares students to pursue professional careers in musical theater, theater, television and film, or to pursue graduate study. The coursework provides the highest caliber of training possible within the context of a liberal arts education, so students can thrive either in a graduate conservatory program or in the profession. Through intensive and varied classes combined with experiential work in minimalist to full-scale productions, students develop the skills needed for creative communication and artistic leadership, tools they will need to pursue their professional goals.

Notes:

1. In order for the student to progress to the next level of study, prerequisites for admission to some classes are required.
2. The director of Musical Theater, Dance and/or Movement Professors, and a representative from the Acting Program audition interested incoming theater students in the spring semester of the school year prior to the desired fall admission semester. Students must be selected through this audition process to gain entrance into the Musical Theater Concentration. Selection through this process does not guarantee admission to Temple University. The audition is rigorous and includes singing, dancing and acting.
3. The Musical Theater Concentration culminates in Musical Theater: Dress Rehearsal (Theater 4133), an intensive audition and performance seminar specially designed to prepare students for the rigorous demands of auditioning for and performing in professional Musical Theater.
4. Throughout the Musical Theater Concentration student's four years of study, workshops and seminars are made available which feature Musical Theater professionals from New York City and Philadelphia.
5. To support the Musical Theater Concentration, Temple Theaters will produce an annual musical, either in the fall or spring semester. A small musical or cabaret featuring Musical Theater Concentration students will be produced in the alternate semester.

Additional Courses Required for the Musical Theater Concentration:

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Theater | 2131 | Music Theory/Sightsinging: Basic | 2 |  |
| Theater | 2231 | Speech for the Actor | 3 |  |
| Theater | 2261 | Acting II | 3 |  |
| Theater | 3132 | Musical Theater Voice \& Acting | 3 |  |
| Theater | 3012 | American Musical Theater | 3 |  |
| Theater | 3279 | Acting III | 3 |  |
| Theater | 4131 | Musical Theater Scene Study | 3 |  |
| Theater | 4132 | Senior Cabaret Workshop | 3 |  |
| Theater | 4133 | Musical Theater: Dress Rehearsal | 3 |  |
| Theater | 2101 | Ballet I for Musical Theater | 1 |  |
| Theater | 2121 | Ballet II for Musical Theater | 1 |  |
| Theater | 3101 | Jazz I for Musical Theater | 1 |  |
| Theater | 3121 | Jazz II for Musical Theater | 1 |  |
| Theater | 4101 | Tap for Musical Theater | 1 |  |
| Theater | 4121 | Musical Theater Dance Techniques | 1 |  |

Plus, an additional 8 credits in voice lessons must be taken from the following courses:

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| *Music $^{\text {M }}$ | 1256 | Private Voice for Non-Music Majors | 1 |  |
| *Music $^{\text {*Music }}$ | 1257 | Private Voice for Non-Music Majors | 1 |  |
| *Music | 1259 | Private Voice for Non-Music Majors | 1 |  |

*For tuition and fee rates associated with the Boyer College of Music and Dance, please visit: www.temple.edu/bursar/about/tuitionrates.htm.

## Theater Education Concentration

Note: New students are not being admitted into this concentration at this time.

The Theater Education Concentration prepares students to pursue professional careers in theater, education, or to pursue graduate study. Many theater students begin undergraduate training with dreams of becoming a famous actor or performer. Others are drawn to the technical side of theater: they are budding designers, stage managers, props artisans, etc. Another important group of young people are promising educators. These young artists are drawn to children's theater, social issues theater and educational programs. Their dreams include working in the Education Departments of major regional theaters, reaching people of all ages as teaching artists, collaborating with one of the countless outstanding youth theater organizations across the country, teaching in high schools, junior highs, elementary schools, starting their own youth theaters or social issues theaters, heading up programs at recreation centers, camps or private schools and many other occupations available for motivated theater artists.

Additional Courses Required for the Theater Education Concentration:

| Subject | Course $\#$ | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Theater | 2612 | Costume Design I | 3 |  |
| Theater | 2511 | Lighting for the Theater | 3 |  |
| Theater | 2721 | Scene Design I | 4 |  |
| Theater | 2441 | Stage Management I | 3 |  |
| Theater | 3301 | Introduction to the Director's Art | 3 |  |
| Theater | 2261 | Acting II | 3 |  |
| Theater | 3011 | Methods of Teaching Artistry | 3 |  |
| Theater | 3013 | Methods of Teaching Theater | 3 |  |
| Theater | 3085 | Practice Teaching in Theater I | 3 |  |
| Theater | 3086 | Practice Teaching in Theater II | 3 |  |
| Education | 1322 | The Developing Individual Across the Lifespan | 3 |  |
| Education | 2205 | Curriculum Instruction \& Technology in Education | 3 |  |
| Education | 2306 | Assessment and Evaluation | 3 |  |
| Educational Psychology | $4531 *$ | Learning Theories in Education | 3 |  |

*pending approval

## Requirements for a Minor in Theater

A 20 credit-hour minor is available to undergraduate students in other departments and colleges. The minor is intended to give some broad introduction in theater followed by a small amount of specialization. A notation on the transcript will indicate successful completion of the minor.

## STUDENTS ELECTING THE THEATER MINOR MAY APPLY UP TO SIX TRANSFER CREDITS TOWARD THE TWENTY CREDITS REQUIRED FOR THE MINOR. THEATER 1087 IS NOT AVAILABLE AS AN EQUIVALENCY FOR ANY ARTICULATED CREDIT IN TRANSFER. Students must receive the permission of their

 advisor before starting in this program. Once the minor has been approved, students must follow the academic rules of the Department of Theater for all Theater courses. Minor credit is not given for Theater grades below C. Students must maintain at least a 2.0 GPA in the minor. Students with theater averages under 2.0 GPA for more than two semesters will be dropped from the program. Students with averages under 2.0 GPA may not begin the program. Studentsminoring in Theater should collaborate with a Theater Department Advisor in the selection of course work.

## Requirements for the Minor in Theater are as follows:

## Required Courses:

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Theater | 1002 | Theater: The Collaborative Art | 3 |  |
| Theater | 4097 | World of the Play | 3 | WI |
| Theater | 3051 | Modern Directions | 3 |  |
| Theater | 1087 | Production Practicum - (2 semesters required) | $1 / 1$ |  |
| Theater | Electives | 3 courses from either or a combination of the selections below | 9 |  |

## Additional Courses in Theater History and Literature:

$\left.\begin{array}{|l|l|c|c|}\hline \text { Subject } & \text { Course } \# & \text { Course Title } & \text { Hours } \\ \text { Attribute } \\ \hline \text { Theater } & 3096 & \text { Classical Tradition } & 3 \\ \text { WI } \\ \hline \text { Theater } & 3097 & \text { Romantic Tradition } & 3 \\ \hline \text { WI } \\ \hline \text { Theater } & 3012 & \text { American Musical Theater } & 3 \\ \hline \text { Theater } & 3070 & \text { Seminar in Drama } & 3 \\ \hline \text { Theater } & 4711 & \text { History of Modern Scenic Design } & 3 \\ \hline \text { Theater } & 3611 & \text { Visual History I } & 3 \\ \hline \text { Theater } & 3057 & \text { Queer Theater } & 3\end{array}\right]$

## Additional Courses in Theater Performance:

| Subject | Course $\#$ | Course Title | Hours | Attribute |
| :--- | :--- | :---: | :---: | :---: |
| Theater | 1231 | Acting I | 3 |  |
| Theater | 2261 | Acting II | 3 |  |
| Theater | 2262 | Improvisation | 3 |  |
| Theater | 1008 | Poetry as Performance | 3 |  |
| Theater | 1003 | Creativity: Basic | 3 |  |
| Theater | 3132 | Musical Theater Voice \& Acting | 3 |  |
| Theater | 2221 | Voice for the Actor | 3 |  |
| Theater | 2241 | Basic Movement | 3 |  |
| Theater | 2231 | Speech for the Actor | 3 |  |
| Theater | 2251 | Movement for the Actor | 3 |  |
| Theater | 1232 | Jacques Lecoq Technique Part 1 | 3 |  |

Additional Courses in Theater Design and Technology:

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Theater | 1411 | Welcome Backstage | 3 |  |
| Theater | 2511 | Lighting for the Theater | 3 |  |
| Theater | 2612 | Costume Design I | 3 |  |


| Theater | 2411 | Introduction to Design | 3 |  |
| :--- | :--- | :--- | :--- | :--- |
| Theater | 4582 | Lighting Design | 3 |  |
| Theater | 4782 | Scene Design | 3 |  |

Additional Courses in Theater Producing/Directing:

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :---: | :---: | :---: |
| Theater | 1411 | Welcome Backstage | 3 |  |
| Theater | 1231 | Acting I | 3 |  |
| Theater | 2441 | Stage Management I | 3 |  |
| Theater | 3301 | Introduction to the Director's Art | 3 |  |

## Suggested Semester By Semester Plans

Please note that these are suggested academic plans. Depending on your situation, your academic plan may look different.

## Bachelor of Arts in Theater (General)

Requirements for New Students starting in the 2013-2014 Academic Year

| Year 1 - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Theater | 1003 | Creativity: Basic | 3 |  |
| Theater | 1411 | Welcome Backstage | 3 |  |
| Theater | 1087 | Production Practicum | 1 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Semester Total |  |  | 15 |  |
| Year 1 - Spring |  |  |  |  |
| Theater | 1096 | Introduction to Theater Process | 3 | WI |
| Theater | 1231 | Acting I | 3 |  |
| Theater | 1087 | Production Practicum | 1 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Semester Total |  |  | 16 |  |
| Year 2 - Fall |  |  |  |  |
| Theater | 2411 | Introduction to Design | 3 |  |
| Theater | 1087 | Production Practicum | 1 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Semester Total |  |  | 16 |  |



## Bachelor of Arts in Theater (Acting Concentration)

Requirements for New Students starting in the 2013-2014 Academic Year

| Year 1-Fall | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Subject | Acting I | 3 |  |  |
| Theater | 1231 | loice for the Actor | 3 |  |
| Theater | 2221 | Creativity: Basic | 3 |  |
| Theater | 1003 | Production Practicum | 1 |  |
| Theater | 1087 | Analytical Reading \& Writing | 4 | GW |
| English | 0802,0812 or 0902 | And | 3 | GG |
| GenEd | $08 \times x$ or 09xx | Global/World Society |  |  |


| Semester Total |  |  | 17 |  |
| :---: | :---: | :---: | :---: | :---: |
| Year 1 - Spring |  |  |  |  |
| Theater | 2261 | Acting II | 3 |  |
| Theater | 2231 | Speech for the Actor | 3 |  |
| Theater | 1096 | Introduction to Theater Process | 3 | WI |
| Theater | 1087 | Production Practicum | 1 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Semester Total |  |  | 17 |  |
| Year 2 - Fall |  |  |  |  |
| Theater | 2241 | Basic Movement | 3 |  |
| Theater |  | Theater Concentration Elective | 3 |  |
| Theater | 1411 | Welcome Backstage | 3 |  |
| Theater | 1087 | Production Practicum | 1 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Semester Total |  |  | 16 |  |
| Year 2 - Spring |  |  |  |  |
| Theater | 3279 | Acting III | 3 |  |
| Theater | 2411 | Introduction to Design | 3 |  |
| Theater | 1087 | Production Practicum | 1 |  |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| Semester Total |  |  | 16-17 |  |
| Year 3 - Fall |  |  |  |  |
| Theater | 4212 | Acting IV | 3 |  |
| Theater |  | Theater Concentration Elective | 3 |  |
| Theater | 3001 | History of the Theater I | 3 |  |
| Theater | 1087 | Production Practicum | 1 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Semester Total |  |  | 16 |  |
| Year 3 - Spring |  |  |  |  |
| Theater |  | Theater Concentration Elective | 3 |  |
| Theater |  | Theater Concentration Elective | 3 |  |
| Theater | 3002 | History of the Theater II | 3 |  |
| Theater | 1087 | Production Practicum | 1 |  |
| Elective |  | Non-Dramatic Literature Class | 3 |  |
| Various |  | Exploratory Concentration Class | 3 |  |
| Semester Total |  |  | 16 |  |
| Year 4 - Fall |  |  |  |  |
| Theater | 4222 | Acting V | 3 |  |


| Theater | 4097 | World of the Play | 3 | WI |
| :--- | :--- | :--- | :---: | :---: |
| Theater | 1087 | Production Practicum | 1 |  |
| Art History |  | Art History Class (if not taken as GA) | 3 |  |
| Various | Exploratory Concentration Class | 3 |  |  |
| Semester Total |  | $\mathbf{1 3}$ |  |  |
|  |  |  |  |  |
| Year 4 - Spring | 1087 |  | Production Practicum |  |
| Theater | Exploratory Concentration Class | 3 |  |  |
| Various |  | 9 |  |  |
| Electives |  | $\mathbf{1 3}$ |  |  |
| Semester Total |  |  |  |  |
|  |  |  |  |  |
| Total Hours for B.A. In Theater (Acting): |  |  |  |  |

## Bachelor of Arts in Theater (Design/Technology Concentration)

Requirements for New Students starting in the 2013-2014 Academic Year

| Year 1 - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Theater | 1087 | Production Practicum | 1 |  |
| Theater | 1003 | Creativity: Basic | 3 |  |
| Theater | 1411 | Welcome Backstage | 3 |  |
| Theater | 1231 | Acting I | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Semester Total |  |  | 17 |  |
| Year 1 - Spring |  |  |  |  |
| Theater | 1087 | Production Practicum | 1 |  |
| Theater | 1096 | Introduction to Theater Process | 3 | WI |
| Theater | 2411 | Introduction to Design | 3 |  |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Semester Total |  |  | 17 |  |
|  |  |  |  |  |
| Year 2-Fall |  |  |  |  |
| Theater | 1087 | Production Practicum | 1 |  |
| Theater | 2711 | Drawing and Rendering Techniques I | 3 |  |
| Theater |  | Theater Concentration Elective | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | Arts | 3 | GA |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Year 2 - Spring |  |  |  |  |
| Theater | 1087 | Production Practicum | 1 |  |


| Theater | 2712 | Drawing and Rendering Techniques II | 3 |  |
| :--- | :--- | :--- | :---: | :---: |
| Theater | 2721 | Scene Design I | 4 |  |
| Elective |  | Non-Dramatic Literature Class | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Semester Total |  | $\mathbf{1 7}$ |  |  |

Year 3 - Fall

| Theater | 1087 | Production Practicum | 1 |  |
| :--- | :--- | :--- | :---: | :---: |
| Theater | 3001 | History of the Theater I | 3 |  |
| Theater | 3611 | Visual History I | 3 |  |
| Theater | 4711 | History of Modern Scenic Design | 3 |  |
| GenEd | $08 x x$ or 09xx | U.S. Society | 3 | GU |
| Various |  | Exploratory Concentration Class | 3 |  |
| Semester Total |  | $\mathbf{1 6}$ |  |  |

Year 3 - Spring

| Theater | 1087 | Production Practicum | 1 |  |
| :--- | :--- | :--- | :---: | :---: |
| Theater | 3612 | Visual History II | 3 |  |
| Theater | 3002 | History of the Theater II | 3 |  |
| Theater |  | Theater Concentration Elective | 3 |  |
| Art History |  | Art History Class (if not taken as GA) | 3 |  |
| Various | Exploratory Concentration Class | 3 |  |  |
| Semester Total |  |  | $\mathbf{1 6}$ |  |

Year 4 - Fall

| Theater | 1087 | Production Practicum | 1 |  |
| :--- | :--- | :--- | :---: | :---: |
| Theater | 2511 | Lighting for the Theater | 3 |  |
| Theater | 2612 | Costume Design I | 3 |  |
| Theater | 3191 | Research | 3 |  |
| Theater |  | Theater Concentration Elective | 3 |  |
| Semester Total |  | $\mathbf{1 3}$ |  |  |


| Year 4 - Spring |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Theater | 1087 | Production Practicum | 1 |  |
| Theater | 4097 | World of the Play | 3 | WI |
| Various |  | Exploratory Concentration Class | 3 |  |
| Electives |  |  | 5 |  |
| Semester Total |  |  | 12 |  |
|  |  |  |  |  |
| Total Hours for B.A. In Theater (Design/Technology): |  |  | 124 (minimum) |  |

## Bachelor of Arts in Theater (Directing)

Requirements for New Students starting in the 2013-2014 Academic Year

| Year 1 - Fall | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Subject | 1087 | Production Practicum | 1 |  |
| Theater |  |  |  |  |


| Theater | 1003 | Creativity: Basic | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Theater | 1231 | Acting I | 3 |  |
| Theater | 1411 | Welcome Backstage | 3 |  |
| Theater | $\begin{array}{\|c} \hline 1202 \\ \text { or } \\ 2241 \\ \hline \end{array}$ | Fundamentals of Voice \& Movement or <br> Basic Movement | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Semester Total |  |  | 17 |  |
| Year 1 - Spring |  |  |  |  |
| Theater | 1087 | Production Practicum | 1 |  |
| Theater | 1096 | Introduction to Theater Process | 3 | WI |
| Theater | 2411 | Introduction to Design | 3 |  |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Semester Total |  |  | 17 |  |

Year 2 - Fall

| Theater | 1087 | Production Practicum | 1 |  |
| :--- | :--- | :--- | :---: | :---: |
| Theater | 2441 | Stage Management I | 3 |  |
| Theater | 2261 <br> or <br> 3132 | Acting II <br> or <br> Musical Theater Voice \& Acting | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | $08 \times x$ or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Semester Total |  | $\mathbf{1 6}$ |  |  |

Year 2 - Spring

| Theater | 1087 | Production Practicum | 1 |  |
| :--- | :--- | :--- | :---: | :---: |
| Theater | 3241 | Combat \& Stunts for the Actor | 3 |  |
| Elective |  | Non-Dramatic Literature Class | 3 |  |
| GenEd | $08 x x$ or 09xx | Art | $3-4$ | GA |
| GenEd | $08 x x$ or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Semester Total |  | $\mathbf{1 6 - 1 7}$ |  |  |

Year 3-Fall

| Theater | 1087 | Production Practicum | 1 |  |
| :--- | :--- | :--- | :---: | :---: |
| Theater | 3001 | History of the Theater I | 3 |  |
| Theater | 4511 | Creativity in Lighting | 3 |  |
| Theater | 3301 | Introduction to the Director's Art | 3 |  |
| Theater | 3051 | Modern Directions | 3 |  |
| Art History |  | Art History Class (if not taken as GA) | 3 |  |
| Semester Total |  | $\mathbf{1 6}$ |  |  |
|  |  |  |  |  |
| Year 3 Spring |  |  |  |  |
| Theater | 1087 | Production Practicum | 1 |  |


| Theater | 3002 | History of the Theater II | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Theater | $\begin{aligned} & 2612 \\ & \text { or } \\ & 2721 \\ & \text { or } \\ & 4711 \\ & \hline \end{aligned}$ | ```Costume Design I or Scene Design I or History of Modern Scenic Design``` | $3$ <br> 4 $3$ |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Various |  | Exploratory Concentration Class | 3 |  |
| Elective |  | Elective | 3 |  |
| Semester Total |  |  | 16-17 |  |
| Year 4 - Fall |  |  |  |  |
| Theater | 1087 | Production Practicum | 1 |  |
| Theater | 4301 | Advanced Directing | 4 |  |
| Theater | 3191 | Research | 2 |  |
| Various |  | Exploratory Concentration Class | 3 |  |
| Elective |  | Elective | 3 |  |
| Semester Total |  |  | 13 |  |
| Year 4 - Spring |  |  |  |  |
| Theater | 1087 | Production Practicum | 1 |  |
| Theater | 4097 | World of the Play | 3 | WI |
| Theater | 4003 | Production Dramaturgy | 3 |  |
| Various |  | Exploratory Concentration Class | 3 |  |
| Elective |  | Elective | 3 |  |
| Semester Total |  |  | 13 |  |
|  |  |  |  |  |
| Total Hours for B.A. In Theater (Directing): |  |  | 124 (minimum) |  |

## Bachelor of Arts in Theater (Musical Theater)

Requirements for New Students starting in the 2013-2014 Academic Year

| Year 1-Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Theater | 1087 | Production Practicum | 1 |  |
| Music | 1256 | Private Voice for Non-Music Majors | 1 |  |
| Theater | 1003 | Creativity: Basic | 3 |  |
| Theater | 1411 | Welcome Backstage | 3 |  |
| Theater | 1231 | Acting I | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Year 1 - Spring |  |  |  |  |
| Theater | 1087 | Production Practicum | 1 |  |
| Music | 1256 | Private Voice for Non-Music Majors | 1 |  |
| Theater | 1096 | Introduction to Theater Process | 3 | WI |
| Theater | 2231 | Speech for the Actor | 3 |  |
| Theater | 2261 | Acting II | 3 |  |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |


| Semester Total |  | $\mathbf{1 5}$ |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |
| Year 2 - Fall | 1087 | 2131 | Production Practicum | 1 |  |
| Theater | Music Theory/Sightsinging: Basic | 2 |  |  |  |
| Theater | Ballet I for Musical Theater | 1 |  |  |  |
| Theater | Jazz I for Musical Theater | 1 |  |  |  |
| Theater | 3101 | Private Voice for Non-Music Majors | 1 |  |  |
| Music | 1257 | Mosaic: Humanities Seminar I | 3 | GY |  |
| Intellectual Heritage | 0851 or 0951 | Human Behavior | 3 | GB |  |
| GenEd | $08 x x$ or 09xx | Science \& Technology I | 3 | GS |  |
| GenEd | $08 x x$ or 09xx | $\mathbf{1 5}$ |  |  |  |
| Semester Total |  |  |  |  |  |

## Year 2 - Spring

| Theater | 1087 | Production Practicum | 1 |  |
| :--- | :--- | :--- | :---: | :---: |
| Theater | 3132 | Musical Theater Voice \& Acting | 3 |  |
| Theater | 2121 | Ballet II for Musical Theater | 1 |  |
| Theater | 3121 | Jazz II for Musical Theater | 1 |  |
| Music | Private Voice for Non-Music Majors | 1 |  |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| Semester Total |  | $\mathbf{1 6}$ |  |  |

Year 3 - Fall

| Theater | 1087 | Production Practicum | 1 |  |
| :--- | :--- | :--- | :---: | :---: |
| Theater | 3001 | History of the Theater I | 3 |  |
| Theater | 3279 | Acting III | 3 |  |
| Theater | 4131 | Musical Theater Scene Study | 3 |  |
| Music | 1258 | Private Voice for Non-Music Majors | 1 |  |
| Theater | 2411 | Introduction to Design | 3 |  |
| GenEd | $08 x x$ or 09xx | U.S. Society | 3 | GU |
| Semester Total |  |  | $\mathbf{1 7}$ |  |

Year 3 - Spring

| Theater | 1087 | Production Practicum | 1 |  |
| :--- | :--- | :--- | :---: | :---: |
| Theater | 3002 | History of the Theater II | 3 |  |
| Music | 1258 | Private Voice for Non-Music Majors | 1 |  |
| Theater | 3012 | American Musical Theater | 3 |  |
| Theater | 4097 | World of the Play | 3 | WI |
| Elective | Non-Dramatic Literature Class | 3 |  |  |
| Various | Exploratory Concentration Class | 3 |  |  |
| Semester Total |  |  | $\mathbf{1 7}$ |  |

Year 4 - Fall

| Theater | 1087 | Production Practicum | 1 |  |
| :--- | :--- | :--- | :--- | :--- |
| Theater | 4132 | Senior Cabaret Workshop | 3 |  |
| Music | 1259 | Private Voice for Non-Music Majors | 1 |  |
| Theater | 4101 | Tap for Musical Theater | 1 |  |


| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
| GenEd | 08xx or 09xx | Arts | $3-4$ | GA |  |
| Various |  | Exploratory Concentration Class | 3 |  |  |
| Semester Total |  | $\mathbf{1 5 - 1 6}$ |  |  |  |
|  |  |  |  |  |  |
| Year 4 - Spring | 1087 | 4133 | Production Practicum |  |  |
| Theater | Musical Theater: Dress Rehearsal | 1 |  |  |  |
| Theater | Musical Theater Dance Techniques | 3 |  |  |  |
| Theater | Private Voice for Non-Music Majors | 1 |  |  |  |
| Music | Art History Class (if not taken as GA) | 1 |  |  |  |
| Art History | Exploratory Concentration Class | 3 |  |  |  |
| Various | Elective | 3 |  |  |  |
| Elective |  |  | 2 |  |  |
| Semester Total |  |  | $\mathbf{1 4}$ |  |  |
|  |  |  |  |  |  |
| Total Hours for B.A. In Theater (Musical Theater): | $\mathbf{1 2 4}$ (minimum) |  |  |  |  |

## Bachelor of Arts in Theater (Theater Education)

Requirements for New Students starting in the 2013-2014 Academic Year

| Year 1 - Fall | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Subject | 1087 | Production Practicum | 1 |  |
| Theater | 1411 | Welcome Backstage | 3 |  |
| Theater | 1003 | Creativity: Basic | 3 |  |
| Theater | 1231 | Acting I | 3 |  |
| Theater | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| English | Global/World Society | 3 | GG |  |
| GenEd |  | $\mathbf{1 7}$ |  |  |
| Semester Total |  |  |  |  |

Year 1 - Spring

| Theater | 1087 | Production Practicum | 1 |  |
| :--- | :--- | :--- | :--- | :---: |
| Theater | 1096 | Introduction to Theater Process | 3 | WI |
| Education | 1322 | The Developing Individual Across the Lifespan | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| GenEd | Human Behavior | 3 | GB |  |
| Semester Total |  | $\mathbf{1 7}$ |  |  |

Year 2 - Fall

| Theater | 1087 | Production Practicum | 1 |  |
| :--- | :--- | :--- | :---: | :---: |
| Theater | 2411 | Introduction to Design | 3 |  |
| Theater | 2261 | Acting II | 3 |  |
| Education | 2306 | Assessment and Evaluation | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | Science \& Technology I | 3 | GS |  |
| Semester Total |  | $\mathbf{1 6}$ |  |  |

Year 2 - Spring

| Theater | 1087 | Production Practicum | 1 |  |
| :--- | :--- | :--- | :---: | :---: |
| Theater | 2441 | Stage Management I | 3 |  |
| Education | 2205 | Curriculum Instruction \& Technology in Education | 3 |  |
| GenEd | 08 xx or 09xx | U.S. Society | 3 | GU |
| GenEd | 08 xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | Arts | $3-4$ | GA |
| Semester Total |  |  | $\mathbf{1 6 - 1 7}$ |  |

Year 3 - Fall

| Theater | 1087 | Production Practicum | 1 |  |
| :--- | :--- | :--- | :--- | :--- |
| Theater | Scene Design I | 4 |  |  |
| Theater | 3001 | History of the Theater I | 3 |  |
| Theater | 2612 | Costume Design I | 3 |  |
| Theater | Methods of Teaching Theater | 3 |  |  |
| Semester Total |  | $\mathbf{1 4}$ |  |  |

Year 3 - Spring

| Theater | 1087 | Production Practicum | 1 |  |
| :--- | :--- | :--- | :--- | :--- |
| Theater | 3002 | History of the Theater II | 3 |  |
| Theater | 2511 | Lighting for the Theater | 3 |  |
| Elective | Non-Dramatic Literature Course | 3 |  |  |
| GenEd | Race \& Diversity | 3 | GD |  |
| Art History | Art History Class (if not taken as GA) | 3 |  |  |
| Semester Total |  | $\mathbf{1 6}$ |  |  |

## Year 4 - Fall

| Theater | 1087 | Production Practicum | 1 |  |
| :--- | :--- | :--- | :--- | :--- |
| Theater | 4097 | World of the Play | 3 | WI |
| Theater | 3301 | Introduction to the Director's Art | 3 |  |
| Theater | 3011 | Methods of Teaching Artistry | 3 |  |
| Theater | Practice Teaching in Theater I | 3 |  |  |
| Semester Total |  | $\mathbf{1 3}$ |  |  |

Year 4 - Spring

| Theater | 1087 | Production Practicum | 1 |  |
| :--- | :--- | :--- | :---: | :---: |
| Theater | 3086 | Practice Teaching in Theater II | 3 |  |
| Educational Psychology | $4531^{*}$ | Learning Theories in Education | 3 |  |
| Electives |  | Electives | 8 |  |
| Semester Total |  |  | $\mathbf{1 5}$ |  |
|  |  |  |  |  |
| Total Hours for B.A. In Theater (Theater Education): |  |  |  |  |

[^2]
## COLLEGE OF EDUCATION

Founded 1919

Dr. Gregory M. Anderson, Dean<br>245 Ritter Hall<br>1301 Cecil B. Moore Avenue<br>Philadelphia, PA 19122-6091<br>215-204-8017<br>dean.ed@temple.edu<br>http://education.temple.edu/

## Mission Statement

The College of Education at Temple University believes that education improves the lives of children and their families. By ensuring access to high-quality education and empowering all students with the tools they need to achieve, the education profession protects our democratic institutions and promotes social justice. The College of Education aims to play a critical role in promoting educational opportunity both locally and nationally.

As a result of its strategic location in North Philadelphia and its long-term history of collaboration with the School District of Philadelphia, the College of Education is uniquely situated to impact educational practice in city schools. The preparation of teachers, administrators and other school professionals to improve the quality of education, especially in urban settings, remains a core activity of the college.

College faculty conduct and promote research that addresses significant issues of national importance that have immediate practical applications. They investigate problems, evaluate strategic responses to those problems and provide evidence for new practice.

## History

While the official date for the founding of the College of Education is usually given as 1919, the college has included teacher preparation as part of its curricula almost from its inception. It is clear from Temple's history that the unofficial founder of the college was Laura Carnell, who began a program for the preparation of kindergarten teachers as early as 1895. This preparation program was expanded into elementary and then secondary areas largely in response to the Philadelphia School District's decision that higher positions in the city's school system would be open only to those with a college degree. In response to this need, the college began offering two, three, and four-year programs to teachers, as well as extension work, day and evening courses, five days a week and on Saturday mornings. This intimate relationship between the college and the School District of Philadelphia characterizes almost all of the college's history. The college was one of the first institutions to schedule courses so that teachers could take them after school hours. Programs of graduate study at the master's level were introduced in 1923, with the Doctor of Education being first awarded in 1931.

The first dean of the college was George Walk, who took over "Teachers College" in 1919 from Laura Carnell (the official name was changed to the "College of Education" in 1960). At present, there are two departments in the college: the Department of Psychological, Organizational and Leadership Studies and the Department of Teaching and Learning.

Historically, Temple's College of Education has had a significant impact on local and regional practice. It has always been the largest college of education in the region and one of the largest in the country. The college continues to be the major provider of teachers for the Philadelphia School District and for many suburban districts. Many principals and superintendents of the neighboring regions have received their degrees from Temple. Many of the school psychologists, counselors, educational researchers, and other education professionals have been prepared at Temple. In a very real sense, the College of Education has helped to shape the educational direction of the region.

## Accreditation

The College of Education is an accredited member of the following organizations:

1. The Teacher Education Accreditation Council
2. Middle States Accreditation

The College offers programs approved by the Pennsylvania Department of Education (P.D.E) that are designed for students seeking Instruction I certificates to teach in early childhood/elementary, middle-grades, or secondary settings.

The undergraduate programs in the College of Education are designed to prepare students for careers in education, both in schools and in non-school settings. Secondary education programs require students to take extensive course work in a specific specialization area. The College also offers the Adult and Organizational Development program (a non-certification major) designed for students who are interested in a career in education and training but who are not planning to pursue conventional teacher certification.

## Candidacy

Students are admitted to Temple University and the College of Education; however, Pennsylvania Department of Education (P.D.E.) guidelines mandate that all students must be admitted into the Teacher Education Certification Program through an application process, this process is referred to as "Candidacy." Students apply to Candidacy at the midway point of their education before progressing onto teaching methods courses. Students cannot register for teaching methods courses nor the student teaching experience without achieving Candidacy.

To learn more about Candidacy, including all criteria required, visit the College of Education's Candidacy web site: http://education.temple.edu/ugrad/candidacy-application-review.

## Clearances

Pennsylvania requires students to have four clearances prior to entering a school or other setting where children are present. This requirement applies to any student who is taking a course with field experience. Students must renew clearances annually each July and must maintain valid and current clearances while enrolled in the College of Education.

For more information about all clearances required as well as the process for obtaining and renewing clearances, students should visit the College of Education's clearances web site: http://education.temple.edu/services/clearances.

## Certification Testing

Students enrolled in teacher certification programs must successfully complete the Pennsylvania Department of Education's certification exams:

- PAPA (Math, Writing and Reading) which all students take prior to beginning teaching methods courses (see the section called "Candidacy", above).
- Praxis II to be certified in Secondary Education and Middle Grades Education
- PECT to be certified in Early Childhood Education

Students can find all certification exam information on the College of Education web site at http://education.temple.edu/teach/pect-papa.

## Scholarship and Awards Information

## Also see Financial Aid

For more information regarding scholarships available please see the College of Education
Scholarships web site: http://education.temple.edu/services/scholarships-graduation-awards.

## Teacher Certification

Temple provides a variety of ways to obtain certification to teach in early childhood (elementary), middle-grades, or secondary settings. Students in the Early Childhood Education program can declare a concentration in Special Education which will allow them the opportunity to become dually certified. For more information please refer to the College of Education's programs web site: http://education.temple.edu/undergradteach.

Students seeking Teacher Education Certification in the following areas should contact the school/college listed:

- Art - Tyler School of Art
- Health and Physical Education - College of Health Professions and Social Work
- Music - Boyer College of Music and Dance
- Speech - College of Health Professions and Social Work
- Sciences: Biology with Teaching, Chemistry with Teaching, Earth \& Space Science with Teaching, General Science with Teaching, Physics with Teaching - TUteach, a joint College of Science and Technology and College of Education program housed in the College of Science and Technology*
- Mathematics: Mathematics \& Computer Science with Teaching, Mathematics with Teaching, Mathematics \& Technology with Teaching - TUteach, a joint College of Science and Technology and College of Education program housed in the College of Science and Technology*
*All TUteach degrees lead to a "Bachelor of Science with Teaching" degree, all of which have been approved by the Pennsylvania Department of Education for secondary level teaching certification in the content area - grades 7 through 12.

Information about the above teacher education certification programs can also be found within that college's section of the Undergraduate Bulletin.

## Academic Advising Information

## Undergraduate Academic and Student Affairs <br> http://education.temple.edu/services <br> 215-204-8011

The Undergraduate Academic and Student Affairs staff in the College of Education helps students understand their curricular requirements, create academic plans, plan for study abroad opportunities, change majors, develop professionally, address academic standing and progress issues, and resolve a variety of academic matters. Services are provided by a staff of full-time professional Academic Advisors, a Director for Undergraduate Academic and Student Affairs and an Undergraduate Coordinator. The department monitors academic progress, Candidacy approval, Student Teaching academic approval and graduation clearance. Through individual appointments and group workshops, the department offers services including:

- New Student and Transfer Orientations and advising.
- Academic advising and registration assistance for all students in the College of Education.
- Semesterly consultation with each student prior to registration to help students stay on course for their anticipated graduation date.
- Development of a meaningful education plan compatible with career and life goals.
- Developmental advising for students facing academic challenges, especially Academic Warning and Academic Probation.
- Change of Program workshops and individual advising.
- Submission and review of petitions and other requests including: re-enrollment to the University, permission to take courses elsewhere; registration for overloads, Third Attempt registrations, medical withdrawals, etc.
- Workshops on relevant topics such as PAPA exam registration and prep.
- Dissemination of information to students regarding PAPA (all students), Praxis II (Secondary Education, Middle Grades, and Business Education) and PECT (Early Childhood Education) tests.
- Candidacy application information, application submission appointments and academic audits.
- Student Teaching academic audits to determine if students are cleared academically in order to student teach.
- Graduation clearances for all undergraduate students.
- Assistance to the College with development of transfer articulation agreements with other institutions in consultation with the College of Education Faculty and Senior Vice Provost for Undergraduate Studies office.


## Undergraduate advising appointments are scheduled in two ways:

- Same Day Appointments: offered on Main Campus on Mondays throughout fall and spring semesters as well as during peak advising periods (the first two weeks (drop/add) of each fall and spring semester and throughout the Priority Registration periods in fall and spring semesters.) To schedule, students call 215-204-8011 or stop into the Shimada Resource Center at $8: 45$ on days Same Day Appointments are offered. (Same Day Appointments are not available in summer.)
- Appointments scheduled in advance: offered on Main Campus on Tuesdays through Fridays in fall and spring semesters and most days in summer. To schedule, students call 215-204-8011 or stop into the Shimada Resource Center to schedule an appointment in person. Appointments can be scheduled up to two weeks in advance. Ambler campusbased students should call 267-468-8200 to schedule an appointment.

All academic advisors are trained to evaluate information carefully to give students the best possible advice. However, primary responsibility for course selection and degree completion rests with the student. Every student must be aware of the requirements of his or her degree and should collaborate with an advisor regularly to ensure timely completion of his or her program.

## Non-Academic Grievances

Students may have grievances that are not academic in nature. Such grievances should be directed to other offices on campus, which may include the Office of the Dean of Students, the Equal Opportunity Compliance office, Campus Housing, and other units on campus. Students unsure as to where to proceed with a non-academic grievance should consult either with the Office of the Dean of Students or the college's Academic Advising Center.

## Academic Policies \& Regulations

Students are responsible for complying with all university-wide academic policies that apply to their individual academic status. Additional and unique policies related to state requirements for teacher certification are aligned with the Pennsylvania Department of Education (P.D.E.) and College of Education requirements.

## Temple University Requirements

- All students must complete Temple University's General Education (GenEd) curriculum.
- All students must take a minimum of two writing-intensive courses at Temple University (including transfer students).


## College of Education Requirements

## All Teacher Certification Education Programs

(Early Childhood Education, Middle Grades Education, Secondary Education, and Business Education)

Students receive a Bachelor of Science in Education degree by meeting the following minimum College requirements:

- Completion of program requirements as detailed on the 8 -semester matrix.*
- Earn a "C-" or above in all required Education Courses.
- Earn a "C-" or above in all required University General Education Courses.
*The required total credit hours vary depending on the course of study. These credit hours are satisfied by taking courses in four categories:
(1) University General Education requirements
(2) Foundational Education courses
(3) Teacher Education Certification Courses (i.e. methods and student teaching)
(4) Elective courses, as noted in each program of study.

All students seeking to graduate with the recommendation for Pennsylvania teacher certification (Instructional I Certification) must successfully complete their program requirements with a minimum cumulative GPA of 3.0 or must meet the Pennsylvania Department of Education Bureau of School Leadership and Teacher Quality GPA Qualifying Praxis Score.

All students must meet the following requirements:

- Must complete the minimum number of credits at Temple as specified by the University.
- Earn a "C-" or above in all required Education Courses. (Students must be aware, that the State of Pennsylvania requires a minimum cumulative GPA for teacher certification (see above); obtaining the minimum grade of "C-" in multiple courses will not create a cumulative GPA sufficient to obtain certification.)
- Earn a "C-" or above in all University General Education Courses.
- Pass all three sections of PAPA (reading, writing and math) and pass either PECT (Early Childhood Education majors) or PRAXIS II (all programs other than Early Childhood Education) exams.
- Complete six credits of college-level math as specified by your program. Developmental, Pre-College and Courses at the Mathematics 0702 level or below are not applicable to this requirement.
- Complete six credits of college-level English, specifically 3 credits of composition and 3 credits of literature. Developmental, Pre-College and Courses at the English 0xxx level are not applicable to this requirement.
- Pass a speech screening assessment conducted by an Academic Advisor.
- Secondary Education students: earn a minimum cumulative 2.0 GPA in the content area. Students must earn a minimum of "C-" (or higher, where stipulated by the program) in all content area courses.
- Middle Grades students: earn a minimum cumulative 2.0 GPA in the concentration area. Students must earn a minimum of "C-" (or higher, where stipulated by the program) in all content area courses.
- Pennsylvania requires students to have valid clearances prior to entering a school or other setting where children are present. This applies to ANY student who is taking ANY course with a field experience component. See more about clearances on the College of Education's web site: http://education.temple.edu/services/clearances.


## Courses Not Applicable to Certification/Degree Program

Specific courses are required in order for students to be endorsed for Pennsylvania teacher certification and complete their program of study. Just because a student has reached the minimum credits required for a degree does not mean they have completed the degree as the student may have taken additional courses that are credits not applicable to the program. Students should meet with an Academic Advisor once per semester to ensure they are on track for completing all degree requirements.

## Courses Not Able to be Counted in the Minimum Credits Needed for Graduation

Some credits from ROTC and preparatory courses do not count towards the total number of semester hours needed to graduate. Please see an Academic Advisor for more information.

## Courses Over Five Years Old

Courses over five years old are subject to review to fulfill certification requirements.
Courses over ten years old will not count toward a degree nor certification requirements in the College of Education.

## Dean's List

Each fall and spring semester those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List policy for specific GPA and credit-hour requirements for each college.

## Graduation without Certification

In rare instances, a student who is unsuccessful in meeting certification program requirements or who has less than the required GPA(s) may be petition to Graduated Without Certification. The petition is submitted by scheduling an advising appointment. After the student submits a petition to Graduate without Certification, the petition is reviewed by the Director for Undergraduate Academic and Student Affairs and the student is notified of the decision. If approved, the student must complete additional course requirements as advised.

## Permission to Take Courses At Another Institution

Consistent with University Policy, students will not receive transfer credit for courses taken at another institution while they are matriculated (Degree Seeking) at Temple University unless prior permission has been obtained. Permission forms are available on the Senior Vice Provost for Undergraduate Studies web site (www.temple.edu/vpus), under Forms. Students should carefully review the criteria on the form and must make an appointment with an Academic Advisor to review and submit the form. Students should allow at least two weeks for review and processing of these forms.

## Change of Program to The College of Education

## Students wishing to change their major to any teacher certification program (Early

 Childhood, Middle Grades, Secondary Education or Business Education) must register for and attend a Change of Program (COP) workshop at the College of Education. After attending this workshop, students can then schedule an appointment to meet with an Academic Advisor before officially being transferred into the program of study. Students seeking to transfer into a certification program in the College of Education must have a minimum cumulative GPA of 3.0.* Students should call 215-204-8011 to schedule their COP workshop.Students wishing to change their major to Adult and Organizational Development (AOD), a non-certification major, do not have to attend a Change of Program workshop. They can schedule an appointment with an Advisor. Students interested in AOD are also advised to contact Cynthia Belliveau, Ph.D. at cynthia.belliveau@temple.edu to schedule a meeting during which a plan, goals and the AOD program are discussed. Students wishing to change their program to AOD must have a minimum cumulative GPA of 2.0.* Students should call 215-204-8011 to schedule their advising appointment. Students must identify themselves as a student changing his/her major to AOD and should request a one hour appointment.
*Students who are in their first semester at Temple University who have not yet established a GPA are eligible to begin the Change of Program process.

## Change of Program within the College of Education

Students must be in good academic standing in their program to change their major into another program within the College of Education. To change majors within the College of Education, a student must schedule a one hour Change of Program appointment with an Academic Advisor. Call 215-204-8011 to schedule.

## College of Education Graduation Requirements

## College of Education Stipulations

The College of Education does not award Bachelor of Arts or Bachelor of Science degrees to students who have already completed an accredited first Bachelor's, Master's, or Ph.D. degree, regardless of when the degree was completed.

## Bachelor of Arts Degree

## Adult \& Organizational Development (AOD)

A Bachelor of Arts degree is awarded to students majoring in Adult and Organizational Development who successfully

- Complete all program requirements as detailed on the 8 -semester matrix.
- Earn a "C-" or above in all required Education Courses.
- Earn a "C-" or above in all required University General Education Courses.
- Take a minimum of two writing-intensive courses at Temple University (including transfer students).
- Earn a minimum cumulative GPA of 2.0.


## All Teacher Certification Education Programs

(Early Childhood Education, Middle Grades Education, Secondary Education, and Business Education)

Students receive a Bachelor of Science in Education degree by meeting the following minimum College requirements:

- Complete program requirements as detailed on the 8 -semester matrix.*
- Earn a "C-" or above in all required Education Courses.
- Earn a "C-" or above in all required University General Education Courses.
- Take a minimum of two writing-intensive courses at Temple University (including transfer students).
- All students seeking to graduate with the recommendation for Pennsylvania teacher certification (Instructional I Certification) must successfully complete their program requirements with a minimum cumulative GPA of 3.0 or must meet the Pennsylvania Department of Education Bureau of School Leadership and Teacher Quality GPA Qualifying Praxis Score.
*The required total credit hours vary depending upon the course of study. These credit hours are satisfied by taking courses in four categories:
(1) University General Education requirements (General Education)
(2) Education courses
(3) Teacher Education Certification Courses (i.e. methods and student teaching)
(4) Elective courses as permitted by your program of study.


## Professional Certification

## Areas of Certification

All curricula leading to Pennsylvania certification are organized to meet the standards established by the Pennsylvania Department of Education. The following areas of certification have been approved by Temple University's Board of Trustees and the Pennsylvania Department of Education (unless otherwise noted, the following programs are housed in the College of Education):

- Art Education (Tyler School of Art)
- Career and Technical Education
o Business, Computer, and Information Technology K-12 (Formerly Business Education)
o Cooperative Education
o Marketing Education K-12
o Industrial (Career Technical) Education
- Early Childhood Education (Pre K to 4)
o Early Childhood Education with Special Education Concentration (dual certification)
- Health and Physical Education (College of Health Professions \& Social Work)
- Music (Boyer College of Music \& Dance)
- Middle Grades (grades 4 to 8 )
o Math and Science
o Math and English/Language Arts
o Science and English/Language Arts
- Secondary Education
o English
o Mathematics
o Social Studies
- K-12 Certification in World Languages
o French
o German
o Hebrew
o Italian
o Russian
o Spanish
- Speech (College of Health Professions and Social Work)
- TU teach (College of Science \& Technology and College of Education)
o Biology with Teaching
o Chemistry with Teaching
o Earth \& Space Science with Teaching
o General Science with Teaching
o Mathematics with Teaching
o Mathematics \& Computer Science with Teaching
o Mathematics \& Technology with Teaching
o Physics with Teaching


## Certification Requirements

All students seeking to graduate with the recommendation for Pennsylvania teacher certification must meet the following requirements:

- Must complete all degree requirements and meet credit minimum for the program, with a minimum of thirty (30) credits completed at Temple University.
- Earn a "C-" or above in all required Education Courses. (Students must be aware that the State of Pennsylvania requires a minimum cumulative GPA for teacher certification (see above); obtaining the minimum grade of "C-" in multiple courses will not be sufficient to obtain certification.)
- Earn a "C-" or above in all University General Education Courses.
- Pass all three sections of PAPA (reading, writing and math - all students, regardless of program) and passing scores in all required PECT (Early Childhood Education majors) or PRAXIS II (all programs other than Early Childhood Education) exams.
- Complete six credits of college-level math as specified by your program. Developmental, pre-college and courses at the Mathematics 0702 level or below are not applicable to this requirement.
- Completed six credits of college-level English, specifically 3 credits of composition and 3 credits of literature. Developmental, pre-college and courses at the English 0xxx level are not applicable to this requirement.
- Pass a speech screening assessment conducted by an academic advisor.
- Secondary Education students: earn a minimum cumulative 2.0 GPA in their content area. Students must earn a "C-" (or higher, where stipulated by the program) in all content area courses.
- Middle Grades students: earn a minimum cumulative 2.0 GPA in their concentration areas. Students must earn a "C-" (or higher, where stipulated by the program) in all content area courses.
- Pennsylvania requires students to have valid clearances prior to entering a school or other setting where children are present. This applies to ANY student who is taking ANY course with a field experience component. See more about clearances on the College of Education's web site: http://education.temple.edu/services/clearances.

Students not obtaining Pennsylvania State Teacher certification within five years of completing their programs must take additional coursework before the College of Education will recommend them for certification.

## Minimum GPA information

Graduation from the College of Education does not carry automatic endorsement for state certification. Students must complete all the requirements for their specific Teacher Education Certification Program, including student teaching, earn a minimum cumulative GPA of 3.0 or must meet the Pennsylvania Department of Education Bureau of School Leadership and Teacher Quality GPA Qualifying Praxis Score, and pass all required certification tests (see below).

## Certification Tests

All students seeking certification are required by the State of Pennsylvania to pass the relevant parts of the Pennsylvania Teacher Certification Testing Program in order to be eligible for teacher certification. The required tests are:

1. PAPA (Reading, Writing and Math - required of all students) plus
2. Either PECT (Early Childhood Education students) or Praxis II (Secondary Education, Middle Grades Education, Business Education) tests.

Students should visit the PAPA web site, the PECT web site or the Praxis II web site to acquire test dates, registration information, minimum score information, and suggestions for preparation.

## Speech Assessment

Candidates for Teacher Education Certification are given a diagnostic speech assessment. Additional diagnostic testing may be required, and corrective actions may be taken to remediate problems. Decisions about remedial efforts and student eligibility to continue in a program will be determined by the Chair of the Department in which the student is enrolled and approved by the Associate Dean of Teacher Education of the College of Education.

## Candidacy

Students are admitted to Temple University and the College of Education; however, P.D.E. guidelines mandate that all students must be admitted into the Teacher Education Certification Program through an application process; this process is referred to as "Candidacy." Students apply to it at the midway point of their education before progressing onto teaching methods courses. Students cannot register for teaching methods courses or the student teaching experience without achieving Candidacy.

To learn more about Candidacy, including all criteria required, visit the College of Education's Candidacy web site: http://education.temple.edu/ugrad/candidacy-application-review.

## Field Experience, Practicum and Student Teaching

The College of Education places a great deal of emphasis on students' in-school experiences. All undergraduates are required to complete courses that place them in school settings for a specified duration.

Student teaching, completed in a student's final semester, constitutes the most important field experience for prospective teachers. Application for student teaching placement must be submitted by the deadline communicated to students by the student teaching placement office.

Any student going into the field must obtain clearances. See the College of Education's clearance web site for all details.

## Performance Assessments

In addition to the teacher certification tests (PAPA and PECT/Praxis II tests) required by the Pennsylvania Department of Education, students are required to complete three performance assessments in order to gauge the extent to which they:
(a) Know the content they will teach,
(b) Can teach the content, and
(c) Embody the professional attributes required of professional educators.

The performance assessments occur at three points in the undergraduate program: initially when prospective students are being admitted to certification programs through Candidacy; in the junior year, prior to student teaching (intermediate assessment); and before graduation, while student teaching (senior assessment). In addition to assessing and informing candidates about their teaching, the performance assessments are intended for use by faculty as a tool for program evaluation.

All undergraduate Education majors seeking certification must successfully complete the Intermediate Performance Assessment (IPA), a Temple University and PA Department of Education requirement for teacher education majors before student teaching. Under state guidelines, a teacher education institution must:
(a) Conduct performance assessments throughout the preparation program for all students admitted to a professional educator (certification) program
(b) Use the assessment information to determine eligibility for student teaching.

The Intermediate Performance Assessment (IPA) was developed in response to a regulation of the Pennsylvania Department of Education and as part of the College of Education's interest in ensuring teacher candidates' continuous progress in the teacher education certification program. The Temple IPA, like College of Education courses, is aligned to the program's six standards of effective teaching. At the completion of the teacher education program, teacher candidates will have had instruction to help them meet all of these standards in their teaching practice. The IPA measures progress toward these standards part way through the program; students must complete and pass this formal assessment to be eligible to student teach.

The IPA is followed by the Senior Performance Assessment (SPA) in the final semester of the program. All candidates for certification must successfully complete the Intermediate and Senior Performance Assessments. This is both a Temple University and PA Department of Education requirement for teacher education majors. Candidates for certification will not be submitted to the state as having met all requirements if they fail either the IPA or SPA twice.

## Professional Education Portfolio

As a culmination of the teacher education certification program, students will be required to develop a professional teaching portfolio. The specific requirements for the portfolio will be available from the Senior Seminar course instructor.

## Contact Information

Shimada Resource Center<br>College of Education<br>150 Ritter Annex<br>1301 Cecil B. Moore Ave.<br>Philadelphia, PA 19122<br>215-204-8011 (phone)<br>215-204-4383 (fax)<br>Office Hours:<br>8:30 a.m. - 5:00 p.m. Monday through Friday.<br>Ambler Campus advising - West Hall 109, 267-468-8200<br>Undergraduate Academic and Student Affairs - Main Campus<br>Jason B. Bozzone<br>Assistant Dean for Academic and Student Affairs<br>bozzone@temple.edu<br>Janet Distel<br>Director for Academic and Student Affairs<br>jdistel@temple.edu<br>Daniel Gilbert<br>Senior Academic Advisor<br>dgilbert@temple.edu<br>Madeleine DeBot<br>Academic Advisor II<br>mdebot@temple.edu<br>Carly Salvadore<br>Academic Advisor I<br>carly.salvadore@temple.edu<br>Vacant<br>Academic Advisor I<br>Maryann McGrory<br>Coordinator for Undergraduate Academic and Student Affairs<br>mmcgrory@temple.edu<br>Jacqueline Booker<br>Teacher Education Certification Officer<br>jbooker@temple.edu

## Contacts \& Directories

Directories include name, department, office location, phone number, and preferred e-mail. The directories also include links to résumé/CV where available.

- Office of the Dean: http://education.temple.edu/coe/office-dean-staff-directory
- Faculty Directory: http://education.temple.edu/coe/faculty
- Staff Directory: http://education.temple.edu/research-faculty/staff-directory
- Offices and Centers: http://education.temple.edu/research-faculty/departments-centers
- Ombudsperson: http://education.temple.edu/services/ombudsperson


## Faculty

For a listing of the College of Education faculty please visit the faculty directory on the College of Education web site.

## Adult \& Organizational Development

Dr. Cynthia Belliveau, Coordinator
215-204-4397
cynthia.belliveau@temple.edu
This degree prepares students for careers in the field of adult and organizational development. Coursework in this academic major provides students with the communication skills and analytical abilities to: design adult training programs, conduct organizational interventions, develop change management processes, conduct effective team development programs, facilitate group decision-making, manage interpersonal conflict, and design dispute resolution systems. These skills support adults in reaching professional goals in a diverse range of settings including for-profit and non-profit organizations, educational institutions, governmental agencies, and community organizations. Graduates of the program are prepared to enter adult education professions as trainers, performance assessment specialists, managers, group and organizational consultants, mediators, negotiators, and learning and development specialists.

## Bachelor of Arts Requirements

## Summary of Requirements

## University Requirements

- All students must complete Temple University's General Education (GenEd) curriculum.
- All students must take a minimum of two writing-intensive courses at Temple University (including transfer students). Writing intensive courses are indicated by a "WI" in the Attribute column in the grids below.


## College Requirements

College requirements are located under Academic Policies and Regulations in the Bulletin.

## Program Requirements

- Students must complete 33 credit hours in the major.
- All courses in the major must be passed with a grade of "C-" or better.

Complete the following course requirements in Adult and Organizational Development:

| Required Courses | Course \# | Course Title |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Subject | 1016 | Introduction to Adult Learning \& Training | 3 |  |
| Adult \& Organizational Development | 104 | Hours | Attribute |  |
| Adult \& Organizational Development | 1166 | Interpersonal Communication through the <br> Life Span | 3 |  |
| Adult \& Organizational Development | 2115 | Conflict Resolution in Education | 3 |  |
| Adult \& Organizational Development | 2176 | Team Process in Education | 3 |  |
| Adult \& Organizational Development | 2201 | Research Methods | 3 |  |
| Adult \& Organizational Development | 2214 | Conflict \& Communication | 3 |  |
| Adult \& Organizational Development | 2215 | Mediation: Principles \& Practice | 3 |  |
| Adult \& Organizational Development | 3316 | Negotiation Processes | 3 |  |
| Adult \& Organizational Development | 3376 | Facilitating Group Decision-Making | 3 |  |
| Adult \& Organizational Development | 3396 | Organizational Communication | 3 | WI |
| Adult \& Organizational Development | 4396 | Field Research: Practice in Professional | 3 | WI |
| Total |  |  | 33 |  |

## Suggested Semester by Semester Plan

Freshman Year - Fall

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| GenEd | 08xx or 09xx | Quantitative Literacy | , | GQ |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Adult \& Organizational Development | 1016 | Introduction to Adult Learning \& Training | 3 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Freshman Year - Spring |  |  |  |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Adult \& Organizational Development | 1166 | Interpersonal Communication through the Life Span | 3 |  |
| Elective |  |  | 3 |  |
| Subtotal |  |  | 15 |  |


| Sophomore Year - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Adult \& Organizational Development | 2201 | Research Methods | 3 |  |
| Adult \& Organizational Development | 2115 | Conflict Resolution in Education | 3 |  |
| Elective |  |  | 3 |  |
| Elective |  |  | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Sophomore Year-Spring |  |  |  |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Adult \& Organizational Development | 2176 | Team Process in Education | 3 |  |
| Elective |  |  | 3 |  |
| Elective |  |  | 3 |  |
| Elective |  |  | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Junior Year - Fall |  |  |  |  |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| Adult \& Organizational Development | 2214 | Conflict \& Communication | 3 |  |
| Adult \& Organizational Development | 3316 | Negotiation Processes | 3 |  |
| Elective |  |  | 3 |  |
| Elective |  |  | 3 |  |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Junior Year - Spring |  |  |  |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Adult \& Organizational Development | 2215 | Mediation: Principles \& Practice | 3 |  |
| Adult \& Organizational Development | 3376 | Facilitating Group Decision-Making | 3 |  |
| Elective |  |  | 4 |  |
| Elective |  |  | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Senior Year - Fall |  |  |  |  |
| Adult \& Organizational Development | 3396 | Organizational Communication | 3 | WI |
| Elective |  |  | 4 |  |
| Elective |  |  | 3 |  |
| Elective |  |  | 3 |  |
| Elective |  |  | 3 |  |
| Subtotal |  |  | 16 |  |
| Senior Year - Spring |  |  |  |  |

$\left.\begin{array}{|l|l|l||c|c|}\hline \text { Adult \& Organizational } & 4396 & \begin{array}{l}\text { Field Research: Practice in Professional } \\ \text { Development }\end{array} & & \\ \hline \text { Settings }\end{array}\right)$

## Minor in Adult \& Organizational Development

The minor in Adult and Organizational Development consists of 15 credit hours in Adult \& Organizational Development coursework.

Students must complete all of the following courses:

1. Adult \& Organizational Development 1016: Introduction to Adult Learning and Training
2. Adult \& Organizational Development 1166: Interpersonal Communication through the Life Span*
3. Adult \& Organizational Development 2176: Team Process in Education
4. Adult \& Organizational Development 2214: Conflict and Communication

PLUS one of the following courses:

1. Adult \& Organizational Development 2215: Mediation: Principles and Practice
2. Adult \& Organizational Development 3316: Negotiation Processes
3. Adult \& Organizational Development 3376: Facilitating Group Decision-Making
4. Adult \& Organizational Development 3396: Organizational Communication

All courses must be completed with a minimum grade of C-.
*If students have taken the GenEd course Adult \& Organizational Development 0836 (Interpersonal Communication: Critical Competencies for Professional and Personal Success) before declaring an Adult \& Organizational Development minor, then Adult \& Organizational Development 1166 will be waived and students will be required to take two courses from the set of four optional courses. Students must discuss this with an Academic Advisor so their records can be properly updated.

## Career \& Technical Education

Dr. Robert W. Clark, Executive Director

Ritter Hall 338
215-204-8383
robert.clark@temple.edu

The Career and Technical Education Program serves individuals working in the field of workforce development, including secondary and/or post-secondary career and technical education and technical training in industry. The following teacher education degrees/certifications are offered at the undergraduate level: business, computer and information technology education; industrial education; and marketing education.

Note: The degree and certification programs in Career and Technical Education (Business, Computer, and Information Technology Education (BCITE); Industrial Education; Marketing Education) were recently revised to address new regulations from the Pennsylvania Department of Education (PDE). All students enrolling in any of these programs for the first time in 20132014 are strongly recommended to check with the Shimada Resource Center (SRC) in the College of Education, or with the Department of Teaching and Learning, to affirm the requirements that pertain to their specific major. In addition, students should check the Undergraduate Bulletin web site for the most current information about these programs (Academic Programs section), or the College of Education's web site at http://education.temple.edu/. It is also recommended that students meet with an advisor before enrolling in classes specific to these majors and leading to certification as a teacher. This is to assure that a candidate's intended program of study will be compatible with the new requirements.

## Business, Computer, \& Information Technology Education

## Dr. D. James Gilmour, Certification Program Advisor

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215-204-6197
jgilmour@temple.edu

1. The total number of credit hours at graduation may be greater for some students based on initial placement exams, transfer evaluations, individual curricular choices, and academic progress.
2. Certain courses fulfill multiple requirements. In consultation with advisors, students will be able to plan their curriculum more effectively.
3. Students must fulfill the necessary prerequisites for any given course or course sequence. See the Prerequisite and Co-requisite Policy in the university-wide Academic Policies section in this Bulletin.

The Business, Computer, \& Information Technology Education (BCITE) curriculum is designed to prepare students who expect to teach business subjects in K-12 and at the 2-year college level in public and private schools. Subject area content (academic specialization) and professional education content are combined with general education content (university curriculum) in order to provide the student with a general education, a field of specialization, and professional training. Moreover, the curriculum aims to combine these elements in such proportions as to give students the balanced perspective of the relation that business education bears to education as a whole.

Prior to enrolling in Student Teaching (Secondary Education 4688: Student Teaching in Secondary Education), BCITE students must have completed (with a 3.0 cumulative grade point average) the general education, professional education and academic specialization course sequence requirements.

## University Curriculum, Professional Education \& Academic Specialization Course Requirements

Some restrictions and additions to the requirements listed above apply to students in this program.

## University Curriculum

1. All students are required to complete the university's General Education (GenEd) curriculum. 2. All students must take 6 s.h. of college level math and 6 s.h. of English composition and literature and pass the required state tests to be certified.
2. All students must take a minimum of two writing-intensive courses at Temple. The writingintensive courses required for this major are listed below and are identified by "WI" in the Attribute column.

Professional Education

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Business Education | 3241 | Methods of Teaching Microcomputer Applications * | 3 |  |
| Career \& Technical <br> Education | 3103 | Curriculum in Career \& Technical Education + | 3 |  |
| Career \& Technical <br> Education | 3372 | Project-Based Technical Instruction for Children | 3 |  |
| Education | 1255 | Inclusive Education for a Diverse Society | 3 |  |
| Education | 2103 | Socio-cultural Foundations of Education in the United States + | 3 |  |
| Education | 2109 | Adolescent Development for Educators | 3 |  |
| Education | 2255 | Effective Use of Instructional Technology in Classrooms + | 3 |  |
| Education | 2296 | Effective Teaching: Theory and Practice | 3 | WI |
| Education | 2306 | Assessment \& Evaluation | 3 |  |
| Education | 4111 | Classroom \& Conflict Management in Grades 4 through 12 | 3 |  |
| English Education | 3338 | Foundations of Language Teaching: Teaching English | 3 |  |
| LSecondary) | Language Learners in Grades 4 to 12 + |  |  |  |
| Secondary Education | 3796 | Differentiated Literacy Instruction in the Disciplines, 7-12 + | 3 | WI |
| Secondary Education | 4688 | Student Teaching in Secondary Education + | 9 |  |
| Secondary Education | 4801 | Senior Seminar \& Performance Assessment in Secondary <br> Education +\% | 3 |  |
| Special Education | 2231 | Introduction to Inclusive Education | 3 |  |
| Subtotal |  |  | 51 |  |

*Evidence of Advanced Keyboarding Skill is required to take this course.
+Courses and experiences with integrated special education competencies.
\% Requirement for in-service candidates only.

## Academic Specialization

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Accounting | 2101 | Financial Accounting | 3 |  |
| Accounting | $\begin{gathered} 2102 \\ \text { or } \\ 3526 \end{gathered}$ | Managerial Accounting or Accounting Information Systems | 3 |  |
| Computer \& Information Sciences | 1055 | Computers \& Applications | 4 |  |
| Economics | 1101 | Macroeconomic Principles | 3 |  |
| Economics | 1102 | Microeconomic Principles | 3 |  |
| Engineering | 3033 | Entrepreneurial Engineering | 3 |  |
| English | 2007 | Writing for Business \& Industry | 3 |  |
| Human Resource Management | 1101 | Leadership \& Organizational Management | 3 |  |
| International Business Administration | 2501 <br> or <br> 2502 <br> or <br> 2503 | Fundamentals of Asian Business <br> or <br> Fundamentals of Latin American Business <br> or <br> Business in the European Union | 3 |  |
| Legal Studies | 1102 | Law of Contracts | 3 |  |
| Management Information Systems | 2101 | Information Systems in Organizations | 3 |  |
| Marketing | 2101 | Marketing Management | 3 |  |
| Mathematics | 1013 | ```Elements of Statistics or Introduction Course in Statistics Approved by Advisor``` | 3 |  |
| Advanced Keyboarding* |  |  | NC |  |
| Subtotal |  |  | 40 |  |

Total Hours Required for Graduation 123-124

Note: Courses in this section have prerequisites. See an advisor or refer to the Course Catalog.

* Evidence of Advanced Keyboarding Skill is required. See an advisor.

Suggested Semester-by-Semester Plan for Business, Computer, \& Information Technology Education

| Freshman Year - Fall Semester | Course Title | Hours | Attribute |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course \# | U.S. Society | 3 | GS |
| GenEd | $08 x x$ or 09xx | 4 | GW |  |
| English | 0802,0812 or 0902 | Analytical Reading \& Writing | 3 | GS |
| GenEd | $08 x x$ or 09xx | Science \& Technology I | 3 |  |
| Education | 2103 | Socio-cultural Foundations of Education in the <br> United States | 3 |  |
| Economics | Macroeconomic Principles | $\mathbf{1 6}$ |  |  |
| Subtotal | 1101 |  |  |  |
| Freshman Year - Spring Semester |  |  |  |  |


| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| Education | 1255 | Inclusive Education for a Diverse Society+ | 3 |  |
| Education | 2109 | Adolescent Development for Educators | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Mathematics | 1013 | ```Elements of Statistics or Introduction Course in Statistics Approved by Advisor``` | 3 |  |
| Special Education | 2231 | Introduction to Inclusive Education | 3 |  |
| Accounting | 2101 | Financial Accounting | 3 |  |
| Computer \& Information Sciences | 1055 | Computers \& Applications | 4 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Education | 2296 | Effective Teaching: Theory and Practice | 3 | WI |
| $\begin{aligned} & \hline \text { Management } \\ & \text { Information Systems } \\ & \hline \end{aligned}$ | 2101 | Information Systems in Organizations | 3 |  |
| Accounting | $\begin{gathered} 2102 \\ \text { or } \\ 3526 \end{gathered}$ | Managerial Accounting <br> or <br> Accounting Information Systems | 3 |  |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Junior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Education | 3241 | Methods of Teaching Microcomputer Applications <br> (Restrictions: Candidacy Required) | 3 |  |
| Career \& Technical <br> Education | 3103 | Curriculum in Career and Technical Education + | 3 |  |
| Legal Studies | 1102 | Law of Contracts | 3 |  |
| Human Resource <br> Management | 1101 | Leadership \& Organizational Management | 3 |  |
| Marketing | 2101 | Marketing Management | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Junior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Education | 4111 | Classroom \& Conflict Management in Grades 4 through 12 | 3 |  |


| English Education (Secondary) | 3338 | Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12 (Restrictions: Candidacy Required) + | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Economics | 1102 | Microeconomic Principles | 3 |  |
| English | 2007 | Writing for Business \& Industry | 3 |  |
| Career \& Technical Education | 3372 | Project-Based Technical Instruction for Children $+$ | 3 |  |
| Subtotal |  |  | 15 |  |
| Senior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Education | 2255 | Effective Use of Instructional Technology in Classrooms + | 3 |  |
| Secondary Education | 3796 | Differentiated Literacy Instruction in the Disciplines, 7-12 + <br> (Restrictions: Candidacy Required) | 3 | WI |
| International Business Administration | $\begin{gathered} 2501 \\ \text { or } \\ 2502 \\ \text { or } \\ 2503 \\ \hline \end{gathered}$ | ```Fundamentals of Asian Business or Fundamentals of Latin American Business or Business in the European Union``` | 3 |  |
| GenEd | 08xx or 09xx | Race and Diversity | 3 | GD |
| Engineering | 3033 | Entrepreneurial Engineering | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Secondary Education | 4801 | Senior Seminar \& Performance Assessment in Secondary Education + | 3 |  |
| Secondary Education | 4688 | Student Teaching in Secondary Education + | 9 |  |
| Education | 2306 | Assessment \& Evaluation | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Total for BCITE: |  |  | 123-124 |  |

+ Courses and experiences with integrated special education competencies.
\% Requirement for in-service candidates only.


## Industrial Education

## Ms. Nancy Johnston, Certification Program Advisor

Ritter Hall 346
215-204-8376
nancy.johnston@temple.edu

1. The total number of credit hours at graduation may be greater for some students based on initial placement exams, transfer evaluations, individual curricular choices, and academic progress.
2. Certain courses fulfill multiple requirements. In consultation with advisors, students will be able to plan their curriculum more effectively.
3. Students must fulfill the necessary prerequisites for any given course or course sequence. See the Prerequisite and Co-requisite Policy in the university-wide Academic Policies section in this Bulletin.

The Industrial Education (career and technical) curriculum is designed to prepare students who expect to teach career and technical education subjects in grades 7-12 and at the 2-year college level in public and private schools. Subject area content (academic specialization) and professional education content are combined with general education content (university curriculum) in order to provide the student with a general education, a field of specialization, and professional training. Moreover, the curriculum aims to combine these elements in such proportions as to give students the balanced perspective of the relation that industrial education bears to education as a whole.

Prior to enrolling in Student Teaching (Education 4788: Student Teaching in Secondary Education/Career Technical Education), pre-service industrial education students must have completed (with a 3.0 cumulative grade point average) the general education, professional education and academic specialization course sequence requirements.

For certification in industrial (career and technical) education, there is an occupational experience and an occupational competency requirement. To become certified, the student must pass an occupational competency assessment (or the equivalent) and complete two years of occupational wage-earning experience beyond the time needed to learn the occupation.

## University Curriculum, Professional Education \& Academic Specialization Course Requirements

Some restrictions and additions to the requirements listed above apply to students in this program.

## University Curriculum

1. All students are required to complete the university's General Education (GenEd) curriculum. 2. All students must take 6 s.h. of college level math and 6 s.h. of English composition and literature and pass the required state tests to be certified.
2. All students must take a minimum of two writing-intensive courses at Temple. The specific writing-intensive courses required for this major are listed below and are identified by "WI" in the Attribute column.

## Professional Education

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Career \& Technical <br> Education | 3101 | Principles of Career \& Technical Education+ | 3 |  |
| Career \& Technical <br> Education | 3102 | Teaching Strategies in Career \& Technical Education+ | 3 |  |
| Career \& Technical <br> Education | 3103 | Curriculum in Career \& Technical Education+ | 3 |  |


| Education | 1255 | Inclusive Education for a Diverse Society | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Education | 2103 | Socio-cultural Foundations of Education in the United States | 3 |  |
| Education | 2109 | Adolescent Development for Educators | 3 |  |
| Education | 2255 | Effective Use of Instructional Technology in Classrooms + | 3 |  |
| Education | 2296 | Effective Teaching: Theory and Practice | 3 | WI |
| Education | 2306 | Assessment \& Evaluation | 3 |  |
| Education | 4111 | Classroom \& Conflict Management in Grades 4 through 12 | 3 |  |
| Education | 4788 | Student Teaching in Secondary Education/Career Technical Education | 9 |  |
| English Education (Secondary) | 3338 | Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12 | 3 |  |
| Secondary Education | 3796 | Differentiated Literacy Instruction in the Disciplines, 7-12 + | 3 | WI |
| Secondary Education | 4801 | Senior Seminar \& Performance Assessment in Secondary Education +\% | 3 |  |
| Special Education | 2231 | Introduction to Inclusive Education | 3 |  |
| Subtotal |  |  | 51 |  |

+Courses and experiences integrated with special education competencies.
\% Requirement for in-service candidates only.

## Academic Specialization

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Career \& Technical Education | $\begin{aligned} & 4285 \\ & \text { or } \\ & 3389 \end{aligned}$ | Industry Education Capstone \& Field Experience for WorkBased Learning <br> or <br> Supervised Work Experience* | $\begin{gathered} 3 \\ 1-6^{*} \end{gathered}$ |  |
| Career \& Technical Education | 4315 | Technical Content: Credit by Examination | 24 |  |
| Career \& Technical Education | 4324 | Industry-Based Coordination Methods for Work-Based Learning | 3 |  |
| Career \& Technical Education | $\begin{aligned} & 4331 \\ & \text { or } \\ & 3389 \end{aligned}$ | Industry-Based Instructional Methods for Work-Based Learning <br> or Supervised Work Experience* | $\begin{gathered} \hline 3 \\ 1-6^{*} \end{gathered}$ |  |
| Economics | 1101 | Macroeconomics Principles | 3 |  |
| Engineering | 3033 | Entrepreneurial Engineering | 3 |  |
| $\begin{aligned} & \text { Mathematics } \\ & \text { or } \\ & \text { Education } \\ & \hline \end{aligned}$ | $\begin{gathered} 1021 \\ \text { or } \\ 1017 \end{gathered}$ | College Algebra <br> or <br> Algebra \& Algebraic Thinking for Educators | 4 |  |
| Subtotal |  |  | 43 |  |

## Total Semester Hours

*With the permission of the advisor, students may take Career \& Technical Education 3389: Supervised Work Experience for 3 credits instead of Career \& Technical Education 4285. With permission of the advisor, students may also take Career \& Technical Education 3389 for 3 credits instead of Career \& Technical Education 4331.

Note: Matriculated students with work experience who have completed 90 s.h. of acceptable coursework may arrange through a credit by exam process for up to 24 s.h. to be recorded toward their degree. Candidates needing work experience may apply Career \& Technical Education 3389 toward meeting this requirement with an advisor's permission.

Suggested Semester-by-Semester Plan for Industrial Education


| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Education | 2109 | Adolescent Development for Educators | 3 |  |
| English Education (Secondary) | 3338 | Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12 (Restrictions: Candidacy Required)+ | 3 |  |
| Career \& Technical Education | 4315 | Technical Content: Credit by Examination | 8 |  |
| Economics | 1101 | Macroeconomic Principles | 3 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Junior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Education | 4111 | Classroom \& Conflict Management in Grades 4 through 12 | 3 |  |
| Education | 2255 | Effective Use of Instructional Technology in Classrooms + | 3 |  |
| Career \& Technical <br> Education | 4315 | Technical Content: Credit by Examination | 8 |  |
| Career \& Technical Education | $\begin{gathered} 4331 \\ \text { or } \\ 3389 \end{gathered}$ | ```Industry-Based Instructional Methods for Work-Based Learning or Supervised Work Experience*``` | $3$ 1-6* |  |
| Subtotal |  |  | 17 |  |

*Students may take Career \& Technical Education 3389: Supervised Work Experience for up to 3 credits, with permission of the advisor.

## Senior Year - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Career \& Technical Education <br> Career \& Technical Education | $\begin{aligned} & 4285 \\ & \text { or } \\ & 3389 \end{aligned}$ | Industry Education Capstone \& Field Experience for Work-Based Learning <br> or <br> Supervised Work Experience* | $\begin{gathered} \hline 3 \\ 1-6^{*} \end{gathered}$ |  |
| Career \& Technical Education | 4315 | Technical Content: Credit by Examination | 8 |  |
| Engineering | 3033 | Entrepreneurial Engineering (In service Candidates Only) \% | 3 |  |
| Secondary Education | 3796 | Differentiated Literacy Instruction in the Disciplines, 7-12 + | 3 | WI |
| Subtotal |  |  | 17 |  |

*Students may take Career \& Technical Education 3389: Supervised Work Experience for up to 3 credits, with permission of the advisor

Senior Year - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Secondary Education | 4801 | Senior Seminar \& Performance Assessment in <br> Secondary Education +\% | 3 |  |
| Education | 4788 | Student Teaching in Secondary Education/Career <br> Technical Education + | 9 |  |
| Education | 2306 | Assessment \& Evaluation | 3 |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |


| Total for Industrial Education: |  | 1 |
| :--- | :--- | :--- |

+ Courses and experiences enhanced with special education competencies.
\% Requirement for in-service candidates only.


## Marketing Education

Dr. D. James Gilmour, Certification Program Advisor

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1. The total number of credit hours at graduation may be greater for some students based on initial placement exams, transfer evaluations, individual curricular choices, and academic progress.
2. Certain courses fulfill multiple requirements. In consultation with advisors, students will be able to plan their curriculum more effectively.
3. Students must fulfill the necessary prerequisites for any given course or course sequence. See the Prerequisite and Co-requisite Policy in the university-wide Academic Policies section in this Bulletin.

The Marketing Education curriculum is designed to prepare students who expect to teach marketing subjects in K-12 and at the 2-year college level in public and private schools. Subject area content (academic specialization) and professional education content are combined with general education content (university curriculum) in order to provide the student with a general education, a field of specialization, and professional training. Moreover, the curriculum aims to combine these elements in such proportions as to give students the balanced perspective of the relation that marketing education bears to education as a whole.

## University Curriculum, Professional Education \& Academic Specialization Course Requirements

Some restrictions and additions to the requirements listed above apply to students in this program.

## University Curriculum

1. All students are required to complete the university's General Education (GenEd) curriculum. 2. All students must take 6 s.h. of college level math and 6 s.h. of English composition and literature and pass the required state tests to be certified.
2. All students must take a minimum of two writing-intensive courses at Temple. The specific writing-intensive courses required for this major are listed below and are identified by "WI" in the Attribute column.

## Professional Education

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :---: |
| Business Education | 3241 | Methods of Teaching Microcomputer Applications * | 3 |  |
| Career \& Technical <br> Education | 3103 | Curriculum in Career \& Technical Education + | 3 |  |
| Career \& Technical <br> Education | 3372 | Project-Based Technical Instruction for Children | 3 |  |
| Education | 1255 | Inclusive Education for a Diverse Society | 3 |  |
| Education | 2103 | Socio-cultural Foundations of Education in the United States | 3 |  |
| Education | 2109 | Adolescent Development for Educators | 3 |  |
| Education | 2255 | Effective Use of Instructional Technology in Classrooms + | 3 |  |
| Education | 2296 | Effective Teaching: Theory and Practice | 3 | WI |
| Education | 2306 | Assessment \& Evaluation | 3 |  |
| Education | 4111 | Classroom \& Conflict Management in Grades 4 through 12 | 3 |  |
| English Education | 3338 | Foundations of Language Teaching: Teaching English <br> Language Learners in Grades 4 to 12 + | 3 |  |
| (Secondary) | Secondary Education | 3796 | Differentiated Literacy Instruction in the Disciplines, 7-12 + | 3 |
| Secondary Education | 4688 | Student Teaching in Secondary Education + | WI |  |
| Secondary Education | 4801 | Senior Seminar \& Performance Assessment in Secondary <br> Education +\% | 3 |  |
| Special Education | 2231 | Introduction to Inclusive Education | 3 |  |
| Subtotal |  |  | 51 |  |

*Evidence of Advanced Keyboarding Skill is required to take this course.

+ Courses and experiences enhanced with special education competencies.
\% Requirement for in-service candidates only.


## Academic Specialization

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Career \& Technical <br> Education | 4285 | Industry Education Capstone \& Field Experience for Work- <br> Based Learning <br> or <br> or <br> Supervised Work Experience* | 3 |  |
| Career \& Technical <br> Education | 4324 | Industry-Based Coordination Methods for Work-Based <br> Learning | $3-6^{*}$ |  |
| Career \& Technical <br> Education | 4331 | Industry-Based Instructional Methods for Work-Based Learning | 3 |  |
| Economics | 1101 | Macroeconomic Principles | 3 |  |
| Economics | 1102 | Microeconomic Principles | 3 |  |
| Engineering | 3033 | Entrepreneurial Engineering | 3 |  |
| Legal Studies | 1102 | Law of Contracts | 3 |  |
| Marketing | 2101 | Marketing Management | 3 |  |
| Marketing | 3501 | Integrated Marketing Communications | 3 |  |
| Marketing | 3504 | Sales \& Sales Management | 3 |  |
| Marketing | 3553 | International Marketing | 3 |  |
| Marketing | 3596 | Consumer \& Buyer Behavior | 3 | WI |
| Mathematics | 1013 | Elements of Statistics |  |  |
| or |  |  |  |  |
| Introduction Course in Statistics Approved by Advisor | 3 |  |  |  |
| Subtotal |  |  |  |  |

*Marketing Education majors are also eligible for the Cooperative Education Certificate provided they can document wage earning experience

Note: Courses in this section have prerequisites. See an advisor or refer to the Course Catalog.
Suggested Semester-by-Semester Plan for Marketing Education

| Freshman Year - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Education | 2103 | Socio-cultural Foundations of Education in the United States | 3 |  |
| Economics | 1101 | Macroeconomic Principles | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Freshman Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| Education | 2109 | Adolescent Development for Educators | 3 |  |
| Education | 1255 | Inclusive Education for a Diverse Society+ | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Mathematics | 1013 | Elements of Statistics <br> or <br> Introductory Course in Statistics Approved by Advisor | 3 |  |
| Economics | 1102 | Microeconomic Principles | 3 |  |
| Legal Studies | 1102 | Law of Contracts | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Sophomore Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Education | 2255 | Effective Use of Instructional Technology in Classrooms + | 3 |  |
| Special Education | 2231 | Introduction to Inclusive Education + | 3 |  |
| Education | 2296 | Effective Teaching: Theory and Practice | 3 | WI |


| Career \& Technical Education | 3103 | Curriculum in Career \& Technical Education+ | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Marketing | 2101 | Marketing Management | 3 |  |
| Subtotal |  |  | 15 |  |
| Junior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| English Education (Secondary) | 3338 | Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12 (Restrictions: Candidacy Required) + | 3 |  |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| Career \& Technical <br> Education | 4324 | Industry-Based Coordination Methods for WorkBased Learning | 3 |  |
| Engineering | 3033 | Entrepreneurial Engineering | 3 |  |
| Marketing | 3501 | Integrated Marketing Communications | 3 |  |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Junior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Career \& Technical Education | 3372 | Project-Based Technical Instruction for Children+ | 3 |  |
| Education | 4111 | Classroom \& Conflict Management in Grades 4 through 12 | 3 |  |
| Career \& Technical Education | 4331 | Industry-Based Instructional Methods for WorkBased Learning | 3 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Marketing | 3596 | Consumer and Buyer Behavior | 3 | WI |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Senior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Business Education | 3241 | Methods of Teaching Microcomputer Applications (Restrictions: Candidacy Required) | 3 |  |
| Secondary Education | 3796 | Differentiated Literacy Instruction in the Disciplines, 7-12 <br> (Restrictions: Candidacy Required)+ | 3 | WI |
| Career \& Technical Education | $\begin{aligned} & 4285 \\ & \text { or } \\ & 3389 \\ & \hline \end{aligned}$ | Industry Education Capstone \& Field Experience for Work-Based Learning <br> or <br> Supervised Work Experience* | $3$ 1-6* |  |
| Marketing | 3504 | Sales and Sales Management | 3 |  |
| Marketing | 3553 | International Marketing | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Secondary Education | 4801 | Senior Seminar \& Performance Assessment in Secondary Education + | 3 |  |
| Secondary Education | 4688 | Student Teaching in Secondary Education + | 9 |  |
| Education | 2306 | Assessment \& Evaluation | 3 |  |


| Subtotal |  |  | 15 |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| Total for Marketing Education: |  | $122-123$ |  |  |

*Marketing Education majors are also eligible for the Cooperative Education Certificate provided they can document wage earning experience.
+Courses and experiences with integrated special education competencies.

## Certification Programs

## Cooperative Education

Dr. Chester Wichowski, Certification Program Advisor

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chet.w@temple.edu
School personnel interested in teaching and supervising students in work-based settings in Pennsylvania must be certified in Cooperative Education. This certification covers a variety of work-based settings for secondary students, including capstone programs, diversified occupations programs, shadowing experiences, work experience programs, internships, and job shadowing. The skill and knowledge included in this certification program also has application to post-secondary and adult settings.

Persons wishing to become teachers of cooperative education must apply to the program and provide information about their education and experiential backgrounds. Based on the information provided, a program of studies, which includes an internship, is prepared. Persons who enter this program holding a valid teaching certificate will work toward earning an "add-on" certificate in Cooperative Education, while others will work toward a "stand-alone" certificate. Persons wishing to enroll in this program should contact an advisor.

## Career \& Technical Certification Program

Ms. Nancy Johnston, Certification Program Advisor

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215-204-8376
nancy.johnston@temple.edu
This curriculum, which is offered in cooperation with the Pennsylvania Department of Education, is designed to prepare in-service teachers of career and technical education (industrial) subjects at the secondary, post-secondary, and 2-year college levels in public and private schools. Career and Technical Teacher Education courses may be taken on three levels: certification, undergraduate, and graduate. Persons who meet statutory requirements and who have at least two years of work experience beyond the learning period in a trade, technical, or other selected occupation may prepare for certification to teach occupational subjects or related classes in secondary schools in Pennsylvania.

Certification students must apply and be admitted to the Industrial (Career and Technical) Education Certification Program. All certification students must meet the requirements for admission to the university. In addition, candidates must satisfy the departmental requirements for work experience and must have passed the required Occupational Competency Assessment. Students must also pass Praxis I computer-based tests before receiving the Vocational Intern Teaching Certificate. This program prepares the student for career and technical teacher certification in Pennsylvania and, in general, is acceptable in other states. Work taken toward the certification objective may be applied to the undergraduate degree program. The courses are offered on a part-time basis for those who are employed on an Intern credential. Completing 18 semester hours of approved coursework and passing the occupational competency examination will permit the issuance of a Vocational Instructional I Certificate, which is valid for six years.

Upon receipt of the Vocational Instructional I certificate, the student must complete an additional 60 s.h. of college work, earning a minimum of 6 semester hours of credit per year until the requirements for permanent certification (78 s.h. and three years successful teaching) are satisfied.

Persons wishing to enroll in this program should contact an advisor.

## Early Childhood Education (PreK-4)

Shimada Resource Center
College of Education
150 Ritter Annex
1301 Cecil B. Moore Ave.
Philadelphia, PA 19122
215-204-8011 (phone)
215-204-4383 (fax)
The Early Childhood-Elementary Education (PreK-4) program is designed to prepare teachers to work in programs serving children in pre-kindergarten, kindergarten, primary, and early intermediate grades. The program aims to help students gain an appreciation and understanding of child development and learning, build conceptual and practical expertise about effective instruction, acquire a sound philosophy of education, and develop personally and professionally.

One hallmark of the program is the variety of exciting and diverse field experiences. By working directly with children several times prior to student teaching, students in the program gain hands-on experience with children of various ages and backgrounds, gaining insight into the creation of effective learning situations which meet the needs of all learners.

## Bachelor of Science in Education Requirements

## Summary of Requirements

- All new students are required to complete the university's General Education (GenEd) curriculum (except where a waiver is noted)
- All students must take a minimum of two writing-intensive (WI) courses at Temple University.
- Students must be accepted into the certification program prior to taking methods courses (see Candidacy).
- Additional University and College requirements are located on the College of Education's Academic Policies and Regulations page in the Bulletin.


## Early Childhood Education Suggested Semester-by-Semester Plan

| Freshman Year - Fall Semester | Course Title | Hours | Attribute |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course \# | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 |
|  | GW |  |  |  |
| English | $08 x x$ or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08 xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | $08 x x$ or 09xx | U.S. Society | 3 | GU |
| GenEd |  | Elective* | 3 |  |
| Elective |  |  | $\mathbf{1 6}$ |  |
| Subtotal |  |  |  |  |

*The following are suggested electives: Communication Sciences \& Disorders 1108: Introduction to Linguistics; Education 2255: Effective Use of Instructional Technology in Classrooms; English 2301: Survey of American Literature I; History 1101: U.S. History to 1877; Sociology 1176: Introduction to Sociology.

| Freshman Year - Spring Semester |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08 xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08 xx or 09xx | Arts | $3-4$ | GA |
| GenEd | 08 xx or 09xx | Global/World Society | 3 | GG |
| Mathematics | 1015 | Introduction to Numbers \& Figures | 4 |  |
| Subtotal |  |  | $\mathbf{1 6 - 1 7}$ |  |

Sophomore Year - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| $\begin{array}{\|l} \hline \text { Mathematics } \\ \text { or } \\ \text { Education } \\ \hline \end{array}$ | $\begin{gathered} 1021 \\ \text { or } \\ 1017 \end{gathered}$ | College Algebra or Algebra and Algebraic Thinking for Educators | 4 |  |
| Early Childhood Education | 2101 | Child Development, Birth to Nine | 3 |  |
| Education | 2103 | Socio-Cultural Foundations of Education in the United States | 3 |  |
| Special Education | 2231 | Introduction to Inclusive Education | 3 |  |
| Subtotal |  |  | 16 |  |


| Sophomore Year - Spring Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Early Childhood Education | 2105 | Cognition \& Learning in the Classroom | 3 |  |
| Early Childhood Education | 2106 | Language \& Literacy Development in Early Childhood: Birth through Kindergarten | 3 |  |
| Early Childhood Education | 2108 | Engaging Children in the Learning Process through Classroom Management | 3 |  |
| Early Childhood Education | 2187 | Practicum for Pre-K and Kindergarten | 3 |  |
| Elective |  | Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Junior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Early Childhood <br> Education | 3106 | Literacy Foundations for the Primary Grades: First Grade through Fourth Grade | 3 |  |
| Early Childhood <br> Education | 3107 | Learning Mathematics for the Primary Grades: First through Fourth Grade | 3 |  |
| Early Childhood Education | 3108 | Social Studies for the Early Years: Pre-K through Fourth Grade | 3 |  |
| Early Childhood Education | 3109 | Science for the Early Years | 3 |  |
| Early Childhood <br> Education | 3187 | Practicum for the Primary Grades | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Junior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Early Childhood <br> Education | 3205 | Assessment in Early Childhood Education | 3 |  |
| Early Childhood <br> Education | 3209 | Teaching English Language Learners in the Early Grades | 3 |  |
| Early Childhood <br> Education | 3296 | Differentiated Reading Instruction in the Early Grades | 3 | WI |
| Special Education | 3211 | Effective Instructional Strategies for Young Children with Disabilities | 3 |  |
| Elective |  | Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Early Childhood Education | 4101 | Integrating the Arts into Early Childhood Education | 3 |  |
| Early Childhood <br> Education | 4102 | Children's Literature: Pre-K through Fourth Grade | 3 |  |
| Early Childhood Education | 4196 | The Learning Community: Family \& Community Relationships | 3 | WI |
| Special Education | 4105 | Assessment in Early Childhood Special Education | 3 |  |


| Special Education | 4196 | Literacy Instruction for Young Children with Disabilities | 3 | WI |
| :---: | :---: | :---: | :---: | :---: |
| Subtotal |  |  | 15 |  |
| Senior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Early Childhood <br> Education | 4588 | Student Teaching in Early Childhood Education | 9 |  |
| Early Childhood <br> Education | 4801 | Senior Seminar \& Performance Assessment in Early Childhood Education | 3 |  |
| Subtotal |  |  | 12 |  |
| Minimum Total Hours for Bachelor of Science in Education in Early ChildhoodElementary Ed (Pre-K-4): |  |  |  | 120 |

## Early Childhood Education, Concentration in Special Education Suggested Semester-by-Semester Plan

The Early Childhood-Elementary Education (PreK-4) with Concentration in Special Education (K-8) program is designed to prepare teachers to work in programs serving diverse learners in a variety of settings in grades pre-kindergarten through four. In addition to certification in early childhood-elementary education, students in this concentration will learn to implement evidencebased instructional practices in classrooms with students of diverse abilities. Furthermore, students will apply their skills in a variety of field experiences including a practicum for diverse learners focused on addressing the needs of special education students and English language learners.

## Freshman Year - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Subtotal |  |  | $\mathbf{1 6}$ |  |

Freshman Year - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08 xx or 09xx | Arts | $3-4$ | GA |
| Education | 2103 | Socio-Cultural Foundations of Education in <br> the United States | 3 |  |
| Mathematics | 1015 | Introduction to Numbers \& Figures | 4 |  |
| Subtotal |  |  |  |  |

Sophomore Year - Fall Semester
$\left.\begin{array}{|l|l|l|c|c|}\hline \text { Subject } & \text { Course \# } & \text { Course Title } & \text { Hours } & \text { Attribute } \\ \hline \text { Intellectual Heritage } & 0852 \text { or 0952 } & \text { Mosaic: Humanities Seminar II } & 3 & \text { GZ } \\ \hline \begin{array}{l}\text { Mathematics } \\ \text { or } \\ \text { Education }\end{array} & \begin{array}{l}1021 \\ \text { or } \\ 1017\end{array} & \begin{array}{l}\text { College Algebra } \\ \text { or }\end{array} & 4 & \\ \hline \begin{array}{l}\text { Early Childhood } \\ \text { Education }\end{array} & 2101 & \text { Child Development, Birth to Nine }\end{array}\right)$

Junior Year - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Early Childhood <br> Education | 3106 | Literacy Foundations for the Primary Grades: <br> First Grade through Fourth Grade | 3 |  |
| Early Childhood <br> Education | 3107 | Learning Mathematics for the Primary <br> Grades: First through Fourth Grade | 3 |  |
| Early Childhood <br> Education | 3108 | Social Studies for the Early Years: Pre-K <br> through Fourth Grade | 3 |  |
| Early Childhood <br> Education | 3109 | Science for the Early Years | 3 |  |
| Early Childhood <br> Education | 3187 | Practicum for the Primary Grades | 3 |  |
| Subtotal |  |  |  |  |
|  | Course Title | $\mathbf{1 5}$ |  |  |
| Junior Year - Spring Semester | Course \# | Assessment in Early Childhood Education | 3 |  |
| Subject | Teaching English Language Learners in the |  |  |  |
| Early Grades |  |  |  |  |
| Education |  |  |  |  |$\quad 3$|  |
| :--- |
| Early Childhood |
| Education |


| Early Childhood <br> Education | 3296 | Differentiated Reading Instruction in the Early Grades | 3 | WI |
| :---: | :---: | :---: | :---: | :---: |
| Special Education | 3201 | Effective Instructional Strategies for Young Students with Mild to Significant Disabilities | 3 |  |
| Special Education | 3287 | Practicum for Diverse Learners | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Early Childhood Education | 4102 | Children's Literature: Pre-K through Fourth Grade | 3 |  |
| Early Childhood <br> Education | 4196 | The Learning Community: Family \& Community Relationships | 3 | WI |
| Special Education | 4103 | Classroom Management \& Positive Behavior Support | 3 |  |
| Special Education | 4105 | Assessment in Early Childhood Special Education | 3 |  |
| Special Education | 4196 | Literacy Instruction for Young Children with Disabilities | 3 | WI |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Early Childhood Education | 4588 | Student Teaching in Early Childhood Education | 9 |  |
| Early Childhood <br> Education | 4801 | Senior Seminar \& Performance Assessment in Early Childhood Education | 3 |  |
| Subtotal |  |  | 12 |  |
|  |  |  |  |  |
| Minimum Total Hours for Bachelor of Science in Education in Early ChildhoodElementary Ed (Pre-K-4) with a Concentration in Special Education: |  |  | 120 |  |

## Middle Grades Education

Shimada Resource Center<br>College of Education<br>150 Ritter Annex<br>1301 Cecil B. Moore Ave.<br>Philadelphia, PA 19122<br>215-204-8011 (phone)<br>215-204-4383 (fax)

The Bachelor of Science in Education in Middle Grades Education prepares undergraduate students for middle level teaching (fourth to eighth grades). Middle grades teachers, particularly
in math and science education, are increasingly sought out and in high-demand in Pennsylvania as well as across the country.

The College of Education program in Middle Grades Education is designed to ensure not only that there are certified teachers to fill the growing vacancies, but that our students graduate highly knowledgeable about learning and teaching as well as committed to pre/adolescent learners from diverse ethnic, economic and geographic backgrounds. To that end, our program focuses on building deep content-specific pedagogical knowledge aligned to the breadth of academic standards and the wide-ranging developmental needs of middle grades students. To develop a strong link between learning theories and actual pedagogical practice, we also require that our students engage in early, often and strategic field/clinical education experiences in middle grades settings.

Our newly designed program stands out as cutting-edge because we prepare undergraduate students to teach in both the upper elementary and middle grades classrooms. In addition to becoming certified to teach all elementary subjects in 4-6th, all Middle Grades Education students will pursue dual certification for 7-8th grades in one of the following concentrations:

- Math and Science
- Math and Language Arts/English
- Science and Language Arts/English

The total number of credit hours for the program is $\mathbf{1 2 6}$ credits for the Mathematics and Language Arts concentration, 126 for the Science and Language Arts concentration; and 127 credits for the Mathematics and Science concentration.

## Bachelor of Science in Education Requirements

## University Requirements

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

All students must take a minimum of two writing-intensive (WI) courses at Temple
University. Writing intensive course numbers end in 96, 97 and 98.

## College Requirements

Students receive a Bachelor of Science in Education degree with a recommendation for Pennsylvania teacher certification upon the successful completion of their program requirements with a minimum cumulative GPA of $\mathbf{3 . 0}$ or must meet the Pennsylvania Department of Education's Bureau of School Leadership and Teacher Quality GPA Qualifying Praxis Score.

The required total credit hours may vary depending on the course of study. These credit hours are satisfied by taking courses in four categories:

1. University General Education requirements (General Education)
2. Education courses
3. Teacher Education Certification Courses (i.e. methods and student teaching)
4. elective courses as permitted by your program of study

All students seeking to graduate with the recommendation for Instructional I Certification from Pennsylvania must also meet the requirements for candidacy.

## Suggested Semester-by-Semester Plans

## Mathematics and Language Arts Concentration:

To best prepare students in this major for the Praxis II exams, we strongly encourage taking the suggested GenEds listed.

| Freshman Year - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Biology | 1011 | General Biology I (includes a lab) ** | 4 |  |
| GenEd | 08xx or 09xx | Global/World Society (suggested: <br> Anthropology/Geography \& Urban Studies/Sociology <br> 0867: World Regions \& Cultures: Diversity \& Interconnections) | 3 | GG |
| Mathematics | 1022 | Precalculus | 4 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Freshman Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Mathematics | 1041 | Calculus I *** | 4 |  |
| GenEd | 08xx or 09xx | Race \& Diversity <br> (suggested: African American Studies/Anthropology/ Geography \& Urban Studies/History/Political Science/ Sociology 0829: The History \& Significance of Race in America, or Sociology 0926: Honors: The History \& Significance of Race in America) | 3 | GD |
| Communication <br> Sciences <br> \& Disorders | 1108 | Introduction to Linguistics | 3 |  |
| Physics | 1021 | Introduction to General Physics I ** | 4 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Mathematics | 1042 | Calculus II | 4 |  |


| GenEd | 08xx or 09xx | U.S. Society (suggested: American <br> Studies/Anthropology/Geography \& Urban <br> Studies/History/Sociology 0848: American <br> Revolutions) | 3 | GU |
| :--- | :--- | :--- | :---: | :---: |
| English | 2831 | Literacy and Society | 3 |  |
| Education | 2103 | Socio-cultural Foundations of Education in the United <br> States (field experience) | 3 |  |
| Subtotal |  | $\mathbf{1 6}$ |  |  |

Sophomore Year - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{\|c} \hline \text { Biology } \\ \text { or } \\ \text { Physics } \\ \hline \end{array}$ | $\begin{gathered} 1012 \\ \text { or } \\ 1022 \end{gathered}$ | General Biology II (includes a lab) or Introduction to General Physics II | 4 |  |
| Mathematics | 1015 | Introduction to Numbers \& Figures | 4 |  |
| Education | 2109 | Adolescent Development for Educators (field experience)* | 3 |  |
| Special Education | 2231 | Introduction to Inclusive Education (field experience) * | 3 |  |
| Select one of the following English courses: |  |  | 3 |  |
| English | $\begin{aligned} & 1121 \\ & 1141 \\ & 2004 \\ & 2511 \\ & 2512 \end{aligned}$ | Introduction to Fiction Introduction to Literature Creative Writing: Fiction Modern Poetry Modern Novel |  |  |
| Subtotal |  |  | 17 |  |

Junior Year - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| History | $\begin{gathered} 1101 \\ \text { or } \\ 1102 \\ \hline \end{gathered}$ | U.S. History to 1877 <br> or <br> U.S. History since 1877 | 3 |  |
| Mathematics | $\begin{gathered} 1013 \\ \text { or } \\ 2031 \\ \hline \end{gathered}$ | ```Elements of Statistics or Probability & Statistics``` | 3 |  |
| GenEd | 08xx or 09xx | Arts (Suggested: English 0826 or 0926: Creative Acts) | 4 | GA |
| Middle Grades Education | 3109 | Cognitive Development in the Content Areas (field experience) FALL ONLY | 3 |  |
| Middle Grades Education | 3111 | Applications of Learning Theory to Middle Grades Education (field experience) <br> FALL ONLY | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Junior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 2301 or 2302 or 2402 | Survey of American Literature I <br> or <br> Survey of American Literature II <br> or <br> African American Literature II | 3 |  |
| Mathematics | $\begin{gathered} 2021 \\ \text { or } \\ 3003 \end{gathered}$ | Functions and Modeling or <br> Theory of Numbers | 3 |  |


| Middle Grades Education | 3145 | Teaching and Learning Mathematics in the Middle Grades (field experience) SPRING ONLY | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Middle Grades <br> Education | 4108 | Teaching and Learning Science in the Middle Grades (field experience) SPRING ONLY | 3 |  |
| Special Education | 4109 | Educating Students with Disabilities in Inclusive Settings (field experience) SPRING ONLY | 3 |  |
| Subtotal |  |  | 15 |  |
| Senior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Middle Grades Education | 3196 | Teaching and Learning Literacy in the Middle Grades FALL ONLY | 3 | WI |
| Special Education | 3187 | Integrated Literacy and Special Education Practicum (field experience) FALL ONLY | 3 |  |
| Middle Grades Education | 3296 | Cultures, Communities and Families (field experience) FALL ONLY | 3 | WI |
| Education | 2306 | Assessment and Evaluation | 3 |  |
| English Education (Secondary) | 3338 | Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12 (field experience)* | 3 |  |
| Subtotal |  |  | 15 |  |
| Senior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Middle Grades Education | 4888 | Student Teaching in the Middle Grades | 9 |  |
| Middle Grades Education | 4801 | Senior Seminar \& Performance Assessment in Middle Grades Education | 3 |  |
| Education | 4111 | Classroom \& Conflict Management in Grades 4 through 12 | 3 |  |
| Subtotal |  |  | 15 |  |
| Total Hours for Mathematics \& Language Arts Concentration: |  |  | 126 |  |

* These three courses constitute the waiver for the GenEd Human Behavior category when the GPA requirement is met.
** These two courses constitute the waiver for the GenEd Science category when the GPA requirement is met.
*** This course constitutes the waiver for the GenEd Quantitative Literacy category when the GPA requirement is met.


## Science and Language Arts Concentration:

To best prepare students in this major for the Praxis II exams, we strongly encourage taking the suggested GenEds listed.

| Freshman Year - Fall Semester |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 | GW |


| GenEd | 08xx or 09xx | Global/World Society (suggested: <br> Anthropology/Geography \& Urban Studies/Sociology <br> 0867: World Regions \& Cultures: Diversity \& Interconnections) | 3 | GG |
| :---: | :---: | :---: | :---: | :---: |
| Mathematics | 1021 | College Algebra *** | 4 |  |
| Biology | 1011 | General Biology I (includes a lab) ** | 4 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Freshman Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Race \& Diversity <br> (suggested: African American Studies/Anthropology/ Geography \& Urban Studies/History/Political Science/ Sociology 0829: The History \& Significance of Race in America, or Sociology 0926: Honors: The History \& Significance of Race in America) | 3 | GD |
| Mathematics | 1022 | Precalculus *** | 4 |  |
| GenEd | 08xx or 09xx | Arts | 3 | GA |
| Physics | 1004 | Introduction to Astronomy | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Mathematics | 1015 | Introduction to Numbers \& Figures *** | 4 |  |
| Chemistry | 1021 | Introduction to Chemistry I | 3 |  |
| Chemistry | 1023 | Introduction to Chemistry Laboratory I | 1 |  |
| English | 2831 | Literacy and Society | 3 |  |
| Education | 2103 | Socio-cultural Foundations of Education in the United States (field experience) | 3 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Communication Sciences \& Disorders | 1108 | Introduction to Linguistics | 3 |  |
| Chemistry | 1022 | Introduction to Chemistry II | 3 |  |
| Chemistry | 1024 | Introduction to Chemistry Laboratory II | 1 |  |
| GenEd | 08xx or 09xx | U.S. Society (suggested: American Studies/Anthropology/Geography \& Urban Studies/History/Sociology 0848: American Revolutions) | 3 | GU |
| Education | 2109 | Adolescent Development for Educators (field experience) * | 3 |  |
| Special Education | 2231 | Introduction to Inclusive Education (field experience) * | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Junior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |


| Select one of the following English courses: |  |  | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| English | $\begin{aligned} & 1121 \\ & 1141 \\ & 2004 \\ & 2511 \\ & 2512 \\ & \hline \end{aligned}$ | Introduction to Fiction Introduction to Literature Creative Writing: Fiction Modern Poetry Modern Novel |  |  |
| History | $\begin{gathered} 1101 \\ \text { or } \\ 1102 \end{gathered}$ | $\begin{aligned} & \text { U.S. History to } 1877 \\ & \text { or } \\ & \text { U.S. History since } 1877 \end{aligned}$ | 3 |  |
| Physics | 1021 | Introduction to General Physics I | 4 |  |
| Middle Grades Education | 3109 | Cognitive Development in the Content Areas (field experience) FALL ONLY | 3 |  |
| Middle Grades Education | 3111 | Applications of Learning Theory to Middle Grades Education (field experience) FALL ONLY | 3 |  |
| Subtotal |  |  | 16 |  |
| Junior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 2301 <br> or <br> 2302 <br> or <br> 2402 | ```Survey of American Literature I or Survey of American Literature II or African American Literature II``` | 3 |  |
| Biology | 1012 | General Biology II (includes a lab) ** | 4 |  |
| Middle Grades Education | 3145 | Teaching and Learning Mathematics in the Middle Grades (field experience)*** SPRING ONLY | 3 |  |
| Middle Grades Education | 4108 | Teaching and Learning Science in the Middle Grades (field experience) SPRING ONLY | 3 |  |
| Special Education | 4109 | Educating Students with Disabilities in Inclusive Settings (field experience) SPRING ONLY | 3 |  |
| Subtotal |  |  | 16 |  |
| Senior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Middle Grades Education | 3196 | Teaching \& Learning Literacy in the Middle Grades FALL ONLY | 3 | WI |
| Special Education | 3187 | Integrated Literacy and Special Education Practicum (field experience) FALL ONLY | 3 |  |
| Middle Grades Education | 3296 | Cultures, Communities \& Families (field experience) FALL ONLY | 3 | WI |
| English Education (Secondary) | 3338 | Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12 (field experience) * | 3 |  |
| Education | 2306 | Assessment and Evaluation | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Middle Grades Education | 4888 | Student Teaching in the Middle Grades | 9 |  |



* These 3 courses constitute the waiver for the GenEd Human Behavior category when the GPA requirement is met.
** These two courses constitute the waiver for the GenEd Science category when the GPA requirement is met.
*** These four courses constitute the waiver for the GenEd Quantitative Literacy category when the GPA requirement is met.


## Mathematics and Science Concentration:

To best prepare students in this major for the Praxis II exams, we strongly encourage taking the suggested GenEds listed.

| Freshman Year - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Biology | 1011 | General Biology I (includes a lab) ** | 4 |  |
| GenEd | 08xx or 09xx | Global/World Society (suggested: <br> Anthropology/Geography \& Urban Studies/Sociology 0867: World Regions \& Cultures: Diversity \& Interconnections) | 3 | GG |
| Mathematics | 1022 | Precalculus | 4 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Freshman Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Race \& Diversity <br> (suggested: African American Studies/Anthropology/ Geography \& Urban Studies/History/Political Science/ Sociology 0829: The History \& Significance of Race in America, or Sociology 0926: Honors: The History \& Significance of Race in America) | 3 | GD |
| Mathematics | 1041 | Calculus I *** | 4 |  |
| Physics | 1004 | Introduction to Astronomy | 3 |  |
| GenEd | 08xx or 09xx | Arts | 3 | GA |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Mathematics | 1042 | Calculus II | 4 |  |
| Chemistry | 1021 | Introduction to Chemistry I | 3 |  |


| Chemistry | 1023 | Introduction to Chemistry Laboratory I | 1 |  |
| :---: | :---: | :---: | :---: | :---: |
| GenEd | 08xx or 09xx | U.S. Society (suggested: American Studies/Anthropology/Geography \& Urban Studies/History/Sociology 0848: American Revolutions) | 3 | GU |
| Education | 2103 | Socio-cultural Foundations of Education in the United States (field experience) | 3 |  |
| Subtotal |  |  | 17 |  |
| Sophomore Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 2301 <br> or <br> 2302 <br> or <br> 2402 | Survey of American Literature I <br> or <br> Survey of American Literature II <br> or <br> African American Literature II | 3 |  |
| Mathematics | 1015 | Introduction to Numbers \& Figures | 4 |  |
| Chemistry | 1022 | Introduction to Chemistry II | 3 |  |
| Chemistry | 1024 | Introduction to Chemistry Laboratory II | 1 |  |
| Education | 2109 | Adolescent Development for Educators (field experience)* | 3 |  |
| Special Education | 2231 | Introduction to Inclusive Education (field experience)* | 3 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Junior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| History | $\begin{gathered} 1101 \\ \text { or } \\ 1102 \end{gathered}$ | $\begin{aligned} & \text { U.S. History to } 1877 \\ & \text { or } \\ & \text { U.S. History since } 1877 \end{aligned}$ | 3 |  |
| Mathematics | $\begin{gathered} 1013 \\ \text { or } \\ 2031 \\ \hline \end{gathered}$ | $\left\lvert\, \begin{aligned} & \text { Elements of Statistics } \\ & \text { or } \\ & \text { Probability and Statistics }\end{aligned}\right.$ | 3 |  |
| Physics | 1021 | Introduction to General Physics I | 4 |  |
| Middle Grades Education | 3109 | Cognitive Development in the Content Areas (field experience) FALL ONLY | 3 |  |
| Middle Grades Education | 3111 | Applications of Learning Theory to Middle Grades Education (field experience) FALL ONLY | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Junior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | $\begin{gathered} \hline 2021 \\ \text { or } \\ 3003 \\ \hline \end{gathered}$ | Functions and Modeling or <br> Theory of Numbers | 3 |  |
| Biology | 1012 | General Biology II (includes a lab) ** | 4 |  |
| Middle Grades Education | 3145 | Teaching and Learning Mathematics in the Middle Grades (field experience) SPRING ONLY | 3 |  |
| Middle Grades Education | 4108 | Teaching and Learning Science in the Middle Grades (field experience) SPRING ONLY | 3 |  |
| Special Education | 4109 | Educating Students with Disabilities in Inclusive Settings (field experience) SPRING ONLY | 3 |  |


| Subtotal |  |  | 16 |  |
| :---: | :---: | :---: | :---: | :---: |
| Senior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Middle Grades Education | 3196 | Teaching and Learning Literacy in the Middle Grades FALL ONLY | 3 | WI |
| Special Education | 3187 | Integrated Literacy and Special Education Practicum (field experience) FALL ONLY | 3 |  |
| Middle Grades Education | 3296 | Cultures, Communities \& Families (field experience) FALL ONLY | 3 | WI |
| English Education (Secondary) | 3338 | Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12 (field experience)* | 3 |  |
| Education | 2306 | Assessment and Evaluation | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Middle Grades Education | 4888 | Student Teaching in the Middle Grades | 9 |  |
| Middle Grades Education | 4801 | Senior Seminar \& Performance Assessment in Middle Grades Education | 3 |  |
| Education | 4111 | Classroom \& Conflict Management in Grades 4 through 12 | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Total Hours for Mathematics \& Science Concentration: |  |  |  | 127 |

* These 3 courses constitute the waiver for the GenEd Human Behavior category when the GPA requirement is met.
** These two courses constitute the waiver for the GenEd Science category when the GPA requirement is met.
*** This course constitutes the waiver for the GenEd Quantitative Literacy category when the GPA requirement is met.


## Secondary Education

Shimada Resource Center
College of Education
150 Ritter Annex
1301 Cecil B. Moore Ave.
Philadelphia, PA 19122
215-204-8011 (phone)
215-204-4383 (fax)
The Secondary Education program offers specializations that prepare students to earn an Instructional I Certificate that will authorize them to teach in one of the following content areas:

Specializations offering grades 7-12 certification:

- English
- Mathematics
- Social Studies

Specialization offering K-12 certification:

- World Languages
o French
o German
o Hebrew
o Italian
o Latin
o Spanish

Additionally, science and mathematics certifications are available in the TUteach program, a joint program offered through the College of Science and Technology and the College of Education. All TUteach degrees lead to a "Bachelor of Science with Teaching" degree, all of which have been approved by the Pennsylvania Department of Education for secondary level teaching certification in the content area - grades 7 through 12.

- Sciences: Biology with Teaching, Chemistry with Teaching, Earth \& Space Science with Teaching, General Science with Teaching, Physics with Teaching
- Mathematics: Mathematics \& Computer Science with Teaching, Mathematics \& Technology with Teaching, Mathematics with Teaching

Students in Secondary Education must complete course work in both education and in their content areas. All Secondary Education specializations require 8 credits in the specialty area, with the exception of math which requires an additional 3 credit hour course, in addition to the following courses:

- Education 2103: Socio-cultural Foundations of Education in the United States (3 credits)*
- Education 2109: Adolescent Development for Educators (3 credits)*
- Special Education 2231: Introduction to Inclusive Education (3 credits)*
- Education 1255: Inclusive Education for a Diverse Society (3 credits)
- Education 2205: Curriculum Instruction and Technology in Education (3 credits)
- Education 2255: Effective Use of Instructional Technology in Classrooms (3 credits)
- Education 2306: Assessment and Evaluation (3 credits)
- Education 4111: Classroom and Conflict Management in Grades 4 through 12 (3 credits)
- English Education (Secondary) 3338: Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12 (3 credits)
- Secondary Education 3796: Differentiated Literacy Instruction in the Disciplines, 7-12 (3 credits)
- Secondary Education 4801: Senior Seminar and Performance Assessment in Secondary Education (3 credits)
- Secondary Education 4688: Student Teaching in Secondary Education (9 credits)
*course required for candidacy
For specific details on each specialization, including suggested four-year academic plans, click on one the following links: English, Mathematics, Social Studies, World Languages.

Please note: Students are encouraged to speak with their College of Education advisor each semester to ensure that all requirements for Pennsylvania teacher certification are being fulfilled. In order to maintain good standing in Secondary Education, students must maintain a 2.0 grade point average in the course work in their content areas in addition to maintaining a 3.0 cumulative grade point average.

## Secondary Education / English Education

## Academic Content Area - English

Students seeking certification in Secondary Education: English must complete the requirements for both the major in Secondary Education: English AND for the English major as specified by the English Department. (For more information on the English department's major requirements, click here.) In order to assure that students gain the content knowledge specified by the Pennsylvania Department of Education, we strongly recommend students to choose English electives that include the following areas: Linguistics, Shakespeare, and African American literature. Coursework in these areas prepare students for the state-mandated Praxis II examination.

## Summary of Requirements

University and College requirements are located under Academic Policies and Regulations in the Bulletin.

Program Requirements for Secondary Education / English Education

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| English Education (Secondary) | 4366 | Teaching Literature \& Reading: 7-12 | 3 |  |
| English Education (Secondary) | 4371 | Teaching Oral \& Written Communication: 7-12 | 3 |  |
| Education | 4389 | Field Experience | 2 |  |
| Subtotal |  | $\mathbf{8}$ |  |  |

Suggested Semester-by-Semester Plan for Secondary Education / English Education

| Freshman Year - Fall Semester | Course Title | Hours | Attribute |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course \# | Corer | 4 | GQ |
| GenEd | 08xx or 09xx | Quantitative Literacy | 3 | GU |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GS |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GG |
| GenEd | 08xx or 09xx | Global/World Society |  |  |


| English | 0802, 0812 or 0902] | Analytical Reading \& Writing | 4 | GW |
| :---: | :---: | :---: | :---: | :---: |
| Subtotal |  |  | 17 |  |
| Freshman Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| English | 2097 | Introduction to English Studies | 3 | WI |
| $\begin{aligned} & \text { Mathematics } \\ & \text { or } \\ & \text { Education } \\ & \hline \end{aligned}$ | $\begin{array}{\|l} \hline 1021 \\ \text { or } \\ 1017 \\ \hline \end{array}$ | ```College Algebra or Algebra & Algebraic Thinking for Educators``` | 4 |  |
| Select one of the following: |  |  | 3 |  |
| Education <br>  <br> Disorders <br> Anthropology <br> English | 0815 1108 2507 2821 | Language \& Society <br> Introduction to Linguistics <br> Fundamentals of Linguistic Anthropology Introduction to Linguistics |  |  |
| Subtotal |  |  | 16 |  |
| Sophomore Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Special Education | 2231 | Introduction to Inclusive Education + * | 3 |  |
| Education | 2103 | Socio-cultural Foundations of Education in the United States | 3 |  |
| English | 2201 | Survey of English Literature: Beginnings to 1660 | 3 |  |
| English | 2XXX | English Elective** | 3 |  |
| Subtotal |  |  | 15 |  |
| Sophomore Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Education | 2109 | Adolescent Development for Educators * | 3 |  |
| Education | 4111 | Classroom \& Conflict Management in Grades 4 through 12 | 3 |  |
| English | 2202 | Survey of English Literature: 1660-1900 | 3 |  |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Junior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Education | 1255 | Inclusive Education for a Diverse Society + | 3 |  |
| English Education (Secondary) | 4366 | Teaching Literature \& Reading: 7-12 (Fall only) | 3 |  |
| Education | 4389 | Field Experience + | 1 |  |
| English | 2301 | Survey of American Literature I | 3 |  |
| English | 2xxx | English Elective** | 3 |  |
| English | 3 xxx | English Elective** | 3 |  |
| Subtotal |  |  | 16 |  |


| Junior Year - Spring Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Education | 2205 | Curriculum Instruction \& Technology in Education | 3 |  |
| English Education (Secondary) | 4371 | Teaching Oral \& Written Communication: 7-12 (Spring only) | 3 |  |
| Education | 4389 | Field Experience + | 1 |  |
| English Education (Secondary) | 3338 | Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12 * | 3 |  |
| English | 2302 | Survey of American Literature II | 3 |  |
| English | 3xxx | English Elective** | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Senior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Secondary Education | 3796 | Differentiated Literacy Instruction in the Disciplines, 7-12 + | 3 | WI |
| English | 2xxx | English Elective** | 3 |  |
| English | 3 xxx | English Elective** | 3 |  |
| English | $4 \times 96,4 \times 97$ or $4 \times 98$ | Senior Seminar | 3 | WI |
| Education | 2255 | Effective Use of Instructional Technology in Classrooms + | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Education | 2306 | Assessment \& Evaluation | 3 |  |
| Secondary Education | 4688 | Student Teaching in Secondary Education + | 9 |  |
| Secondary Education | 4801 | Senior Seminar \& Performance Assessment in Secondary Education + | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Total Credits required for Secondary Education/English Education: |  |  | 125-126 |  |

+ Indicates courses and experiences enhanced with special education competencies.
* These 3 courses constitute the waiver for the GenEd Human Behavior category when the GPA requirement is met.
** In order to assure that students gain the content knowledge specified by the Pennsylvania Department of Education, we strongly urge students to choose English electives that include the following areas: Linguistics, Shakespeare, and African American literature. Without coursework in these areas, students risk failing the state-mandated Praxis II examination.


## Secondary Education / World Languages Education

In the state of Pennsylvania, certification in a world language is a K-12 certificate. World Language certification is offered in French, German, Hebrew, Italian, Latin, and Spanish. Students seeking certification in Secondary Education: World Languages must complete the requirements for both the major in Secondary Education: World Languages AND for the language major as specified by the College of Liberal Arts.

## Summary of Requirements

University and College requirements are located under Academic Policies and Regulations in the Bulletin.

Program Requirements for Secondary Education /World Languages Education

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Foreign Language Ed-Secondary | 5429 | Curriculum \& Methods in Foreign Languages | 3 |  |
| Foreign Language Ed-Secondary | 5431 | Innovations in Foreign Language Education | 3 |  |
| Education | 4389 | Field Experience | 2 |  |
| Subtotal |  |  | $\mathbf{8}$ |  |

Ten courses above the first two elementary courses must be taken (that is, beyond courses which, at Temple, are generally numbered 1001 and 1002)

All courses must be taught in the target language. (Native speakers who received most of their pre-university education in their native land may be eligible to certify by taking eight appropriate foreign language courses in their native language.)

These ten courses must include:

- Composition and Conversation: at least two (and preferably three) courses are required, except for Italian, in which only one course is available.
- Culture and Civilization: one course is required.
- Linguistics: one course is required. If no course is available in the target language, one will have to be taken in another department, but it will not count as a foreign language course if taken in the English or Strategic Communication departments.
- Literature: two courses are required, one of which must be contemporary literature. Students should check with an advisor to select the specific courses that meet the above requirements. Additional courses should also be selected in consultation with an advisor. It is strongly recommended that, in Spanish, courses be taken in both Peninsular and Latin American Spanish. Similarly, in French, coursework should include both continental and overseas French.

Total Semester Hours for Certification in One Foreign Language: 122-124
It is strongly recommended that certification in English as a Second Language (ESL or ESOL) or in an additional foreign language be pursued in order to enhance career opportunities. Courses may be taken during summer sessions to avoid heavy course loads during the academic year.

Total Semester Hours for Certification in One Foreign Language and ESL: 131-133

## Academic Content Area for Certification in Two Foreign Languages

Ten courses in the first foreign language must be taken. If the language is begun at the college level, the first two elementary courses do not count toward the ten courses. At Temple, these courses are generally numbered 1001 and 1002.

For the second foreign language, at least eight courses must be taken. The first two beginning courses do count toward certification in the second foreign language. The same courses required for the first foreign language apply also to the second foreign language, (i.e., two courses in composition and conversation, one culture and civilization course, one linguistics course, and two literature courses, including contemporary literature).

Total Semester Hours for Certification in Two Foreign Languages: 146-148

## Native Speakers

Native speakers who were educated to speak, read, and write their native language need only eight courses in the formal study of their native language as a subject at the university level. Courses should be at an appropriate level for their background. These courses must include two composition and conversation courses, one culture and civilization course, one linguistics course, and two literature courses (including a contemporary literature course). There is no credit-byexamination given at Temple in a foreign language.

## Foreign Study and/or Travel

Study and travel experiences in relevant foreign language speaking areas are highly recommended. Temple provides such experiences at Temple's Rome Campus, the TempleSorbonne program, the Temple University of Puerto Rico exchange program, or Temple's exchange programs with the Universities of Hamburg and Tübingen in Germany. The Latin American Studies Semester program is an immersion experience available at Temple's Main Campus to all Spanish majors during spring semesters. Students interested in Study Abroad should consult International Programs and College of Education advising well in advance of when they plan to go abroad.

Suggested Semester-by-Semester Plan for Secondary Education / World Languages Education

| Freshman Year - Fall Semester |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | $08 x x$ or 09xx | Quantitative Literacy | 4 | GQ |
| English | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | $08 x x$ or 09xx | Science \& Technology I | 3 | GS |
| Foreign Language |  | Foreign Language Elective \#1 | 3 |  |
| Subtotal |  |  |  |  |
|  |  |  |  |  |
| Freshman Year - Spring Semester | Course \# | Course Title | $\mathbf{1 4}$ |  |
| Subject |  |  |  |  |


| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| :--- | :--- | :--- | :---: | :---: |
| GenEd | 08 xx or 09xx | Science \& Technology II | 3 | GS |
| Mathematics <br> or <br> Education | 1021 <br> or <br> 1017 | College Algebra <br> or <br> Algebra \& Algebraic Thinking for Educators | 4 |  |
| Education | Socio-cultural Foundations of Education in the United <br> States | 3 |  |  |
| Foreign Language | Composition \& Conversation + | 3 |  |  |
| Subtotal |  | $\mathbf{1 6}$ |  |  |

Sophomore Year - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Education | 2109 | Adolescent Development for Educators * | 3 |  |
| Special Education | 2231 | Introduction to Inclusive Education $*$ | 3 |  |
| Foreign Language |  | Composition \& Conversation +** | 3 |  |
| Subtotal |  |  |  |  |

## Sophomore Year - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Education | 2205 | Curriculum Instruction \& Technology in Education | 3 |  |
| Education | 4111 | Classroom \& Conflict Management in Grades 4 <br> through 12 | 3 |  |
| Foreign Language |  | Culture \& Civilization | 3 |  |
| Elective | Elective \#1 | 3 |  |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

Junior Year - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Elective |  | Elective \#2 | 3-4 |  |
| English Education (Secondary) | 3338 | Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12 * | 3 |  |
| Foreign Language |  | Contemporary Literature \% | 3 |  |
| Foreign Language |  | Foreign Language Elective \#2 | 3 |  |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Junior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| Education | 2255 | Effective Use of Instructional Technology in Classrooms + | 3 |  |
| Foreign Language Ed-Secondary | 5429 | Curriculum \& Methods in Foreign Languages | 3 |  |
| Education | 4389 | Field Experience + | 1 |  |
| Foreign Language |  | Literature | 3 |  |
| Foreign Language |  | Foreign Language Elective \#3 | 3 |  |
| Subtotal |  |  | 16-17 |  |


| Senior Year - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Secondary Education | 3796 | Differentiated Literacy Instruction in the Disciplines, 7-12 + | 3 | WI |
| Education | 1255 | Inclusive Education for a Diverse Society + | 3 |  |
| Foreign Language Ed-Secondary | 5431 | Innovations in Foreign Language Education | 3 |  |
| Education | 4389 | Field Experience + | 1 |  |
| Foreign Language |  | Linguistics ^ | 3 |  |
| Foreign Language |  | Foreign Language Elective \#4 | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Senior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Secondary Education | 4688 | Student Teaching in Secondary Education + | 9 |  |
| Secondary Education | 4801 | Senior Seminar \& Performance Assessment in Secondary Education + | 3 |  |
| Education | 2306 | Assessment \& Evaluation | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Total Credits required for Secondary Education/World Languages Education: |  |  | 122-124 |  |

+ Indicates courses and experiences enhanced with special education competencies.
* These 3 courses constitute the waiver for the GenEd Human Behavior category when the GPA requirement is met
** Must be a writing-intensive course at the 3000-level.
\% Contemporary literature course must be at the 4000-level for all majors.
$\wedge$ Spanish majors must take Spanish linguistics at the 4000-level.


## Secondary Education / Mathematics Education

Students seeking certification in Secondary Education: Mathematics must complete the requirements for both the major in Secondary Education: Mathematics AND for the Mathematics (B.A.) major as specified by the College of Science and Technology.

The eight semester plan delineated below is inclusive of all requirements for both the Secondary Education: Mathematics major housed in the College of Education AND for the Mathematics major housed in the College of Science and Technology (CST). Students entering this major must declare the second major of Mathematics through CST.

2013-2014 will be the final academic year in which the College of Education will offer the Secondary Education/Mathematics program. After the 2013-2014 academic year, students interested in teaching Secondary Education math should apply to the TUteach program, a joint program of the College of Science and Technology and the College of Education.

## Summary of Requirements

University and College requirements are located under Academic Policies and Regulations in the Bulletin.

Program Requirements for Secondary Education / Mathematics Education

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Mathematics Education <br> (Secondary) | 3145 | Teaching \& Learning Mathematics in the Middle Grades | 3 |  |
| Mathematics Education <br> (Secondary) | 4146 | Teaching \& Learning Mathematics in High School | 3 |  |
| Mathematics Education <br> (Secondary) | 4371 | History of Mathematics | 3 |  |
| Education | 4389 | Field Experience | 2 |  |
| Subtotal |  |  | $\mathbf{1 1}$ |  |

## Academic Content Area for Mathematics

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Mathematics | 1041 | Calculus I | 4 |  |
| Mathematics | 1042 | Calculus II | 4 |  |
| Mathematics | 2043 | Calculus III | 4 |  |
| Mathematics | 2101 | Linear Algebra | 3 |  |
| Mathematics | 2111 | Basic Concepts of Math | 3 |  |
| Mathematics | 3003 | Theory of Numbers | 3 |  |
| Mathematics | 3031 | Probability Theory I | 3 |  |
| Mathematics | 3032 | Mathematical Statistics | 3 |  |
| Mathematics | 3061 | Modern Geometry I | 3 |  |
| Mathematics | 3096 | Introduction to Modern Algebra | 3 | WI |
| Mathematics | 3137 | Real \& Complex Analysis I | 3 |  |
| Mathematics | 3138 | Real \& Complex Analysis II | 3 |  |
| Mathematics | 4096 | Senior Problem Solving | 3 | WI |
| Physics | 1061 | Elementary Classical Physics I | 4 |  |
| Physics | 1062 | Elementary Classical Physics II | 4 |  |
|  |  |  |  |  |
| Choose one of the following courses to fulfill the computer programming requirement: | 4 |  |  |  |
| Computer \& Information Sciences | 1053 | Programming in Matlab |  |  |
| Computer \& Information Sciences |  |  |  |  |
| 1057 | Computer Programming in C |  |  |  |
| Subtotal |  |  | 5 |  |

Suggested Semester-by-Semester Plan for Secondary Education / Mathematics Education

| Freshman Year - Fall Semester |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802,0812, or 0902 | Analytical Reading \& Writing | 4 | GW |



Junior Year - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Mathematics | 3032 | Mathematical Statistics | 3 |  |
| Mathematics | 3138 | Real \& Complex Analysis II | 3 |  |
| Mathematics | 3096 | Introduction to Modern Algebra | 3 | WI |
| Mathematics Education (Secondary) | 3145 | Teaching \& Learning Mathematics in the Middle Grade | 3 |  |
| Education | 4389 | Field Experience + | 1 |  |
| Education | 1255 | Inclusive Education for Diverse Society + | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Senior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Secondary Education | 3796 | Differentiated Literacy Instruction in the Disciplines, 7-12 + | 3 | WI |
| Mathematics | 3061 | Modern Geometry I | 3 |  |
| Mathematics | 4096 | Senior Problem Solving | 3 | WI |
| Mathematics Education (Secondary) | 4146 | Teaching \& Learning Mathematics in High School + | 3 |  |
| Education | 4389 | Field Experience + | 1 |  |
| English Education (Secondary) | 3338 | Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12 * | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Senior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Secondary Education | 4688 | Student Teaching in Secondary Education + | 9 |  |
| Secondary Education | 4801 | Senior Seminar \& Performance Assessment in Secondary Education + | 3 |  |
| Education | 2306 | Assessment \& Evaluation | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Total Credits required for Secondary Education/Mathematics Education: |  |  | 128-129 |  |

+ Indicates courses and experiences enhanced with special education competencies.
* These 3 courses constitute the waiver for the GenEd Human Behavior category when the GPA requirement is met.


## Secondary Education / Social Studies Education

Students seeking certification in Secondary Education: Social Studies must complete the requirements for both the major in Secondary Education: Social Studies AND for the content major* as specified by the College of Liberal Arts.
*Currently students may obtain certification in either; History, Political Science, Economics, or Geography and Urban Studies. However, the Political Science, Economics, and Geography and Urban Studies double major with Secondary Education: Social Studies is under revision. Students are encouraged to double major in History until the revisions are finalized.

## Summary of Requirements

University and College requirements are located under Academic Policies and Regulations in the Bulletin.

Program Requirements for Secondary Education / Social Studies Education

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Social Studies Education <br> (Secondary) | 3278 | Methods \& Materials in Secondary Social Studies (Fall <br> Only) | 3 |  |
| Social Studies Education <br> (Secondary) | 4278 | Teaching for Understanding in Secondary Social Studies + | 3 |  |
| Education | 4389 | Field Experience | 2 |  |
| Subtotal |  |  |  |  |

## Academic Content Area - History

History courses should be chosen in accordance with major requirements outlined by the College of Liberal Arts' History Department.

## Suggested Semester-by-Semester Plan for Secondary Education / Social Studies Education (History Major)

| Freshman Year - Fall Semester | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Subject | $08 x x$ or 09xx | Quantitative Literacy | 4 | GQ |
| GenEd | 0802,0812, or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | $08 x x$ or 09xx | Science \& Technology I | 3 | GS |
| GenEd | $0800-4999$ | History Elective (0800-4999)** | 3 |  |
| History |  |  |  |  |
| Subtotal |  | $\mathbf{1 4}$ |  |  |

Freshman Year - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| GenEd | 08 xx or 09xx | U.S. Society | 3 | GU |
| GenEd | 08 xx or 09xx | Science \& Technology II | 3 | GS |
| Mathematics <br> or <br> Education | 1021 <br> or <br> 1017 | College Algebra <br> or <br> Algebra \& Algebraic Thinking for Educators | 4 |  |
| Education | 2103 | Socio-cultural Foundations of Education in the <br> United States | 3 |  |
| History | History Elective (0800-1099)** | 3 |  |  |
| Subtotal | $0800-1099$ | $\mathbf{1 6}$ |  |  |

Sophomore Year - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08 xx or 09xx | Global/World Society | 3 | GG |
| Education | 1255 | Inclusive Education for a Diverse Society + | 3 |  |
| Education | 2109 | Adolescent Development for Educators * | 3 |  |


| History | 1100-1899 | History Elective (1100-1999)** | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Subtotal |  |  | 15 |  |
| Sophomore Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Education | 4111 | Classroom \& Conflict Management in Grades 4 through 12 | 3 |  |
| History | 2xxx | History Elective (2xxx)** | 3 |  |
| History | 2xxx | History Elective (2xxx)** | 3 |  |
| Special Education | 2231 | Introduction to Inclusive Education * | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Junior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Social Studies Education (Secondary) | 3278 | Methods \& Materials in Secondary Social Studies (Fall Only) + | 3 |  |
| Education | 4389 | Field Experience + | 1 |  |
| History | 3x96, 3x97, 3x98 | History Elective (3x96, 3x97, 3x98)** WritingIntensive Course | 3 | WI |
| History | 3 xxx | History Elective (3xxx)** | 3 |  |
| History | 2xxx | History Elective (2xxx)** | 3 |  |
| English Education (Secondary) | 3338 | Foundations of Language Teaching: Teaching English Language Learners in Grades 4 to 12 * | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Junior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Social Studies Education (Secondary) | 4278 | Teaching for Understanding in Secondary Social Studies + | 3 |  |
| Education | 4389 | Field Experience + | 1 |  |
| History | 3xxx | History Elective (3xxx)** | 3 |  |
| History | 3 xxx | History Elective (3xxx)** | 3 |  |
| Education | 2205 | Curriculum Instruction \& Technology in Education | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Senior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Secondary Education | 3796 | Differentiated Literacy Instruction in the Disciplines, 7-12 + | 3 | WI |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| History | 0800-4999 | History Elective (0800-4999)** | 3 |  |
| History | 4x96, 4x97, or 4x98 | History Capstone | 3 | WI |
|  |  | Field Experience + | 1 |  |
| Education | 2255 | Effective Use of Instructional Technology in Classrooms + | 3 |  |
| Subtotal |  |  | 15-16 |  |


| Senior Year - Spring Semester | Course Title | Hours | Attribute |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course \# | Student Teaching in Secondary Education + | 9 |  |
| Secondary Education | 4688 | Senior Seminar \& Performance Assessment <br> in Secondary Education + | 3 |  |
| Secondary Education | 4801 | Assessment \& Evaluation | 3 |  |
| Education | 2306 |  | $\mathbf{1 5}$ |  |
| Subtotal |  |  |  |  |
| Total Credits required for Secondary Education/Social Studies Education: | $\mathbf{1 2 2 - 1 2 3}$ |  |  |  |

* These 3 courses constitute the waiver for the GenEd Human Behavior category when the GPA requirement is met.
** History courses should be chosen in accordance with major requirements outlined by the College of Liberal Arts' History Department.
+ Indicates courses and experiences enhanced with special education competencies.


## Secondary Education / Science Education

Students seeking certification in Secondary Education Science should pursue TUteach, a joint program between the College of Science and Technology and the College of Education. The TUteach program is grounded in the "How People Learn" framework described in recent National Academy of Science publications and has a strong emphasis on project-based instruction (learning content by intensive exploration of a problem rather than by solely listening to lectures). The TUteach program prepares students to pursue the same career options as other science majors or to teach high school science.

All TUteach degrees lead to a "Bachelor of Science with Teaching" degree, all of which have been approved by the Pennsylvania Department of Education for secondary level teaching certification in the content area - grades 7 through 12.

- Sciences: Biology with Teaching, Chemistry with Teaching, Earth \& Space Science with Teaching, General Science with Teaching, Physics with Teaching
- Mathematics: Mathematics \& Computer Science with Teaching, Mathematics \& Technology with Teaching, Mathematics with Teaching

Additional information about the TUteach program can be found at https://tuteach.cst.temple.edu/.

## COLLEGE OF ENGINEERING

Keya Sadeghipour, Ph.D., Dean
Engineering Building, Room 331
1947 N. 12th Street
Philadelphia, PA 19122
215-204-7800
http://engineering.temple.edu/

## Accreditation

The Civil Engineering, Electrical Engineering and Mechanical Engineering programs are accredited by the Engineering Accreditation Commission (EAC) of ABET, http://www.abet.org. The Construction Management Technology and Engineering Technology programs are accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, http://www.abet.org.

ABET is a non-profit and non-governmental accrediting agency for academic programs in the disciplines of applied science, computing, engineering, and engineering technology. ABET is a recognized accreditor in the United States by the Council for Higher Education Accreditation.

Being introduced in the Fall of 2013, the Bioengineering program will seek accreditation as soon as it is possible.

## Mission

The mission of the College of Engineering (COE) is to provide students with a high-quality, innovative, and globally-competitive learning experience in engineering, engineering technology, and the applied sciences. Engineering graduates are to be educated professionals with the technical, problem-solving, and communication skills required to succeed in the workplace and society.

The college is mindful of its obligation to be an environment for the creation of knowledge, and it encourages basic and cross-disciplinary applied research by faculty and students. We place great value on scholarship, practice, and service aimed at improving the quality of life and the economic viability of our society. This value system is reflected in how we assess faculty for promotion and tenure and how we grade student work.

We strive to pursue these objectives in a learning environment that celebrates ethnic and gender diversity, respects experience, and encourages problem solving through teamwork.

The college offers undergraduate curricula in engineering and engineering technology. Our engineering programs, leading to the Bachelor of Science in Engineering degree, prepare students for positions in engineering that require a broad preparation in mathematics and the engineering sciences at the entry level. They are recommended for those who expect to become registered professional engineers, pursue an advanced degree, or become involved in conceptual
design, planning, research, and development in industry. The programs in engineering technology, which lead to the Bachelor of Science in Engineering Technology degree, educate students for careers as engineering technologists. They participate as members of the engineering team, translating concepts into functioning systems and supervising subsequent implementation by technicians and craftsmen.

Graduates of the COE find employment in manufacturing, construction management, sales engineering, inspection and quality control, production engineering and management, research and development, purchasing, technical field services, application engineering, engineering design, computer systems and software manufacturing, and research or production involving computers. Following on-the-job experience, they can qualify for positions of a supervisory and managerial nature. Others may qualify as registered professional engineers.

Day and evening courses are offered at the Main Campus and at the Ambler Campus. All programs can be completed at the Main Campus.

## Admission

Admission to the university does not guarantee admission to particular programs in the College of Engineering. Because programs in the college have varying admissions requirements, students should contact the Office of Undergraduate Studies, Room 349, for further information (215-204-2998).

## Honors Program

For current information on the College Honors Program, contact Dr. Vallorie Peridier, Coordinator, by phone (215-204-7143) or e-mail (vallorie.peridier@temple.edu).

## Cooperative Education \& Internship

Full-time matriculated College of Engineering students who have a GPA of 2.5 or greater and who have completed at least 30 semester hours (at least 12 at Temple) toward the baccalaureate degree may apply for paid cooperative work experience (full-time) during spring or fall semesters. Students work at least 35 hours per week and are considered full-time students at Temple University. It can take additional time to complete the degree when participating in this program, but at least one semester of relevant work experience is gained. College of Engineering students may register and receive technical elective credits for their work experience with the Co-op courses (Engineering 2181, 3181). These programs are managed by the Director of Recruiting and Co-op Programs in the College of Engineering, Room 349, phone: 215-204-2998.

Students may also receive relevant work experience through internships, which are normally available during the summer terms. Because internships are offered over the summer, they allow students to finish in the traditional four years and still gain some on-the-job experience.

## Honor Societies, Awards, \& Student Associations

## Professional Societies \& Organizations

The following professional societies and organizations are located within the College of Engineering:

- American Concrete Institute (ACI)
- American Society of Civil Engineering (ASCE)
- American Society of Heating, Refrigeration, and Air Conditioning Engineering (ASHRAE)
- American Society of Mechanical Engineers (ASME)
- Biomedical Engineering Society (BMES)
- Construction Management Student Organization (CMSO)
- Engineers Without Borders (EWB)
- Institute of Electrical \& Electronics Engineers (IEEE)
- Minority Engineering Students Association (MESA)
- National Society of Black Engineers (NSBE)
- National Society of Hispanic Engineers (SHPE)
- National Society of Professional Engineers (NSPE)
- Society of Automotive Engineers (SAE)
- Society of Manufacturing Engineers (SME)
- Society of Women Engineers (SWE)
- Temple University Amateur Radio Club (TUARC)
- ETA KAPPA NU (Electrical Engineering Honor Society)
- PI TAU SIGMA (Mechanical Engineering Honor Society)


## Program Information

## Engineering

The programs in Civil Engineering, Electrical Engineering and Mechanical Engineering are accredited by the Engineering Accreditation Commission (EAC) of ABET, http://www.abet.org.

All engineering programs lead to a Bachelor of Science degree in the following fields of study:
Bioengineering (B.S. BioE.)
Civil Engineering (B.S.C.E.)
Electrical Engineering (B.S.E.E.)
Engineering (B.S.E.)
Mechanical Engineering (B.S.M.E.)
These degree programs also offer concentrations in the following areas:
Environmental Engineering in B.S.C.E.
Computer Engineering in B.S.E.E.

Bioelectrical in B.S.E.E.
Bioengineering in B.S.M.E.
Energy Systems in B.S.M.E.
The new program in Bioengineering will seek accreditation as soon as it is possible. Likewise the new program in Engineering will seek accreditation.

## Engineering Technology

Engineering Technology programs are accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, http://www.abet.org.

These programs lead to a Bachelor of Science in Engineering Technology (B.S.E.T.) degree.
Two Engineering Technology programs are offered in the following areas:
Construction Management Technology
Engineering Technology

## College Requirements for all Majors:

Engineering Programs:
32 minimum credits in Math and Science
15 minimum credits in Humanities and Social Science
60-70 credits in major (varies with major), minimum 2.0 GPA in the major
124 minimum credits total
Engineering Technology (CMT \& ET) programs:
24 minimum credits in Math and Science
15 minimum credits in Humanities and Social Science
50-60 credits in major (varies with major), minimum 2.0 GPA in the major
124 minimum credits total

1. The total number of credit hours at graduation may be greater for some students based on initial placement exams, transfer evaluations, individual curricular choices, and academic progress.
2. Students must fulfill the necessary prerequisites for any given course or course sequence. See the Prerequisite and Co-requisite Policy in the university-wide Academic Policies section in this Bulletin.
3. The engineering programs are structured to prepare students for the professional practice of engineering and/or graduate study. The curricula emphasize a rigorous treatment of the mathematical and scientific approaches to the solution of engineering problems.
4. The final two years of study stress the synthesis of unique solutions rooted in the fundamental principles mastered during the first two years. These final years culminate in a design project.

## Academic Advising

Steven Ridenour, DAE<br>Director of Undergraduate Studies<br>Engineering Building, Room 326<br>215-204-8825<br>steven.ridenour@temple.edu<br>\section*{Advising Centers for the Major in the College of Engineering}<br>Civil and Environmental Engineering Department<br>Engineering Building, Room 513<br>215-204-7814<br>ceed@temple.edu<br>Electrical and Computer Engineering Department<br>Engineering Building, Room 711<br>215-204-7597<br>eegrad@temple.edu<br>Mechanical Engineering Department<br>Engineering Building, Room 610<br>215-204-7808<br>vross@temple.edu<br>Bioengineering Department<br>Engineering Building, Room 813<br>215-204-3038<br>ruth.ochia@temple.edu

All students in the College of Engineering (COE) are assigned an academic or faculty advisor when they initially enroll. The student's academic advisor will confirm that the courses selected yield credits toward a degree and that the requirements of Temple University, COE, and the academic department are being met. Reference should be made to this Bulletin and to DARS in planning programs.

Academic advisors attempt to avoid errors when advising students about their program requirements, but schools and colleges cannot assume liability for errors in advising. Therefore, students must assume primary responsibility for knowing the requirements for their degrees and for acquiring current information about their academic status.

## Academic Policies \& Regulations

Please see the full listing of university-wide Academic Policies. The university policies and regulations generally apply to all undergraduate students and provide a framework within which
schools and colleges may specify further conditions or variations appropriate to students in their courses or programs. Students are responsible for complying with all university-wide academic policies that apply to their individual academic status.

## Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List policy for specific GPA and credit-hour requirements.

## College Graduation Requirements

Anticipation of Graduation - All College of Engineering (COE) students who intend to graduate in May, August, or January must have a graduation review at the completion of 90 credits. At the beginning of the final semester, the student must complete a graduation application. To earn the baccalaureate degree in any curriculum of the COE, a student must submit a graduation plan (check sheet), consisting of all required courses in the chosen curriculum, which has been approved by the student's faculty advisor, chairperson, and dean of the college. Required courses are indicated in curriculum checklists available from the student's respective department of instruction.

## College Requirements for all Majors:

## Engineering Program:

32 minimum credits in Math and Science
15 minimum credits in Humanities and Social Science
60-70 credits in major (varies with major), minimum 2.0 GPA in the major
124 minimum credits total

## Engineering Technology (CMT \& ET) programs:

24 minimum credits in Math and Science
15 minimum credits in Humanities and Social Science
50-60 credits in major (varies with major), minimum 2.0 GPA in the major
124 minimum credits total

Program Performance - A minimum cumulative GPA of 2.0 is required for graduation. Students majoring in engineering must attain a minimum GPA of 2.0 in their major courses in order to graduate. Students majoring in engineering technology and construction management technology must have a minimum GPA of 2.0 in their major courses.

Independent Research - Independent student work on a laboratory investigation or design project must be approved by the chairperson of the respective department and the assigned faculty supervisor. Work is graded on research methodology, research results, and a report. Only seniors with a minimum GPA of 3.0 may apply for independent research. Approved projects must be completed in one academic year.

Independent Study - A student is permitted to take no more than two independent study courses. Permission is granted only if a student needs the course to complete his/her studies. They can be taken only in the junior and senior years. The content of the independent study work must cover the material in one of the courses listed in the curriculum. Students must complete an independent study form in their department prior to registration for the independent study.

Transfer Credit - Transfer credit to the COE can be granted only from an accredited institution of higher learning. Co-op education, credit for life experience, and advanced placement credits are not transferable from other institutions. Transfer credits are not granted after a student has matriculated into a degree program. In only exceptional circumstances may students take courses at other institutions and have transfer credits awarded. The dean must approve permission for such arrangements in advance. Senior Design Projects or Capstone courses are not transferable to the college.

Non-Traditional Credits - A maximum of 12 semester hours of credit will be allowed by the COE in cooperative education, relevant work experience, approved ROTC courses, and Advanced Placement or CLEP examinations. No other non-traditional credit will be granted.

Credit for Life Experience - Degree seeking students may be granted academic credits for work experience if it is judged to be an adequate substitute for all or part of particular courses required of the student. Experience must be related to a specific course in the curriculum offered by the college. Work experience must be acquired before entering Temple University. Credit will only be granted after completion of 30 semester hours of coursework. Application forms are available in the Office of Undergraduate Studies (Engineering Building, Room 349).

## Student Contact Information

Office of Undergraduate Studies (Room 349)
College of Engineering
1947 N. 12th Street
Philadelphia, PA 19122
215-204-7800
Steven Ridenour, DAE
Director of Undergraduate Studies
215-204-8825
steven.ridenour@temple.edu

## Faculty

## Administration

Keya Sadeghipour, Ph.D., Dean
George Baran, Ph.D., Associate Dean for Research and Graduate Studies
Steven Lengkeek, Assistant Dean for Finance and Operations

Steven Ridenour, DAE, Director of Undergraduate Studies

## Bioengineering

## Professor

Peter Lelkes, Ph.D., RWTH Aachen, Germany
Nancy Pleshko, Ph.D., McGill University, Canada

## Associate Professor

Ruth Ochia, Ph.D., University of Washington, P.E.
Cezary Marcinkiewicz, Ph.D., Med. School Bialystok, Poland

## Assistant Professor

Omar Fisher, Ph.D., University of Texas Austin
Yah-el Har-el, Ph.D., Johns Hopkins University
Won Suh, Ph.D., University of Illinois Urbana-Champaign

## Civil \& Environmental Engineering

## Professor

Sergio Serrano, Ph.D., University of Waterloo, Canada
Rominder Suri, Ph.D., Michigan Technological University, P.E.

## Associate Professor

Bechara Abboud, Ph.D., Drexel University, P.E.
Robert Brooks, Ph.D., University of California, P.E.
William C. Miller, Ph.D., University of Pennsylvania, P.E.
Philip D. Udo-Inyang, Ph.D., University of Missouri, P.E.

## Assistant Professor

Joseph Coe, Ph.D., University of California, Los Angeles
Sanghun Kim, Ph.D., Syracuse University
Robert Ryan, Ph.D., Drexel University
Felix Udoeyo, Ph.D., Abubakar Tafawa Balewa University, Nigeria
Benoit Van Aken, Ph.D., Catholic University of Louvain, Belgium
Huichun (Judy) Zhang, Ph.D., Georgia Institute of Technology

## Instructor

Berk Ayranci, M.S.E., Temple University
Leonard Bernstein, M.S., University of Pennsylvania
Electrical \& Computer Engineering

## Professor

Saroj K. Biswas, Ph.D., University of Ottawa, Canada

Joseph Picone, Ph.D., Illinois Institute of Technology
Dennis A. Silage, Ph.D., University of Pennsylvania
Thomas E. Sullivan, Ph.D., Pennsylvania State University

## Associate Professor

Li Bai, Ph.D., Drexel University
Zdenka Delalic, Ph.D., University of Pennsylvania
Fatehy El-Turky, Ph.D., University of Waterloo, Canada
Seong Kong, Ph.D., University of Southern California
John Helferty, Ph.D., Drexel University
Iyad Obeid, Ph.D., Duke University
Chang-Hee Won, Ph.D., University of Notre Dame
Mechanical Engineering

## Professor

George Baran, Ph.D., University of Michigan
Shih-Juin Chen, Ph.D., Drexel University
Mohammad F. Kiani, Ph.D., Louisiana State University
Keya Sadeghipour, Ph.D., University of Manchester, England Steven Ridenour, DAE, University of Miami, P.E.
Songgang Qui, Ph.D., University of Minnesota
Associate Professor
Richard S. Cohen, Ph.D., Princeton University, P.E.
Kurosh Darvish, Ph.D., University of Virginia
Parsaoran Hutapea, Ph.D., North Carolina State University
Vallorie Peridier, Ph.D., Lehigh University
Alex Pillapakkam, Ph.D., New Jersey Institute of Technology
Nancy Pleshko, Ph.D., Rutgers University

## Assistant Professor

Robert Hughes, Ph.D., McMaster University, Canada
Oleksandr Diloyan, Ph.D., Donetsk National Technical University
Svetlana Neretina, Ph.D., McMaster University, Canada
Gaetano Restivo, Ph.D., University of Palermo, Italy
Dmitri Vainchetin, Ph.D., University of Illinois

## Emeritus Faculty

Professor
M. Robert Baren

Brian Butz
Sushil DasGupta
Richard Klafter
Musoke H. Sendaula
Victor Schutz

Theodore P. Vassallo

Thomas Ward
F. Stanton Woerth

Robert Yantorno
Associate Professor
Raymond D. Fidler
Alma K. Forman
Joseph A Hrusovsky
Stephen Jochum
Thomas Reeves
Frederick Schmitt

## Assistant Professor

George W. Mackey
Ross Nickel

# Bioengineering 

Peter Lelkes, Chair
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$\underline{\text { http://engineering.temple.edu/department/bioengineering }}$

## Bioengineering Program

The Bioengineering program will be able to integrate engineering science, rigorous mathematical tools and a quantitative approach to the life sciences and apply this spectrum of knowledge in an interdisciplinary fashion to provide solution to basic and applied biological and medical problems.

This goal will be accomplished by offering to the students an integrated set of courses aimed at providing a thorough introduction to the complex and interdisciplinary field of Bioengineering:

- Teach engineering science, analysis, and design in the context of quantitative approaches to solving life science and medicine-related problems.
- Integrate interdisciplinary aspects of biology, physiology, and engineering within courses and design projects.
- Emphasize the interdisciplinary nature of Bioengineering, in terms of problem solving, design, within the framework of interdisciplinary teams focusing on the dialogue between "biology-inspired engineering" and "biology as a specific arm of applied engineering principles."
- Immerse students in key life science and medical principles, while focusing on understanding cell/molecular-level events through quantitative analysis and modeling.
- Provide an exceptional learning environment with significant instruction by Bioengineering faculty and researchers in collaboration with experts from other fields, especially the Health Science Campus.

In this curriculum, incoming freshmen will first and foremost be trained as solid Temple engineers, focusing on applying engineering science, design, and analysis to real life problems specifically in the areas of biology and medicine. This firm engineering foundation will be further enhanced with newly developed Bioengineering courses in specific pathways, such as:

- Biomaterials: A focus on the design, development, and uses of biomaterials in biology and medicine. It also explores the host-biomaterial interface and interactions.
- Bioinstrumentation: A focus on the design, development, and use of instruments used to record, process, and/or control biological functions.
- Biomechanics: A focus on the interaction between forces and motions in tissues, organisms, and biomedical materials.
- Tissue and Regenerative Engineering: A focus on building functional tissues using cells and scaffolds and repairing diseased tissues and organs at the cellular and molecular level.
- Neuroengineering: A focus on using engineering to understand and interact with neural tissues.
- Pre-med: A broad-based Bioengineering curriculum with fulfills current pre-med course requirements.

Hands-on engineering experience will be gained through intense laboratory coursework and by solving real-life biomedical problems.

## Summary of Requirements

## University Requirements:

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

All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific writing-intensive courses required for this major are listed below and are identified by "WI" in the Attribute column.

## General Department Requirements:

Bioengineering Program
Foundation Science \& Math Courses in Engineering

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Mathematics | 1041 | Calculus I | 4 |  |
| Mathematics | 1042 | Calculus II | 4 |  |
| Mathematics | 2043 | Calculus III | 4 |  |
| Mathematics | 2101 | 3041 | Linear Algebra | 3 |
| Mathematics | Differential Equations I | 3 |  |  |
| Biology | Human Biology <br> or <br> 1035 <br> or <br> 1951 | General Chemistry I <br> or <br> Chemistry for Engineers <br> or <br> Chemistry | Honors General Chemistry I | 4 |


| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| GenEd | 08xx or 09xx | Arts | $3-4$ | GA |
| Subtotal |  | $\mathbf{2 5}$ <br> (minimum) |  |  |

Required Engineering Courses

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Bioengineering | 2001 | 1101 | Principles of Bioengineering <br> Introduction to Engineering \& Engineering <br> Technology | 3 |
| Engineering | len |  |  |  |
| Engineering | 3571 | Classical \& Statistical Thermodynamics | 3 |  |
| Bioengineering | 2101 | Engineering Principles of Physiological <br> Systems | 3 |  |
| Bioengineering | 3001 | Research Design \& Methods in Bioengineering | 2 |  |
| Bioengineering | 3101 | BioE Lab \#1 - Bioelectrical Engineering | 3 |  |
| Bioengineering | 3102 | BioE Lab \#2 - Biomaterials | 3 |  |
| Bioengineering | 4101 | BioE Lab \#3 - Biomechanics | 3 |  |
| Bioengineering | 3201 | Biomedical Instrumentation | 2 |  |
| Bioengineering |  | BIOE Elective \#1 | 3 |  |


| Bioengineering |  | BIOE Elective \#2 | 3-4 |  |
| :---: | :---: | :---: | :---: | :---: |
| Bioengineering |  | BIOE Elective \#3 | 3 |  |
| Bioengineering |  | Capstone Elective \#1 | 3 |  |
| Bioengineering |  | Capstone Elective \#2 | 3 |  |
| Engineering | 2196 | Technical Communication | 3 | WI |
| Engineering or <br> Bioengineering | $\begin{gathered} 3033 \\ \text { or } \\ 4311 \end{gathered}$ | Entrepreneurial Engineering or <br> The Entrepreneurial Bioengineer | $\begin{aligned} & \hline \hline 3 \\ & 2 \\ & \hline \end{aligned}$ |  |
| Engineering | 4169 | Engineering Seminar | 1 |  |
| Engineering | 4196 | Senior Design Project I | 1 | WI |
| Engineering | 4296 | Senior Design Project II | 3 | WI |
| Subtotal |  |  | 50 |  |
|  |  |  |  |  |
| Technical Electives |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Elective |  | Technical Elective \#1 | 3 |  |
| Elective |  | Technical Elective \#2 | 4 |  |
| Elective |  | Technical Elective \#3 | 4 |  |
| Elective |  | Technical Elective \#4 | 4 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Total Hours for B.S. in Bioengineering |  |  | 124 (minimum) |  |

## Suggested Semester By Semester Plan

## Bachelor of Science in Bioengineering

Requirements for New Students starting in the 2013-2014 Academic Year

| Year 1 - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 1041 | Calculus I | 4 |  |
| Chemistry | $\begin{gathered} 1031 \\ \text { or } \\ 1035 \\ \text { or } \\ 1951 \end{gathered}$ | General Chemistry I <br> or <br> Chemistry for Engineers <br> or <br> Honors General Chemistry I | 3 |  |
| Chemistry | 1033 | General Chemistry Laboratory I | 1 |  |
| Biology | 1001 | Human Biology | 4 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Year 1 - Spring |  |  |  |  |
| Mathematics | 1042 | Calculus II | 4 |  |
|  |  | Technical Elective | 3 |  |
| Physics | 1061 | Elementary Classical Physics I | 4 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Engineering | 1101 | Introduction to Engineering \& Engineering Technology | 3 |  |
| Semester Total |  |  | 17 |  |


| Year 2-Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Mathematics | 2043 | Calculus III | 4 |  |
| Physics | 1062 | Elementary Classical Physics II | 4 |  |
|  |  | Technical Elective | 4 |  |
| Engineering | 2196 | Technical Communication | 3 |  |
| Bioengineering | 2001 | Principles of Bioengineering | 2 |  |
| Semester Total |  |  | 17 |  |
| Year 2 - Spring |  |  |  |  |
| Mathematics | 3041 | Differential Equations I | 3 |  |
| Engineering | 3571 | Classical \& Statistical Thermodynamics | 3 |  |
| Bioengineering | 2101 | Engineering Principles of Physiological Systems | 3 |  |
|  |  | Technical Elective | 4 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Semester Total |  |  | 16 |  |
| Year 3 - Fall |  |  |  |  |
| Bioengineering | 3001 | Research Design \& Methods in Bioengineering | 2 |  |
| Bioengineering | 3101 | BioE Lab \#1 - Bioelectrical Engineering | 3 |  |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Mathematics | 2101 | Linear Algebra | 3 |  |
| Bioengineering | 3201 | Biomedical Instrumentation | 2 |  |
| Bioengineering |  | BIOE Elective \#1 | 3 |  |
| Semester Total |  |  | 16 |  |
| Year 3 - Spring |  |  |  |  |
| Bioengineering | 3102 | BioE Lab \#2 - Biomaterials | 3 |  |
| Bioengineering |  | BIOE Elective \#2 | 3-4 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Engineering | 4169 | Engineering Seminar | 1 |  |
| ```Engineering or Bioengineering``` | $\begin{gathered} 3033 \\ \text { or } \\ 4311 \\ \hline \end{gathered}$ | Entrepreneurial Engineering or <br> The Entrepreneurial Bioengineer | $\begin{aligned} & \hline 3 \\ & 2 \\ & \hline \end{aligned}$ |  |
|  |  | Technical Elective | 4 |  |
| Semester Total |  |  | 17 |  |
| Year 4 - Fall |  |  |  |  |
| Bioengineering | 4101 | BioE Lab \#3 - Biomechanics | 3 |  |
| Engineering | 4196 | Senior Design Project I | 1 | WI |
| Bioengineering |  | Capstone Elective \#1 | 3 |  |
| GenEd | 08xx or 09xx | The Arts | 3-4 | GA |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Semester Total |  |  | 13 |  |
| Year 4 - Spring |  |  |  |  |
| Engineering | 4296 | Senior Design Project II | 3 | WI |
| Bioengineering |  | BIOE Elective \#3 | 3 |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |


| Bioengineering |  | Capstone Elective \#2 | 3 |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
| Semester Total |  | $\mathbf{1 2}$ |  |  |  |
|  |  |  |  |  |  |
| Total Hours for Bioengineering: |  |  |  |  |  |

## Technical Electives:

Some of the technical electives are 4 credits, such as:
Computer \& Information Science 1053: Programming in Matlab
Computer \& Information Science 1057: Computer Programming in C
Electrical Engineering 2112 \& 2113: Electrical Devices \& Systems I with Lab
Electrical Engineering 2312 \& 2313: Electrical Engineering Science I with Lab
Electrical Engineering 2322 \& 2323: Electrical Engineering Science II with Lab
Electrical Engineering 3412 \& 3413: Classical Control Systems with Lab
Chemistry 1032 \& 1034: General Chemistry II with Lab
Chemistry 2201 \& 2203: Organic Chemistry I with Lab
Chemistry 2202 \& 2204: Organic Chemistry II with Lab
Chemistry 4503: Introduction to Polymer Chemistry
Biology 1111: Introduction to Biology I
Biology 2112: Introduction to Biology II
Biology 3096: Cell Structure and Function
Other technical electives (3 credits, unless otherwise noted):
Engineering 1117: Engineering Graphics (2 credits)
Engineering 3117: Computer Aided Design
Engineering 3496: Materials Science for Engineers
Engineering 3553: Mechanics of Fluids
Chemistry 3301: Physical Chemistry Lecture I
Chemistry 4401: Biochemistry I
Biology 3352: Systems Neuroscience
Biology 3356: Organization and Development of the Nervous System
Engineering Technology 4278: Cardiac Devices
Bioengineering Electives (3 credits each, unless otherwise noted):
Bioengineering 4301: Bioengineering Seminar (1 credit)
Bioengineering 1301: Principles of Macromolecular Science
Bioengineering 3301: Biomedical Signals and Systems
Bioengineering 3302: Drug Delivery
Bioengineering 3303: Biotransport Phenomena
Bioengineering 2301: Quantitative Pathophysiology
Bioengineering 2302: Cellular and Molecular Biology for Bioengineers
Bioengineering 2312: Mechanics for Bioengineering I (4 credits)
Bioengineering 3312: Mechanics for Bioengineering II (4 credits)
Bioengineering 3725: Cell Biology for Engineers
Bioengineering 4741: Biomaterials for Engineers

Capstone Electives (all are 3 credits each):
Bioengineering 4411: Capstone Elective: Biomaterials
Bioengineering 4421: Capstone Elective: Bionanotechnology
Bioengineering 4431: Capstone Elective: Neuroengineering
Bioengineering 4441: Capstone Elective: Biomechanics
Bioengineering 4451: Capstone Elective: Biomedical Imaging
Bioengineering 4461: Principles of Tissue and Regenerative Engineering

# Civil \& Environmental Engineering 

Rominder P.S. Suri, Ph.D., Chair
Bechara Abboud, Ph.D., P.E., Program Coordinator
Room 522, Engineering Building
215-204-7816
http://engineering.temple.edu/department/civil-environmental-engineering
The Civil Engineering Program is accredited by the Engineering Accreditation Commission (EAC) of ABET, http://www.abet.org.

## Civil Engineering Program

## Goals, Objectives \& Design Integration

Graduates will be employed in industries, academia or state and federal government agencies or enter into or complete graduate or professional degree programs. Graduates will use modern engineering techniques, skills, and tools to identify, formulate, and solve civil engineering problems; or design structures or systems considering functionality, safety and cost effectiveness; or evaluate the impact of civil engineering solutions in a global, societal, and environmental context consistent with the principles of sustainable development. Graduates will engage in the professional practice in civil engineering or closely related fields. Graduates will demonstrate an understanding of ethical, societal, and professional responsibility; engage in lifelong learning opportunities; and demonstrate effective communication and interpersonal skills within multidisciplinary teams.

Civil Engineering professionals plan, design, construct, and operate facilities which are essential to the quality of modern life, the Civil Engineering curriculum is based upon providing a fullyintegrated design experience by beginning with introductory courses in the study of engineering history and economics, then progressing through a broad coverage of the primary areas of practice within Civil Engineering (surveying, structures, geotechnical engineering, construction engineering, water resources, transportation, and environmental engineering), and finishing with a year-long capstone Civil Engineering senior design project. The goal of the Civil Engineering program is to prepare students to pursue graduate education in their specific areas of interest, to pass the Fundamental of Engineering and Professional Engineer exams in the areas of practice within Civil Engineering, and become involved in design, project planning and research.

## Civil Engineering Program with Concentration in Environmental Engineering

## Goals, Objectives \& Design Integration

The objective of the Concentration in Environmental Engineering within the Civil Engineering program at Temple University is to provide students with the skills needed to understand environmental problems and to design environmental systems to reduce and/or mitigate pollution. Environmental Engineering is a hybrid of Civil Engineering and Chemical Engineering, and it is thus natural for a civil engineer to broaden his/her knowledge in Environmental Engineering. Students in this concentration would be in a program that satisfies ABET accreditation for civil engineers, but they are more equipped to pass the Fundamental of Engineering and the Professional Engineer exams in the Environmental Engineering Category.

## Summary of Requirements

## University Requirements:

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

All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific writing-intensive courses required for this major are listed below and are identified by "WI" in the Attribute column.

## Department Requirements:

Civil Engineering Program

| Foundation Science \& Math Courses in Civil Engineering | Hours | Attribute |  |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course \# | Course Title | 4 |  |
| Mathematics | 1041 | Calculus I | 4 |  |
| Mathematics | 1042 | Calculus II | 4 |  |
| Mathematics | 2043 | Calculus III | 3 |  |
| Mathematics | 3041 | Differential Equations I | 4 |  |
| Physics | 1061 | Elementary Classical Physics I | 4 |  |
| Physics | 1062 | Elementary Classical Physics II | 3 |  |
| Chemistry | 1035 | Chemistry for Engineers | 1 |  |
| Chemistry | 1033 | General Chemistry Laboratory I | 27 |  |
| Subtotal |  |  | 2 |  |

Required Communications, Humanities, \& Social Science

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | Electives | Humanities and Social Science Various* | 21 <br> (minimum) |  |
| Subtotal |  | $\mathbf{2 5}$ |  |  |
|  |  |  |  |  |
| Required Engineering Courses for Civil Engineering |  |  |  |  |


| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Civil Engineering | 1105 | Surveying | 2 |  |
| Civil Engineering | 2011 | Civil Engineering Materials | 2 |  |
| Civil Engineering | 3048 | Probability, Statistics \& Stochastic Methods | 3 |  |
| Civil Engineering | 3211 | Transportation Engineering | 3 |  |
| Civil Engineering | 3311 | Construction Engineering | 3 |  |
| Civil Engineering | 3331 | Soil Mechanics | 3 |  |
| Civil Engineering | 3332 | Soil Mechanics Laboratory | 1 |  |
| Civil Engineering | 3411 | Structural Analysis | 3 |  |
| Civil Engineering | 3412 | Structural Analysis Laboratory | 1 |  |
| Civil Engineering | 3441 | Steel \& Concrete Design | 4 |  |
| Civil Engineering | 3711 | Environmental Engineering | 3 |  |
| Civil Engineering |  | Approved Civil Engineering Technical Electives | 6 |  |
| Science Elective |  | Must select: <br> Civil Engineering 2711 <br> or <br> Earth \& Environmental Science 1001 | 3-4 |  |
| Electrical Engineering | 2112 | Electrical Devices \& Systems I | 3 |  |
| Engineering | 1101 | Introduction to Engineering \& Engineering Technology | 3 |  |
| Engineering | 1117 | Engineering Graphics | 2 |  |
| Engineering | 2196 | Technical Communication | 3 | WI |
| Engineering | 2331 | Engineering Statics + | 3 |  |
| Engineering | 2332 | Engineering Dynamics + | 3 |  |
| Engineering | 2333 | Mechanics of Solids + | 3 |  |
| Engineering | 3496 | Materials Science for Engineers | 3 | WI |
| Engineering | 3553 | Mechanics of Fluids + | 3 |  |
| Engineering | 3571 | Classical \& Statistical Thermodynamics | 3 |  |
| Engineering | 4169 | Engineering Seminar | 1 |  |
| Engineering | 4196 | Senior Design Project I* | 1 | WI |
| Engineering | 4296 | Senior Design Project II* | 3 | WI |
| Mechanical Engineering | 3506 | Fluids and Energy Laboratory | 1 |  |
| Subtotal |  |  | 72 |  |
| Total Hours for Civil Engineering Major |  |  | 124 (minimum) |  |

* Senior Design topic must be approved by the chair of the Department of Civil \& Environmental Engineering.
+ Courses must be passed with a C- or better.


## Civil Engineering Program with Concentration in Environmental Engineering

Foundation Science \& Math Courses

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Mathematics | 1041 | Calculus I | 4 |  |
| Mathematics | 1042 | Calculus II | 4 |  |
| Mathematics | 2043 | Calculus III | 4 |  |
| Mathematics | 3041 | Differential Equations I | 3 |  |
| Physics | 1061 | Elementary Classical Physics I | 4 |  |
| Physics | 1062 | Elementary Classical Physics II | 4 |  |
| Chemistry | Chemistry for Engineers | 3 |  |  |


| Chemistry | 1033 | General Chemistry Laboratory I | 1 |  |
| :---: | :---: | :---: | :---: | :---: |
| Subtotal |  |  | 27 |  |
| Required Communications, Humanities, \& Social Science |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | Electives | Humanities and Social Science Various* | $\begin{gathered} 21 \\ \text { (minimum) } \end{gathered}$ |  |
| Subtotal |  |  | 25 |  |
|  |  |  |  |  |
| Required Engineering Courses for Civil Engineering with Concentration in Environmental Engineering |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Civil Engineering | 1105 | Surveying | 2 |  |
| Civil Engineering | 2011 | Civil Engineering Materials | 2 |  |
| Civil Engineering | 2711 | Environmental Chemistry \& Microbiology | 3 |  |
| Civil Engineering | 3048 | Probability, Statistics \& Stochastic Methods | 3 |  |
| Civil Engineering | 3311 | Construction Engineering | 3 |  |
| Civil Engineering | 3331 | Soil Mechanics | 3 |  |
| Civil Engineering | 3332 | Soil Mechanics Laboratory | 1 |  |
| Civil Engineering | 3711 | Environmental Engineering | 3 |  |
| Civil Engineering | $\begin{gathered} \hline 4621 \\ \text { or } \\ 4631 \\ \hline \end{gathered}$ | Engineering Hydrology <br> or <br> Environmental Hydrology | 3 |  |
| Civil Engineering | 4711 | Air Pollution Control System | 3 |  |
| Civil Engineering | 4721 | Water \& Wastewater Systems Design | 3 |  |
| Civil Engineering |  | Approved Civil Engineering Technical Electives | 6 |  |
| Elective |  | Free Elective | 2 |  |
| Electrical Engineering | 2112 | Electrical Devices \& Systems I | 3 |  |
| Engineering | 1101 | Introduction to Engineering \& Engineering Technology | 3 |  |
| Engineering | 1117 | Engineering Graphics | 2 |  |
| Engineering | 2196 | Technical Communication | 3 | WI |
| Engineering | 2331 | Engineering Statics + | 3 |  |
| Engineering | 2332 | Engineering Dynamics + | 3 |  |
| Engineering | 2333 | Mechanics of Solids + | 3 |  |
| Engineering | 3096 | Economic Analysis | 3 | WI |
| Engineering | 3553 | Mechanics of Fluids + | 3 |  |
| Engineering | 3571 | Classical \& Statistical Thermodynamics | 3 |  |
| Engineering | 4169 | Engineering Seminar | 1 |  |
| Engineering | 4196 | Senior Design Project I* | 1 | WI |
| Engineering | 4296 | Senior Design Project II* | 3 | WI |
| Mechanical Engineering | 3506 | Fluids and Energy Laboratory | 1 |  |
| Subtotal |  |  | 72 |  |
| Total Hours for Civil Engineering Major with Concentration in Environmental Engineering: |  |  | 124 (minimum) |  |

* Senior Design topic must be approved by the chair of the Department of Civil \& Environmental

Engineering.

+ Courses must be passed with a C- or better.


## Minor in Environmental Engineering

Room 514, Engineering and Architecture Building
1947 North 12th Street
Philadelphia, PA 19122
215-204-7814

The Department of Civil and Environmental Engineering (CEE) offers a five-course (15 s.h.) undergraduate Minor in Environmental Engineering. Undergraduates from the Physical Sciences, Mathematics, and Engineering are eligible to participate in this program.

The purpose of the Minor is to allow students from a wide range of undergraduate majors to obtain an introductory background in sustainability, pollution prevention, environmental modeling, and pollution control technologies most appropriate to their interests and major field. The Minor in Environmental Engineering will add considerably to students' major program skills and make them more valuable to employers. Mathematics and Science majors will gain an understanding of engineering problem-solving processes and standard pollution control technologies. Engineering majors will understand the environmental effects of technologies in their major field and how to manage those effects. After the student completes the requirements for the minor, the minor will be recorded on the student's official university transcript upon graduation.

## Academic Requirements for the Environmental Engineering Minor

Students pursuing an Environmental Engineering Minor must meet the following requirements:

- A minimum of C - in each course
- An overall GPA of 2.0 for courses in the Environmental Engineering minor


## Courses

## Two required courses:

- Civil Engineering 2711: Environmental Chemistry \& Microbiology (prerequisites: Chemistry 1031, Chemistry 1033)
- Civil Engineering 3711: Environmental Engineering (prerequisites: Chemistry 1031, Mathematics 1042)

Three elective courses (minimum) may be taken after completion of the two required courses; choose from the following:

- Civil Engineering 4621: Engineering Hydrology
- Civil Engineering 4631: Environmental Hydrology
- Civil Engineering 4711: Air Pollution Control System
- Civil Engineering 4721: Water \& Wastewater Systems Design
- Civil Engineering 4731: Solid \& Hazardous Waste Management

Students are required to complete prerequisite courses (shown in parentheses above) as indicated for the two required courses. These prerequisite courses do not count toward the minimum of 15 semester hours. The Department of Civil and Environmental Engineering maintains an approved list of elective courses.

## Declaration of Environmental Engineering Minor

Students who are interested in pursuing an Environmental Engineering minor should speak to their advisor in the school or college in which they are pursuing their degree. Students should formally declare the Environmental Engineering minor upon completing no more than 6 credits toward the minor. There is no penalty if the minor is not completed. For more information and to declare the minor, please contact the Department of Civil and Environmental Engineering.

## Suggested Semester By Semester Plans

## Bachelor of Science in Civil Engineering (B.S.C.E.)

Requirements for New Students starting in the 2013-2014 Academic Year

| Year 1 - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Engineering | 1101 | Introduction to Engineering \& Engineering Technology | 3 |  |
| Mathematics | 1041 | Calculus I | 4 | (GQ) |
| Chemistry | 1035 | Chemistry for Engineers | 3 |  |
| Chemistry | 1033 | General Chemistry Laboratory I | 1 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Year 1-Spring |  |  |  |  |
| Mathematics | 1042 | Calculus II | 4 | (GQ) |
| Physics | 1061 | Elementary Classical Physics I | 4 | (GS) |
| Engineering | 1117 | Engineering Graphics | 2 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Civil Engineering | 1105 | Surveying | 2 |  |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Year 2-Fall |  |  |  |  |
| Mathematics | 2043 | Calculus III | 4 |  |
| Physics | 1062 | Elementary Classical Physics II | 4 | (GS) |
| Engineering | 2331 | Engineering Statics | 3 |  |
| Civil Engineering | 2011 | Civil Engineering Materials | 2 |  |
| Engineering | 2196 | Technical Communication | 3 | WI |
| Semester Total |  |  | 16 |  |


| Year 2 - Spring |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Engineering | 2332 | Engineering Dynamics | 3 |  |
| Engineering | 2333 | Mechanics of Solids | 3 |  |
| Engineering | 3571 | Classical \& Statistical Thermodynamics | 3 |  |
| Mathematics | 3041 | Differential Equations I | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Semester Total |  |  | 15 |  |
| Year 3-Fall |  |  |  |  |
| Engineering | 3553 | Mechanics of Fluids | 3 |  |
| Civil Engineering | 3331 | Soil Mechanics | 3 |  |
| Civil Engineering | 3332 | Soil Mechanics Laboratory | 1 |  |
| Civil Engineering | 3411 | Structural Analysis | 3 |  |
| Civil Engineering | 3412 | Structural Analysis Laboratory | 1 |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Engineering | 3496 | Materials Science for Engineers | 3 | WI |
| Semester Total |  |  | 17 |  |
| Year 3-Spring |  |  |  |  |
| Engineering | 4169 | Professional Seminar | 1 |  |
| Civil Engineering | 3048 | Probability, Statistics \& Stochastic Methods | 3 |  |
| Civil Engineering | 3211 | Transportation Engineering | 3 |  |
| Civil Engineering | 3441 | Steel \& Concrete Design | 4 |  |
| Mechanical Engineering | 3506 | Fluids and Energy Laboratory | 1 |  |
| Science Elective: Must choose one of the following: |  |  | 3-4 |  |
| ```Civil Engineering or Earth & Environmental Science``` | $\begin{aligned} & 2711 \\ & \text { or } \\ & 1001 \end{aligned}$ | ```Environmental Chemistry & Microbiology or Introductory Geology``` |  |  |
| Semester Total |  |  | 15 |  |
| Year 4 - Fall |  |  |  |  |
| Engineering | 4196 | Senior Design Project I | 1 | WI |
| Civil Engineering | Xxxx | Approved Civil Engineering Technical Elective | 3 |  |
| Civil Engineering | 3711 | Environmental Engineering | 3 |  |
| Civil Engineering | 3311 | Construction Engineering | 3 |  |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | Arts | 3 | GA |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Year 4 - Spring |  |  |  |  |
| Engineering | 4296 | Senior Design Project II | 3 | WI |
| Electrical Engineering | 2112 | Electrical Devices \& Systems I | 3 |  |
| Civil Engineering | Xxxx | Approved Civil Engineering Technical Elective | 3 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Total Hours for Civil Engineering: |  |  | 124 (minimum) |  |

## Approved Civil Engineering Technical Electives:

Year 4/Fall:<br>Civil Engineering 4211: Bridge Engineering<br>Civil Engineering 4244: Introduction to Geosynthetics<br>Civil Engineering 4301: Construction Administration<br>Civil Engineering 4302: Engineering Project Management<br>Civil Engineering 4431: Behavior \& Design of Steel Structures<br>Civil Engineering 4433: Behavior \& Design of Masonry Structures<br>Civil Engineering 4631: Environmental Hydrology<br>Civil Engineering 4445: Earthquake Engineering \& Seismic Design<br>Civil Engineering 4711: Air Pollution Control System<br>Civil Engineering 4811: Advanced Soil Mechanics<br>Civil Engineering 4822: Earth Retaining Systems<br>Engineering 3096: Engineering Economic

Year 4/Spring:
Civil Engineering 3334: Structural Design of Pavements
Civil Engineering 3611: Hydraulic Engineering (An Advanced Course)
Civil Engineering 4231: Airport Engineering
Civil Engineering 4303: Construction Financial Management
Civil Engineering 4312: Construction Equipment Management
Civil Engineering 4321: Geotechnical Engineering
Civil Engineering 4421: Structural Dynamics
Civil Engineering 4432: Behavior \& Design of Reinforced Concrete Structures
Civil Engineering 4531: Life Cycle Assessment \& Carbon Footprinting
Civil Engineering 4721: Water \& Wastewater Systems Design
Civil Engineering 4731: Solid \& Hazardous Waste Management
Civil Engineering 4821: Foundation Engineering
Civil Engineering 4823: Geotechnical Earthquake Engineering

## Bachelor of Science in Civil Engineering (B.S.C.E.) - Environmental Engineering

 ConcentrationRequirements for New Students starting in the 2013-2014 Academic Year

| Year 1-Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Engineering | 1101 | Introduction to Engineering \& Engineering Technology | 3 |  |
| Mathematics | 1041 | Calculus I | 4 | (GQ) |
| Chemistry | 1035 | Chemistry for Engineers | 3 |  |
| Chemistry | 1033 | General Chemistry Laboratory I | 1 |  |
| English | 10802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Year 1-Spring |  |  |  |  |
| Mathematics | 1042 | Calculus II | 4 | (GQ) |
| Physics | 1061 | Elementary Classical Physics I | 4 | (GS) |


| Engineering | 1117 | Engineering Graphics | 2 |  |
| :---: | :---: | :---: | :---: | :---: |
| Civil Engineering | 1105 | Surveying | 2 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Semester Total |  |  | 15 |  |
| Year 2 - Fall |  |  |  |  |
| Mathematics | 2043 | Calculus III | 4 |  |
| Physics | 1062 | Elementary Classical Physics II | 4 | (GS) |
| Engineering | 2331 | Engineering Statics | 3 |  |
| Civil Engineering | 2011 | Civil Engineering Materials | 2 |  |
| Civil Engineering | 2711 | Environmental Chemistry \& Microbiology | 3 |  |
| Semester Total |  |  | 16 |  |
| Year 2 - Spring |  |  |  |  |
| Engineering | 2332 | Engineering Dynamics | 3 |  |
| Engineering | 2333 | Mechanics of Solids | 3 |  |
| Engineering | 3571 | Classical \& Statistical Thermodynamics | 3 |  |
| Mathematics | 3041 | Differential Equations I | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities II | 3 | GZ |
| Semester Total |  |  | 15 |  |
| Year 3-Fall |  |  |  |  |
| Engineering | 3553 | Mechanics of Fluids | 3 |  |
| Civil Engineering | 3331 | Soil Mechanics | 3 |  |
| Civil Engineering | 3332 | Soil Mechanics Laboratory | 1 |  |
| Civil Engineering | 3711 | Environmental Engineering | 3 |  |
| Engineering | 2196 | Technical Communication | 3 | WI |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Semester Total |  |  | 16 |  |
| Year 3 - Spring |  |  |  |  |
| Engineering | 4169 | Engineering Seminar | 1 |  |
| Civil Engineering | 3048 | Probability, Statistics \& Stochastic Methods | 3 |  |
| Civil Engineering | 3311 | Construction Engineering | 3 |  |
| Mechanical Engineering | 3506 | Fluids and Energy Laboratory | 1 |  |
| Civil Engineering | $\begin{gathered} \hline 4621 \\ \text { or } \\ 4631 \\ \hline \end{gathered}$ | Engineering Hydrology or <br> Environmental Hydrology | 3 |  |
| Free | xxxx | Free Elective | 2 |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Semester Total |  |  | 16 |  |
| Year 4 - Fall |  |  |  |  |
| Engineering | 4196 | Senior Design Project I | 1 | WI |
| Engineering | 3096 | Economic Analysis | 3 | WI |
| Civil Engineering | 4721 | Water \& Wastewater Systems Design | 3 |  |
| Civil Engineering | xxxx | Approved Civil Engineering Technical Elective | 3 |  |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |


| GenEd | 08xx or 09xx | Arts | 3 | GA |
| :---: | :---: | :---: | :---: | :---: |
| Semester Total |  |  | 16 |  |
| Year 4 - Spring |  |  |  |  |
| Engineering | 4296 | Senior Design Project II | 3 | WI |
| Electrical Engineering | 2112 | Electrical Devices \& Systems I | 3 |  |
| Civil Engineering | 4711 | Air Pollution Control System | 3 |  |
| Civil Engineering | xxxx | Approved Civil Engineering Technical Elective | 3 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Total Hours for Civil Engineering - Environmental Engineering Concentration: |  |  | 124 (minimum) |  |

## Approved Civil Engineering Technical Electives:

Fall:
Civil Engineering 3211: Transportation Engineering
Civil Engineering 3411: Structural Analysis and Civil Engineering 3412: Structural Analysis Laboratory
Civil Engineering 4221: Intelligent Transportation Systems
Civil Engineering 4244: Introduction to Geosynthetics
Civil Engineering 4301: Construction Administration
Civil Engineering 4302: Engineering Project Management
Civil Engineering 4631: Environmental Hydrology
Civil Engineering 4641: Urban Streams \& Storm Water Management
Civil Engineering 4762: Environmental Organic Chemistry
Spring:
Civil Engineering 3441: Steel \& Concrete Design
Civil Engineering 3611: Hydraulic Engineering (An Advanced Course)
Civil Engineering 4303: Construction Financial Management
Civil Engineering 4312: Construction Equipment Management
Civil Engineering 4321: Geotechnical Engineering
Civil Engineering 4531: Life Cycle Assessment \& Carbon Footprinting
Civil Engineering 4731: Solid \& Hazardous Waste Management

## Cooperative Education Programs

A Cooperative Education (Co-op) is an optional program available at the College of Engineering where you have the opportunity to gain professional work experience before graduation. It is designed to give you the chance to apply the knowledge learned in the classroom to real life problems. You will be exposed to the latest technology and new ideas at a worksite helping you understand your field of work more extensively. During the Co-op, you will make valuable connections with professionals in your field. A cooperative education can enhance and strengthen you academically, professionally and personally.

Below are the five-year curricula for the Co-op programs leading to the Bachelor of Science in Civil Engineering and the Bachelor of Science in Civil Engineering with a concentration in Environmental Engineering. The minimum requirement for graduation is 127 semester hours.

## Bachelor of Science in Civil Engineering with Cooperative Experience

Requirements for New Students starting in the 2013-2014 Academic Year

| First Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Engineering | 1101 | Introduction to Engineering \& Engineering Technology | 3 |  |
| Mathematics | 1041 | Calculus I | 4 | (GQ) |
| Chemistry | 1035 | Chemistry for Engineers | 3 |  |
| Chemistry | 1033 | General Chemistry Laboratory I | 1 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Second Semester |  |  |  |  |
| Mathematics | 1042 | Calculus II | 4 | (GQ) |
| Physics | 1061 | Elementary Classical Physics I | 4 | (GS) |
| Engineering | 1117 | Engineering Graphics | 2 |  |
| Civil Engineering | 1105 | Surveying | 2 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Third Semester |  |  |  |  |
| Mathematics | 2043 | Calculus III | 4 |  |
| Physics | 1062 | Elementary Classical Physics II | 4 | (GS) |
| Engineering | 2331 | Engineering Statics | 3 |  |
| Civil Engineering | 2011 | Civil Engineering Materials | 2 |  |
| Engineering | 2196 | Technical Communication | 3 | WI |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Fourth Semester |  |  |  |  |
| Engineering | 2332 | Engineering Dynamics | 3 |  |
| Engineering | 2333 | Mechanics of Solids | 3 |  |
| Engineering | 3571 | Classical \& Statistical Thermodynamics | 3 |  |
| Mathematics | 3041 | Differential Equations I | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Seminar II | 3 | GZ |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Fifth Semester |  |  |  |  |
| Engineering | 3553 | Mechanics of Fluids | 3 |  |
| Civil Engineering | 3331 | Soil Mechanics | 3 |  |
| Civil Engineering | 3332 | Soil Mechanics Laboratory | 1 |  |
| Civil Engineering | 3411 | Structural Analysis | 3 |  |
| Civil Engineering | 3412 | Structural Analysis Laboratory | 1 | WI |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Engineering | 3496 | Materials Science for Engineers | 3 |  |
| Semester Total |  |  | 17 |  |
|  |  |  |  |  |
| Sixth Semester |  |  |  |  |
| Engineering | 4169 | Engineering Seminar | 1 |  |


| Mechanical Engineering | 3506 | Fluids and Energy Laboratory | 1 |  |
| :---: | :---: | :---: | :---: | :---: |
| Civil Engineering | 3048 | Probability, Statistics \& Stochastic Methods | 3 |  |
| Civil Engineering | 3211 | Transportation Engineering | 3 |  |
| Civil Engineering | 3441 | Steel \& Concrete Design | 4 |  |
| Science Elective: Must choose one of the following: |  |  | 3-4 |  |
| Civil Engineering or <br> Earth \& Environmental Science | $\begin{gathered} 2711 \\ \text { or } \\ 1001 \end{gathered}$ | Environmental Chemistry \& Microbiology or <br> Introductory Geology |  |  |
| Semester Total |  |  | 15 |  |
| Seventh Semester |  |  |  |  |
| Engineering | 2181 or 3181 | Co-op Experience I or II | 3 |  |
|  |  |  |  |  |
| Eighth Semester |  |  |  |  |
| Engineering | 3181 | Co-op Experience II | 3 |  |
|  |  |  |  |  |
| Ninth Semester |  |  |  |  |
| Engineering | 4196 | Senior Design Project I | 1 | WI |
| Civil Engineering | 3311 | Construction Engineering | 3 |  |
| Civil Engineering | Xxxx | Approved Civil Engineering Technical Elective | 3 |  |
| Civil Engineering | 3711 | Environmental Engineering | 3 |  |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | Arts | 3 | GA |
| Semester Total |  |  | 16 |  |
| Tenth Semester |  |  |  |  |
| Engineering | 4296 | Senior Design Project II | 3 | WI |
| Electrical Engineering | 2112 | Electrical Devices \& Systems I | 3 |  |
| Civil Engineering | xxxx | Approved Civil Engineering Technical Elective | 3 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Total Hours for Civil Engineering: |  |  | 127 (minimum) |  |

## Approved Civil Engineering Technical Electives:

Fall:
Civil Engineering 4211: Bridge Engineering
Civil Engineering 4244: Introduction to Geosynthetics
Civil Engineering 4301: Construction Administration
Civil Engineering 4302: Engineering Project Management
Civil Engineering 4431: Behavior \& Design of Steel Structures
Civil Engineering 4433: Behavior \& Design of Masonry Structures
Civil Engineering 4445: Earthquake Engineering \& Seismic Design
Civil Engineering 4631: Environmental Hydrology
Civil Engineering 4711: Air Pollution Control System
Civil Engineering 4811: Advanced Soil Mechanics

Civil Engineering 4822: Earth Retaining Systems
Engineering 3096: Engineering Economics

Spring:<br>Civil Engineering 3334: Structural Design of Pavements<br>Civil Engineering 3611: Hydraulic Engineering (An Advanced Course)<br>Civil Engineering 4303: Construction Financial Management<br>Civil Engineering 4312: Construction Equipment Management<br>Civil Engineering 4231: Airport Engineering<br>Civil Engineering 4321: Geotechnical Engineering<br>Civil Engineering 4421: Structural Dynamics<br>Civil Engineering 4432: Behavior \& Design of Reinforced Concrete Structures<br>Civil Engineering 4531: Life Cycle Assessment \& Carbon Footprinting<br>Civil Engineering 4721: Water \& Wastewater Systems Design<br>Civil Engineering 4731: Solid \& Hazardous Waste Management<br>Civil Engineering 4821: Foundation Engineering<br>Civil Engineering 4823: Geotechnical Earthquake Engineering

## Bachelor of Science in Civil Engineering - Environmental Engineering Concentration with Cooperative Experience

## Requirements for New Students starting in the 2013-2014 Academic Year

| First Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Engineering | 1101 | Introduction to Engineering \& Engineering Technology | 3 |  |
| Mathematics | 1041 | Calculus I | 4 | (GQ) |
| Chemistry | 1035 | Chemistry for Engineers | 3 |  |
| Chemistry | 1033 | General Chemistry Laboratory I | 1 |  |
| English | $\begin{aligned} & 0802,0812 \text { or } \\ & 0902 \end{aligned}$ | Analytical Reading \& Writing | 4 | GW |
| Semester Total |  |  | 15 |  |
| Second Semester |  |  |  |  |
| Mathematics | 1042 | Calculus II | 4 | (GQ) |
| Physics | 1061 | Elementary Classical Physics I | 4 | (GS) |
| Engineering | 1117 | Engineering Graphics | 2 |  |
| Civil Engineering | 1105 | Surveying | 2 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Third Semester |  |  |  |  |
| Mathematics | 2043 | Calculus III | 4 |  |
| Physics | 1062 | Elementary Classical Physics II | 4 | (GS) |
| Engineering | 2331 | Engineering Statics | 3 |  |
| Civil Engineering | 2011 | Civil Engineering Materials | 2 |  |
| Civil Engineering | 2711 | Environmental Chemistry \& Microbiology | 3 |  |
| Semester Total |  |  | 16 |  |


| Fourth Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Engineering | 2332 | Engineering Dynamics | 3 |  |
| Engineering | 2333 | Mechanics of Solids | 3 |  |
| Engineering | 3571 | Classical \& Statistical Thermodynamics | 3 |  |
| Mathematics | 3041 | Differential Equations I | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Seminar II | 3 | GZ |
| Semester Total |  |  | 15 |  |
| Fifth Semester |  |  |  |  |
| Engineering | 3553 | Mechanics of Fluids | 3 |  |
| Civil Engineering | 3331 | Soil Mechanics | 3 |  |
| Civil Engineering | 3332 | Soil Mechanics Laboratory | 1 |  |
| Civil Engineering | 3711 | Environmental Engineering | 3 |  |
| Engineering | 2196 | Technical Communication | 3 | WI |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Semester Total |  |  | 16 |  |
| Sixth Semester |  |  |  |  |
| Engineering | 4169 | Engineering Seminar | 1 |  |
| Civil Engineering | 3048 | Probability, Statistics \& Stochastic Methods | 3 |  |
| Civil Engineering | 3311 | Construction Engineering | 3 |  |
| Mechanical Engineering | 3506 | Fluids and Energy Laboratory | 1 |  |
| Civil Engineering | $\begin{gathered} 4621 \\ \text { or } \\ 4631 \\ \hline \end{gathered}$ | Engineering Hydrology <br> or <br> Environmental Hydrology | 3 |  |
| Free | xxxx | Free Elective | 2 |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Seventh Semester |  |  |  |  |
| Engineering | 2181 or 3181 | Co-op Experience I or II | 3 |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Eighth Semester |  |  |  |  |
| Engineering | 3181 | Co-op Experience II | 3 |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Ninth Semester |  |  |  |  |
| Engineering | 4196 | Senior Design Project I | 1 | WI |
| Engineering | 3096 | Economic Analysis | 3 | WI |
| Civil Engineering | 4721 | Water \& Wastewater Systems Design | 3 |  |
| Civil Engineering | xxxx | Approved Civil Engineering Technical Elective | 3 |  |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | Arts | 3 | GA |
| Semester Total |  |  | 16 |  |
| Tenth Semester |  |  |  |  |
| Engineering | 4296 | Senior Design Project II | 3 | WI |


| Electrical Engineering | 2112 | Electrical Devices \& Systems I | 3 |  |
| :--- | :--- | :--- | :---: | :---: |
| Civil Engineering | 4711 | Air Pollution Control System | 3 |  |
| Civil Engineering | xxxx | Approved Civil Engineering Technical Elective | 3 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Semester Total |  | $\mathbf{1 5}$ |  |  |
|  |  |  |  |  |
| Total Hours for Civil Engineering - Environmental Engineering Concentration: | $\mathbf{1 2 7}$ (minimum) |  |  |  |

## Approved Civil Engineering Technical Electives:

Fall:
Civil Engineering 3211: Transportation Engineering
Civil Engineering 3411: Structural Analysis and Civil Engineering 3412: Structural Analysis Laboratory
Civil Engineering 4221: Intelligent Transportation Systems
Civil Engineering 4244: Introduction to Geosynthetics
Civil Engineering 4301: Construction Administration
Civil Engineering 4302: Engineering Project Management
Civil Engineering 4631: Environmental Hydrology
Civil Engineering 4641: Urban Streams \& Storm Water Management
Civil Engineering 4762: Environmental Organic Chemistry

Spring:
Civil Engineering 3441: Steel \& Concrete Design
Civil Engineering 3611: Hydraulic Engineering (An Advanced Course)
Civil Engineering 4303: Construction Financial Management
Civil Engineering 4312: Construction Equipment Management
Civil Engineering 4321: Geotechnical Engineering
Civil Engineering 4531: Life Cycle Assessment \& Carbon Footprinting
Civil Engineering 4731: Solid \& Hazardous Waste Management

## Electrical Engineering

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$\underline{\text { http://engineering.temple.edu/department/electrical-computer-engineering }}$
The Electrical Engineering program is accredited by the Engineering Accreditation Commission (EAC) of ABET, http://www.abet.org.

## Program Goals, Objectives \& Design Integration

The objective of the Electrical and Computer Engineering Program is to prepare students for careers as practicing engineers in areas such as digital systems, embedded processor applications, digital communications, control systems, sensor networks, biomedical signal processing, microelectronics, computer security, and power networks. These careers are in applications, development, research, and design of electric and electronic systems and devices. Electrical Engineers are involved in the design and development of telecommunications networks, cellular telephones, computer and other microprocessor-based devices, consumer electronics, control systems for space vehicles and robots, and in many aspects of the power and automotive industries.

The Department offers a concentration in Computer Engineering. The objective of the computer engineering concentration is to prepare students for a career in the area of Computer Engineering as it relates to the design of integrated software/hardware systems with both high- and low-level computer systems programming and applications to electrical systems. Computer engineers are responsible for the design, implementation, and application of computers and digital systems. The field covers hardware, software, and the interaction between them. The Computer Engineering concentration integrates courses on computer science fundamentals from the Department of Computer and Information Sciences of Temple University into the curriculum.

The Department also offers a concentration in Bioelectrical Engineering. The objective of the Bioelectrical Engineering concentration is to prepare students for careers in the emerging areas of biomedical signal and image processing, assistive devices for the impaired, and bioelectronics. The Bioelectrical Engineering concentration utilizes courses in Biology, and Mammalian Anatomy and Physiology from the Department of Biology at Temple University as part of the curriculum.

The Electrical Engineering degree program is accredited by ABET. The curriculum features required courses in Mathematics, Chemistry, Physics, General Education, and the fundamentals of Electrical and Computer Engineering. The ABET minimum requirement for graduation is 124 semester hours, and students must satisfy the minimum requirement in each category as shown below. "Approved Elective" courses include elective electrical engineering courses, and a selection of math, science, engineering, and computer science courses as approved by the Department Chair. Students should consult the department chair or their academic advisor for any questions concerning the credit distribution.

## University Requirements

All new students are required to complete the university's General Education (GenEd) curriculum. Transfer students are advised by the Department Chair with regard to their transfer credit for courses in their major taken elsewhere. Students should contact the Department Chair for an appointment and advisement.

All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific writing-intensive courses required for this major are listed below and are identified by "WI" in the Attribute column.

## Summary of Degree Requirements

The degree of Bachelor of Science in Electrical and Computer Engineering may be conferred upon satisfactory completion of a minimum of 124 semester hours of credit with a minimum GPA of 2.0 overall and in the major. Students must also score a minimum grade of C- in each of the following courses: ECE 2312, ECE 2322, ECE 2612, and ECE 3512 before they can take other junior and senior level courses. The following tables show the minimum credit hour requirement in various areas for the ECE degree program and concentrations in Computer Engineering and Bioelectrical Engineering:

Electrical Engineering:

| Curriculum | Courses/labs <br> (Typical) | Credits |
| :--- | :---: | :---: |
|  | (Minimum) |  |$|$| Mathematics | 6 | 12 |
| :---: | :---: | :---: |
| Basic Sciences | 8 | 25 |
| General Education | 20 | 63 |
| Engineering | 1 | 3 |
| Free Elective |  | $\mathbf{1 2 4}$ s.h. |
| Minimum requirement |  |  |

Computer Engineering Concentration:

| Curriculum | Courses/Labs | Credits |
| :--- | :---: | :---: |
|  | (Typical) | (Minimum) |
| Mathematics | 6 | 21 |
| Basic Sciences | 3 | 12 |
| General Education | 8 | 25 |
| Engineering and Computer Science | 20 | 64 |
| Free Elective | 1 | 2 |
| Minimum requirement |  | $\mathbf{1 2 4}$ s.h. |

## Bioelectrical Engineering Concentration:

| Curriculum | Courses/labs | Credits |
| :--- | :---: | :---: |
|  | (Typical) | (Minimum) |
| Mathematics | 6 | 21 |
| Basic Sciences and Biology | 6 | 16 |
| General Education | 8 | 25 |
| Engineering | 18 | 59 |
| Free Elective | 1 | 3 |
| Minimum requirement |  | $\mathbf{1 2 4}$ s.h. |

## Foundation Science \& Mathematics Courses in Electrical Engineering

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Mathematics | 1041 | Calculus I | 4 |  |
| (Calculus Sequence) | 1042 | Calculus II | 4 |  |
|  | 2043 | Calculus III | 4 |  |
|  | 3041 | Differential Equations I | 3 |  |
| Electrical Engineering | 3522 | Stochastic Processes in Signals \& Systems | 3 |  |
| Engineering | 2011 | Engineering Analysis \& Applications | 3 |  |
| Physics | 1061 | Elementary Classical Physics I | 4 |  |
|  | 1062 | Elementary Classical Physics II | 4 |  |
| Chemistry | 1035 | Chemistry for Engineers | 3 |  |
| Chemistry | 1033 | General Chemistry I Lab | 1 |  |
| Subtotal |  |  | 33 |  |

## Foundation Science \& Mathematics Courses in the Computer Engineering

 Concentration| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Mathematics | 1041 | Calculus I | 4 |  |
| (Calculus Sequence) | 1042 | Calculus II | 4 |  |
|  | 2043 | Calculus III | 4 |  |
|  | 3041 | Differential Equations I | 3 |  |
| Electrical Engineering | 3522 | Stochastic Processes in Signals \& Systems | 3 |  |
| Engineering | 2011 | Engineering Analysis \& Applications | 3 |  |
| Physics | 1061 | Elementary Classical Physics I | 4 |  |
|  | 1062 | Elementary Classical Physics II | 4 |  |
| Chemistry | 1035 | Chemistry for Engineers | 3 |  |
| Chemistry | 1033 | General Chemistry I Lab | 1 |  |
| Subtotal |  |  | 33 |  |

Foundation Science \& Math Courses in the Bioelectrical Engineering Concentration

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Mathematics | 1041 | Calculus I | 4 |  |
| (Calculus Sequence) | 1042 | Calculus II | 4 |  |
|  | 2043 | Calculus III | 4 |  |
|  | 3041 | Differential Equations I | 3 |  |
| Electrical Engineering | 3522 | Stochastic Processes in Signals \& Systems | 3 |  |
| Engineering | 2011 | Engineering Analysis \& Applications | 3 |  |
| Physics | 1061 | Elementary Classical Physics I | 4 |  |
|  | 1062 | Elementary Classical Physics II | 4 |  |
| Chemistry | 1035 | Chemistry for Engineers | 3 |  |
| Chemistry | 1033 | General Chemistry I Lab | 1 |  |
| Biology | 1011 | General Biology I | 4 |  |
| Subtotal |  |  | 37 |  |

## Required General Education Courses (25 s.h.)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | $08 \times x$ or 09xx | U.S. Society | 3 | GU |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | $08 \times x$ or 09xx | Human Behavior | 3 | GB |
| GenEd | 08xx or 09xx | The Arts | 3 | GA |
| GenEd | $08 \times x$ or 09xx | Race \& Diversity | 3 | GD |
| Subtotal |  |  | $\mathbf{2 5}$ |  |

Required Courses: Electrical Engineering (63 s.h. minimum)

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Electrical Engineering | $\begin{aligned} & 2312 \\ & 2313 \\ & 2322 \\ & 2323 \end{aligned}$ | Electrical Engineering Science I <br> Engineering Science I Lab <br> Electrical Engineering Science II <br> Electrical Engineering Science II Lab | $\begin{aligned} & \hline 3 \\ & 1 \\ & 3 \\ & 1 \end{aligned}$ |  |
| Electrical Engineering | $\begin{aligned} & 2612 \\ & 2613 \\ & \hline \end{aligned}$ | Digital Circuit Design <br> Digital Circuit Design Lab | $\begin{aligned} & \hline 3 \\ & 1 \end{aligned}$ |  |
| Electrical Engineering | $\begin{aligned} & 3512 \\ & 3712 \end{aligned}$ | Signals: Continuous \& Discrete Introduction to Electromagnetic Fields \& Waves | $\begin{aligned} & \hline 4 \\ & 3 \end{aligned}$ |  |
| Electrical Engineering | $\begin{aligned} & 3612 \\ & 3613 \end{aligned}$ | Microprocessor Systems Microprocessor Systems Lab | $\begin{aligned} & \hline \hline 3 \\ & 1 \end{aligned}$ |  |
| Electrical Engineering | $\begin{aligned} & 3312 \\ & 3313 \end{aligned}$ | Microelectronics I Microelectronics I Lab | $\begin{aligned} & 3 \\ & 1 \\ & \hline \end{aligned}$ |  |
| Electrical Engineering | $\begin{aligned} & 3412 \\ & 3413 \\ & 4512 \\ & 4513 \\ & \hline \end{aligned}$ | Classical Control Systems <br> Classical Control Lab <br> Digital Communication Systems <br> Digital Communication Systems Lab | $\begin{aligned} & \hline 3 \\ & 1 \\ & 3 \\ & 1 \\ & \hline \hline \end{aligned}$ |  |
| Engineering | $\begin{aligned} & 1101 \\ & 2196 \\ & 3334 \\ & \hline \end{aligned}$ | Introduction to Engineering \& Engineering Technology Technical Communication Mechanical Systems | $\begin{aligned} & \hline \hline 3 \\ & 3 \\ & 3 \\ & \hline \end{aligned}$ | WI |
| Engineering | 4169 | Engineering Seminar | 1 |  |
| Engineering | $\begin{aligned} & 4196 \\ & 4296 \\ & \hline \end{aligned}$ | Senior Design Project I Senior Design Project II | $\begin{aligned} & 1 \\ & 3 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathrm{WI} \\ & \mathrm{WI} \end{aligned}$ |
| Computer \& Information Science | 1057 | Computer Programming in C | 4 |  |
| Electives |  | (can be either 3 or 4 s.h. courses) | $\begin{array}{c\|} \hline 10 \\ \text { (minimum) } \end{array}$ |  |
|  |  |  |  |  |
| Total Hours for Electrical Engineering Major: |  |  | 124 (minimum) |  |

## Required Courses: Computer Engineering Concentration (64 s.h. minimum)

Total credit hours for Computer Engineering concentration is 124. Other required courses for this concentration include Mathematics and Science, and General Education.

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Electrical Engineering | 2312 <br> 2313 <br> 2322 <br> 2323 | Electrical Engineering Science I <br> Electrical Engineering Science I Lab <br> Electrical Engineering Science II <br> Electrical Engineering Science II Lab | $\begin{aligned} & 3 \\ & 1 \\ & 3 \\ & 1 \\ & \hline \end{aligned}$ |  |
| Electrical Engineering | $\begin{aligned} & 2612 \\ & 2613 \end{aligned}$ | Digital Circuit Design Digital Circuit Design Lab | $3$ |  |
| Electrical Engineering | 3512 | Signals: Continuous \& Discrete | 4 |  |
| Electrical Engineering | $\begin{aligned} & 3612 \\ & 3613 \end{aligned}$ | Microprocessor Systems Microprocessor Systems Lab | $\begin{aligned} & 3 \\ & 1 \end{aligned}$ |  |
| Electrical Engineering | 622 <br> 3623 <br> 4512 <br> 4513 | Embedded System Design <br> Embedded System Design Lab <br> Digital Communication Systems <br> Digital Communication Systems Lab | $\begin{aligned} & 3 \\ & 1 \\ & 3 \\ & 1 \\ & \hline \end{aligned}$ |  |
| Electrical Engineering | 4612 | Advanced Processor Systems | 3 |  |
| Electrical Engineering | 4532 | Data and Computer Communication | 3 |  |
| Engineering | $\begin{aligned} & 1101 \\ & 2196 \\ & 4169 \\ & 4196 \\ & 4296 \end{aligned}$ | Introduction to Engineering \& Engineering Technology <br> Technical Communication <br> Engineering Seminar <br> Senior Design Project I <br> Senior Design Project II | $\begin{aligned} & \hline \hline 3 \\ & 3 \\ & 1 \\ & 1 \\ & 3 \\ & \hline \end{aligned}$ | WI <br> WI WI |
| Computer \& Information Science | $\begin{aligned} & 1166 \\ & 1068 \\ & 2168 \\ & \hline \end{aligned}$ | Mathematical Concepts in Computing I Program Design \& Abstraction Data Structures | $\begin{aligned} & 4 \\ & 4 \\ & 4 \\ & \hline \end{aligned}$ |  |
| Computer \& Information Science | 1057 | Computer Programming in C | 4 |  |
| Electives |  | (can be either 3 or 4 s.h. courses) | $\begin{gathered} 3 \\ \text { (minimum) } \\ \hline \end{gathered}$ |  |
|  |  |  |  |  |
| Total Hours for Computer Engineering Concentration: |  |  | 124 (minimum) |  |

## Required Courses: Bioelectrical Engineering Concentration (59 s.h. minimum):

Total credit hours for Bioelectrical Engineering concentration is 124. Other required courses for this concentration include Mathematics and Science, and General Education.

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Electrical Engineering | 2312 | Electrical Engineering Science I | 3 |  |
|  | 2313 | Electrical Engineering Science I Lab | 1 |  |
|  | 2322 | Electrical Engineering Science II | 3 |  |
| Electrical Engineering | 2323 | Electrical Engineering Science II Lab | 1 |  |
| Electrical Engineering | 2612 | Digital Circuit Design | 3 |  |
|  | 2613 | Digital Circuit Design Lab | 1 |  |
| Electrical Engineering | 3512 | Signals: Continuous \& Discrete | 4 |  |
| Electrical Engineering | 3712 | Introduction to Electromagnetic Fields \& Waves | 3 |  |
|  | 3612 | Microprocessor Systems | 3 |  |


| Engineering | 1101 | Introduction to Engineering \& Engineering | 3 |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: |
|  | 2196 | Tech | 3 | WI |  |
|  | 4169 | Technical Communication | 1 |  |  |
|  | 4196 | Engineering Seminar | 3 | WI |  |
|  | 4296 | Senior Design Project I | 3 | WI |  |
|  |  | Senior Design Project II | 4 |  |  |
| Kinesiology | 1223 | Human Anatomy \& Physiology I | 4 |  |  |
| Computer \& Information Science | 1224 | Human Anatomy \& Physiology II | Computer Programming in C | 4 |  |
| Electives |  | (can be either 3 or 4 s.h. courses) | 6 (minimum) |  |  |
| Total Hours for Bioelectrical Engineering Concentration: | $\mathbf{1 2 4}$ (minimum) |  |  |  |  |

## Additional Courses in Electrical \& Computer Engineering

With the approval of the Department Chair, students could take selected courses from another concentration area within the department, which are counted as approved electives. The following courses also serve as approved electives for all students.

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Electrical Engineering | 4312 | Microelectronics II | 3 |  |
|  | 4322 | VLSI Systems Design | 3 |  |
| Electrical Engineering | 4412 | Modern Control Systems | 3 |  |
|  | 4422 | Digital Control Systems | 3 |  |
| Electrical Engineering | 3732 | Electromechanical Energy Systems | 3 |  |
|  | 4712 | Modern Power Engineering \& Electronics | 3 |  |
| Electrical Engineering | 3722 | Electromagnetic Wave Propagation | 3 |  |
|  | 4542 | Telecommunications Engineering | 3 |  |
| Engineering | 4116 | Spacecraft Systems Engineering | 3 |  |
|  | 3033 | Entrepreneurial Engineering | 3 |  |
|  | xx81 | Co-op Experience | $1-3$ |  |
|  | xx85 | Internship Experience | $1-3$ |  |

## Suggested Semester By Semester Plans

Please note that these are suggested academic plans. Depending on your situation, your academic plan may look different.

## Bachelor of Science in Electrical Engineering

## Requirements for New Students starting in the 2013-2014 Academic Year

| Year 1 - Fall | Course \# | Course Title |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Subject | 1041 | Calculus I | 4 |  |
| Mathematics | 1035 | Chemistry for Engineers | Attribute |  |
| Chemistry | General Chemistry I Lab | 3 |  |  |
| Chemistry | 1033 | 1 |  |  |


| Engineering | 1101 | Introduction to Engineering \& Engineering Technology <br> (Prerequisite: Engineering admission) | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Semester Total |  |  | 15 |  |
| Year 1-Spring |  |  |  |  |
| Mathematics | 1042 | Calculus II (Prerequisite: Mathematics 1041) | 4 |  |
| Physics | 1061 | Elementary Classical Physics I (Prerequisite: Mathematics 1041) | 4 |  |
| Computer \& Information <br> Science <br> (Engineering) | $\begin{aligned} & 1057^{*} \\ & (1117) \end{aligned}$ | Computer Programming in C <br> (Engineering Graphics) | 4 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Semester Total |  |  | 15 |  |

*Computer \& Information Science 1057 is a required course for all ECE students. If you completed Engineering 1117 before declaring an ECE major, you must take Computer \& Information Science 1057 in your third semester. Engineering 1117 will be counted as a free elective. See your advisor for more information.

Year 2-Fall

| Mathematics | 2043 | Calculus III <br> (Prerequisite: Mathematics 1042) | 4 |  |
| :--- | :--- | :--- | :---: | :---: |
| Physics | 1062 | Elementary Classical Physics II <br> (Prerequisite: Physics 1061) | 4 |  |
| Electrical Engineering | 2312 | Electrical Engineering Science I <br> (Prerequisite: Mathematics 1041) | 3 |  |
| Electrical Engineering | 2313 | Electrical Engineering Science I Lab | 1 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Semester Total |  | $\mathbf{1 5}$ |  |  |

Year 2 - Spring

| Mathematics | 3041 | Differential Equations I (Prerequisite: Mathematics 2043) | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Electrical Engineering | 2322 | Electrical Engineering Science II (Prerequisites: Electrical Engineering 2312, Mathematics 1042) | 3 |  |
| Electrical Engineering | 2323 | Electrical Engineering Science II Lab | 1 |  |
| Electrical Engineering | 2612 | Digital Circuit Design <br> (Prerequisite: Electrical Engineering 2312) | 3 |  |
| Electrical Engineering | 2613 | Digital Circuit Design Lab | 1 |  |
| Engineering | 2011 | Engineering Analysis \& Applications (Prerequisites: Computer \& Information Science 1057, Mathematics 2043) | 3 |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Semester Total |  |  | 17 |  |
|  |  |  |  |  |
| Year 3-Fall |  |  |  |  |
| Electrical Engineering | 3512 | Signals: Continuous \& Discrete (Prerequisites: Electrical Engineering 2322, Mathematics 2043) | 4 |  |


| Electrical Engineering | 3612 | $\begin{aligned} & \text { Microprocessor Systems } \\ & \text { (Prerequisites: Electrical Engineering 2322, } \\ & 2612,2613 \text { ) } \end{aligned}$ | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Electrical Engineering | 3613 | Microprocessor Systems Lab | 1 |  |
| Electrical Engineering | 3712 | Introduction to Electromagnetic Fields \& Waves (Prerequisites: Physics 1062, Electrical Engineering 2322, Mathematics 2043) | 3 |  |
| Engineering | 3334 | Mechanical Systems (Prerequisites: Mathematics 3041, Physics 1061) | 3 |  |
| Engineering | 2196 | Technical Communication <br> (Prerequisites: Mathematics 1042, Physics 1061) | 3 | WI |
| Semester Total |  |  | 17 |  |
| Year 3 - Spring |  |  |  |  |
| Electrical Engineering | 3412 | Classical Control Systems (Prerequisites: Electrical Engineering 3512, Mathematics 3041) | 3 |  |
| Electrical Engineering | 3413 | $\begin{aligned} & \text { Classical Control Lab } \\ & \text { (Prerequisites: Electrical Engineering 3512, } \\ & \text { Mathematics 3041) } \end{aligned}$ | 1 |  |
| Electrical Engineering | 3522 | Stochastic Processes in Signals \& Systems (Prerequisite: Electrical Engineering 3512) | 3 |  |
| Electrical Engineering | 3312 | Microelectronics I <br> (Prerequisite: Electrical Engineering 2322) | 3 |  |
| Electrical Engineering | 3313 | Microelectronics I Lab | 1 |  |
| Engineering | 4169 | Engineering Seminar (Prerequisite: Engineering 2196 or English 2696) | 1 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Semester Total |  |  | 15 |  |
| Year 4-Fall |  |  |  |  |
| Engineering | 4196 | Senior Design Project I (Prerequisite: Engineering 4169 and Senior Standing) | 1 | WI |
| Electrical Engineering | 4512 | Digital Communication Systems (Prerequisites: Electrical Engineering 3512 and 3522) | 3 |  |
| Electrical Engineering | 4513 | Digital Communication Systems Lab (Prerequisites: Electrical Engineering 3512 and 3522 ) | 1 |  |
| Electrical Engineering | elective | Electrical Engineering Elective | 3 |  |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Semester Total |  |  | 14 |  |
| Year 4 - Spring |  |  |  |  |
| Engineering | 4296 | Senior Design Project II (Prerequisite: Engineering 4196) | 3 | WI |
| Electrical Engineering | elective | Electrical Engineering Elective | 4 |  |
| Engineering | elective | Engineering or Electrical Engineering Elective | 3 |  |
| GenEd | 08xx or 09xx | Arts | 3 | GA |
| Elective | elective | Free Elective | 3 |  |
| Semester Total |  |  | 16 |  |


|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Total Hours for Electrical Engineering: | 124 (minimum) |  |  |  |

## Electives

Electrical Engineering 3622: Embedded System Design (Prerequisites: Electrical Engineering 3612/3613)
Electrical Engineering 3623: Embedded System Design Lab (Co-requisite: Electrical Engineering 3622)
Electrical Engineering 3722: Electromagnetic Wave Propagation (Prerequisite: Electrical Engineering 3712)

Electrical Engineering 3723: Electromagnetic Wave Propagation Lab (Co-requisite: Electrical Engineering 3722)
Electrical Engineering 3732: Electromechanical Energy Systems (Prerequisites: Electrical Engineering 2322, Electrical Engineering 3712, Mathematics 3041)
Electrical Engineering 3733: Electromechanical Energy Systems Lab^ (Co-requisite: Electrical Engineering 3732)
Electrical Engineering 4312: Microelectronics II (Prerequisites: Electrical Engineering 3312/3313)
Electrical Engineering 4322: VLSI Systems Design (Prerequisite: Electrical Engineering 4312)
Electrical Engineering 4412: Modern Control Theory (Prerequisites: Electrical Engineering 3412/3413)
Electrical Engineering 4422: Digital Control Systems (Prerequisites: Electrical Engineering 3412)
Electrical Engineering 4522: Digital Signal Processing (Prerequisites: Electrical Engineering 3522)
Electrical Engineering 4532: Data and Computer Communication (Prerequisite: Electrical Engineering 4512/4513)
Electrical Engineering 4542: Telecommunications Engineering (Prerequisites: Electrical Engineering 4512/4513)
Electrical Engineering 4612: Advanced Processor Systems (Prerequisites: Electrical Engineering 3622/3623)
Electrical Engineering 4712: Modern Power Engineering \& Electronics (Prerequisites: Electrical Engineering 2322, Electrical Engineering 3312)
Engineering 3033: Entrepreneurial Engineering
Engineering 4116: Spacecraft Systems Engineering (Prerequisite: Mathematics 3041)
Engineering xx81: Co-op Work Experience
Engineering xx85: Internship Experience
Electrical Engineering xx82: Independent Study in Electrical \& Computer Engineering
Electrical Engineering xx91: Independent Research in Electrical \& Computer Engineering
$\wedge$ pending approval

## Bachelor of Science in Electrical Engineering - Computer Engineering Concentration

Requirements for New Students starting in the 2013-2014 Academic Year

| Year 1 - Fall | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Subject | 1041 | Calculus I | 4 |  |
| Mathematics | 1035 | Chemistry for Engineers | 3 |  |
| Chemistry | 1033 | General Chemistry I Lab | 1 |  |
| Chemistry | 1101 | Introduction to Engineering \& Engineering <br> Technology <br> (Prerequisite: Engineering admission) | 3 |  |
| Engineering |  |  |  |  |
| English | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 | GW |


| Semester Total |  |  | 15 |  |
| :---: | :---: | :---: | :---: | :---: |
| Year 1 - Spring |  |  |  |  |
| Mathematics | 1042 | Calculus II <br> (Prerequisite: Mathematics 1041) | 4 |  |
| Physics | 1061 | Elementary Classical Physics I (Prerequisite: Mathematics 1041) | 4 |  |
| Computer \& Information Science <br> (Engineering) | $\begin{aligned} & 1057 * \\ & (1117) \\ & \hline \end{aligned}$ | Computer Programming in C <br> (Engineering Graphics) | 4 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Semester Total |  |  | 15 |  |

*Computer \& Information Science 1057 is a required course for all ECE students. If you completed Engineering 1117 before declaring an ECE major, you must take Computer \& Information Science 1057 in your third semester. Engineering 1117 will be counted as a free elective. See your advisor for more information.

Year 2 - Fall

| Mathematics | 2043 | Calculus III <br> (Prerequisite: Mathematics 1042) | 4 |  |
| :--- | :--- | :--- | :---: | :---: |
| Physics | 1062 | Elementary Classical Physics II <br> (Prerequisite: Physics 1061) | 4 |  |
| Electrical Engineering | 2312 | Electrical Engineering Science I <br> (Prerequisite: Mathematics 1041) | 3 |  |
| Electrical Engineering | 2313 | Electrical Engineering Science I Lab | 1 |  |
| Computer \& Information <br> Science | 1166 | Mathematical Concepts in Computing I | 4 |  |
| Semester Total |  | $\mathbf{1 6}$ |  |  |

Year 2 - Spring

| Mathematics | 3041 | Differential Equations I <br> (Prerequisite: Mathematics 2043) | 3 |  |
| :--- | :--- | :--- | :---: | :---: |
| Electrical Engineering | 2322 | Electrical Engineering Science II <br> (Prerequisites: Electrical Engineering 2312, <br> Mathematics 1042) | 3 |  |
| Electrical Engineering | 2323 | Electrical Engineering Science II Lab | 1 |  |
| Electrical Engineering | 2612 | Digital Circuit Design <br> (Prerequisite: Electrical Engineering 2312) | 3 |  |
| Electrical Engineering | 2613 | Digital Circuit Design Lab | 1 |  |
| Engineering | Engineering Analysis \& Applications <br> (Prerequisites: Computer \& Information <br> Science 1057, Mathematics 2043) | 3 |  |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II |  | 3 |
| Semester Total |  |  | $\mathbf{1 7}$ |  |

Year 3 - Fall

| Electrical Engineering | 3512 | Signals: Continuous \& Discrete <br> (Prerequisites: Electrical Engineering 2322, <br> Mathematics 2043) | 4 |  |
| :--- | :--- | :--- | :---: | :---: |
| Electrical Engineering | 3612 | Microprocessor Systems (Prerequisites: <br> Electrical Engineering 2322, 2612, 2613) | 3 |  |
| Electrical Engineering | 3613 | Microprocessor Systems Lab | 1 |  |


| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| :---: | :---: | :---: | :---: | :---: |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Engineering | 2196 | Technical Communication (Prerequisites: Mathematics 1042, Physics 1061) | 3 | WI |
| Semester Total |  |  | 17 |  |
| Year 3 - Spring |  |  |  |  |
| Electrical Engineering | 3622 | Embedded System Design (Prerequisites: Electrical Engineering 3612/3613) | 3 |  |
| Electrical Engineering | 3623 | Embedded System Design Lab (Prerequisites: Electrical Engineering 3612/3613) | 1 |  |
| Electrical Engineering | 3522 | Stochastic Processes in Signals \& Systems (Prerequisite: Electrical Engineering 3512) | 3 |  |
| Computer \& Information Science | 1068 | Program Design \& Abstraction | 4 |  |
| Engineering | 4169 | Engineering Seminar (Prerequisite: Engineering 2196 or English 2696) | 1 |  |
| Elective | elective | Free Elective | 2 |  |
| Semester Total |  |  | 14 |  |
| Year 4 - Fall |  |  |  |  |
| Engineering | 4196 | Senior Design Project I (Prerequisite: Engineering 4169 and Senior Standing) | 1 | WI |
| Electrical Engineering | 4512 | Digital Communication Systems (Prerequisites: <br> Electrical Engineering 3512 and 3522) | 3 |  |
| Electrical Engineering | 4513 | Digital Communication Systems Lab <br> (Prerequisites: Electrical Engineering 3512 and <br> 3522 ) | 1 |  |
| Electrical Engineering | 4612 | Advanced Processor Systems (Prerequisite: Electrical Engineering 3622 and 3623) | 3 |  |
| Computer \& Information Science | 2168 | Data Structure | 4 |  |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Semester Total |  |  | 15 |  |
| Year 4 - Spring |  |  |  |  |
| Engineering | 4296 | Senior Design Project II (Prerequisite: Engineering 4196) | 3 | WI |
| Electrical Engineering/ Computer \& Information Science | XXXX | Electrical Engineering/ Computer \& Information Science Elective | 3 |  |
| Electrical Engineering | 4532 | Data and Computer Communication (Prerequisites: Electrical Engineering 4512 and 4513) | 3 |  |
| GenEd | 08xx or 09xx | Arts | 3 | GA |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Total Hours for Electrical Engineering - Computer Engineering Concentration: |  |  | 124 (minimum) |  |

Electives
Electrical Engineering 3312: Microelectronics I (Prerequisite: Electrical Engineering 2322/2323)
Electrical Engineering 3313: Microelectronics I Lab (Co-requisite: Electrical Engineering 3312)
Electrical Engineering 3412: Classical Control Systems (Prerequisite: Electrical Engineering 3512, Mathematics 3041)
Electrical Engineering 3413: Classical Control Systems Lab (Co-requisite: Electrical Engineering 3412)
Electrical Engineering 3622: Embedded System Design (Prerequisites: Electrical Engineering 3612/3613)
Electrical Engineering 3623: Embedded System Design Lab (Co-requisite: Electrical Engineering 3622)
Electrical Engineering 3712: Introduction to Electromagnetic Fields \& Waves (Prerequisites: Physics 1062, Electrical Engineering 2322, Mathematics 2043)
Electrical Engineering 3722: Electromagnetic Wave Propagation (Prerequisite: Electrical Engineering 3712)

Electrical Engineering 3723: Electromagnetic Wave Propagation Lab (Co-requisite: Electrical Engineering 3722)
Electrical Engineering 3732: Electromechanical Energy Systems (Prerequisites: Electrical Engineering 2322, Electrical Engineering 3712, Mathematics 3041)
Electrical Engineering 3733: Electromechanical Energy Systems Lab^ (Co-requisite: Electrical Engineering 3732)
Electrical Engineering 4322: VLSI Systems Design (Prerequisite: Electrical Engineering 4312)
Electrical Engineering 4522: Digital Signal Processing (Prerequisites: Electrical Engineering 3522)
Electrical Engineering 4542: Telecommunications Engineering (Prerequisites: Electrical Engineering 4512/4513)
Electrical Engineering 4712: Modern Power Engineering \& Electronics (Prerequisites: Electrical Engineering 2322, Electrical Engineering 3312)
Electrical Engineering 4312: Microelectronics II (Prerequisites: Electrical Engineering 3312/3313)
Electrical Engineering 4412: Modern Control Theory (Prerequisites: Electrical Engineering 3412/3413)
Electrical Engineering 4422: Digital Control Systems (Prerequisites: Electrical Engineering 3412)
Engineering 4116: Spacecraft Systems Engineering (Prerequisite: Mathematics 3041)
Engineering 3033: Entrepreneurial Engineering
Engineering xx81: Co-op Work Experience
Engineering xx85: Internship Experience
Electrical Engineering xx82: Independent Study in Electrical \& Computer Engineering Electrical Engineering xx91: Independent Research in Electrical \& Computer Engineering Computer \& Information Science: Approved Electives
$\wedge$ pending approval

## Bachelor of Science in Electrical Engineering - Bioelectrical Engineering

 Concentration
## Requirements for New Students starting in the 2013-2014 Academic Year

| Year 1 - Fall | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Subject | 1041 | Calculus I | 4 |  |
| Mathematics | 1035 | Chemistry for Engineers | 3 |  |
| Chemistry | General Chemistry I Lab | 1 |  |  |
| Chemistry | 1033 |  |  |  |


| Engineering | 1101 | Introduction to Engineering \& Engineering Technology <br> (Prerequisite: Engineering admission) | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Semester Total |  |  | 15 |  |
| Year 1 - Spring |  |  |  |  |
| Mathematics | 1042 | Calculus II (Prerequisite: Mathematics 1041) | 4 |  |
| Physics | 1061 | Elementary Classical Physics I (Prerequisite: Mathematics 1041) | 4 |  |
| Computer \& Information <br> Science <br> (Engineering) | $\begin{aligned} & 1057^{*} \\ & (1117) \end{aligned}$ | Computer Programming in C <br> (Engineering Graphics) | 4 |  |
| Biology | 1011 | General Biology I | 4 |  |
| Semester Total |  |  | 16 |  |

*Computer \& Information Science 1057 is a required course for all ECE students. If you completed Engineering 1117 before declaring an ECE major, you must take Computer \& Information Science 1057 in your third semester. Engineering 1117 will be counted as a free elective. See your advisor for more information.

Year 2-Fall

| Mathematics | 2043 | Calculus III <br> (Prerequisite: Mathematics 1042) | 4 |  |
| :--- | :--- | :--- | :---: | :---: |
| Physics | 1062 | Elementary Classical Physics II <br> (Prerequisite: Physics 1061) | 4 |  |
| Electrical Engineering | 2312 | Electrical Engineering Science I <br> (Prerequisite: Mathematics 1041) | 3 |  |
| Electrical Engineering | 2313 | Electrical Engineering Science I Lab | 1 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Semester Total |  | $\mathbf{1 5}$ |  |  |

Year 2 - Spring

| Mathematics | 3041 | Differential Equations I <br> (Prerequisite: Mathematics 2043) | 3 |  |
| :--- | :--- | :--- | :---: | :---: |
| Electrical Engineering | 2322 | Electrical Engineering Science II <br> (Prerequisites: Electrical Engineering 2312, <br> Mathematics 1042) | 3 |  |
| Electrical Engineering | 2323 | Electrical Engineering Science II Lab | 1 |  |
| Electrical Engineering | 2612 | Digital Circuit Design <br> (Prerequisite: Electrical Engineering 2312) | 3 |  |
| Electrical Engineering | 2613 | Digital Circuit Design Lab | 1 |  |
| Engineering | Engineering Analysis \& Applications | 3 |  |  |
| Intellectual Heritage | Engan | Mosaic: Humanities Seminar II | 3 | GZ |
| Semester Total |  | $\mathbf{1 7}$ |  |  |

Year 3 - Fall

| Electrical Engineering | 3512 | Signals: Continuous \& Discrete <br> (Prerequisites: Electrical Engineering 2322, <br> Mathematics 2043) | 4 |  |
| :--- | :--- | :--- | :--- | :--- |
| Electrical Engineering | 3612 | Microprocessor Systems (Prerequisites: <br> Electrical Engineering 2322, 2612, 2613) | 3 |  |


| Electrical Engineering | 3613 | Microprocessor Systems Lab | 1 |  |
| :--- | :--- | :--- | :---: | :---: |
| Electrical Engineering | 3712 |  <br> Waves | 3 |  |
| Kinesiology | 1223 | Human Anatomy and Physiology I | 4 |  |
| Engineering | 2196 | Technical Communication (Prerequisites: <br> Mathematics 1042, Physics 1061) | 3 | WI |
| Semester Total |  | $\mathbf{1 8 \sim}$ |  |  |

Note: Semester credit totals in excess of 17 s.h. are additionally assessed at the per semester credit hour tuition
rate.

| Year 3 - Spring | Classical Control Systems | 3 |  |  |
| :--- | :--- | :--- | :---: | :---: |
| Electrical Engineering | 3412 | Classical Control Lab | 1 |  |
| Electrical Engineering | 3413 | Stochastic Processes in Signals \& Systems <br> (Prerequisite: Electrical Engineering 3512) | 3 |  |
| Electrical Engineering | 3522 | Human Anatomy and Physiology II | 4 |  |
| Kinesiology | 1224 | Race \& Diversity | 3 | GD |
| GenEd | $08 x x$ or 09xx | Engineering Seminar | 1 |  |
| Engineering | 4169 |  | $\mathbf{1 5}$ |  |
| Semester Total |  |  |  |  |

Year 4 - Fall

| Engineering | 4196 | Senior Design Project I <br> (Prerequisite: Senior student) | 1 | WI |
| :--- | :--- | :--- | :---: | :---: |
| Electrical Engineering | 4522 | Digital Signal Processing | 3 |  |
| Electrical Engineering | elective | Electrical Engineering/Biology Elective | 3 |  |
| GenEd | 08 xx or 09xx | U.S. Society | 3 | GU |
| GenEd | Global/World Society | 3 | GG |  |
| Semester Total |  | $\mathbf{1 3}$ |  |  |

Year 4 - Spring

| Engineering | 4296 | Senior Design Project II <br> (Prerequisite: Engineering 4196) | 3 | WI |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
| GenEd | 08xx or 09xx | Arts | 3 | GA |  |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |  |
| Electrical Engineering | elective | Electrical Engineering Elective | 3 |  |  |
| Elective | Free Elective | 3 |  |  |  |
| Semester Total |  | $\mathbf{1 5}$ |  |  |  |
|  |  |  |  |  |  |
| Total Hours for Electrical Engineering - Bioelectrical Engineering Concentration: | $\mathbf{1 2 4}$ (minimum) |  |  |  |  |

## Electives

Electrical Engineering 3312: Microelectronics I (Prerequisite: Electrical Engineering 2322/2323)
Electrical Engineering 3313: Microelectronics I Lab (Co-requisite: Electrical Engineering 3312)
Electrical Engineering 3622: Embedded System Design (Prerequisites: Electrical Engineering 3612/3613)
Electrical Engineering 3623: Embedded System Design Lab (Co-requisite: Electrical Engineering 3622)
Electrical Engineering 3722: Electromagnetic Wave Propagation (Prerequisite: Electrical Engineering
3712)

Electrical Engineering 3723: Electromagnetic Wave Propagation Lab (Co-requisite: Electrical
Engineering 3722)

Electrical Engineering 3732: Electromechanical Energy Systems (Prerequisites: Electrical Engineering 2322, Electrical Engineering 3712, Mathematics 3041)
Electrical Engineering 3733: Electromechanical Energy Systems Lab^ (Co-requisite: Electrical Engineering 3732)
Electrical Engineering 4312: Microelectronics II (Prerequisite: Electrical Engineering 3312/3313)
Electrical Engineering 4322: VLSI Systems Design (Prerequisite: Electrical Engineering 4312)
Electrical Engineering 4412: Modern Control (Prerequisite: Electrical Engineering 3412/3413)
Electrical Engineering 4542: Telecommunications Engineering (Prerequisites: Electrical Engineering 4512/4513)
Electrical Engineering 4422: Digital Control Systems (Prerequisites: Electrical Engineering 3412)
Electrical Engineering 4512: Digital Communication Systems (Prerequisites: Electrical Engineering 3512, Electrical Engineering 3522)
Electrical Engineering 4513: Digital Communication Systems Lab (Co-requisite: Electrical Engineering 4512)

Electrical Engineering 4612: Advanced Processor Systems (Prerequisite: Electrical Engineering 3622/3623)
Electrical Engineering 4712: Modern Power Engineering (Prerequisite: Electrical Engineering 2322, EE3312)
Engineering 4116: Spacecraft Systems Engineering (Prerequisite: Mathematics 3041)
Engineering 3033: Entrepreneurial Engineering
Engineering xx81: Co-op Work Experience
Engineering xx85: Internship Experience
Electrical Engineering xx82: Independent Study in Electrical \& Computer Engineering Electrical Engineering xx91: Independent Research in Electrical \& Computer Engineering
${ }^{\wedge}$ pending approval

## Cooperative Education Programs

A Cooperative Education (Co-op) is an optional program available at the College of Engineering where you have the opportunity to gain professional work experience before graduation. It is designed to give you the chance to apply the knowledge learned in the classroom to real life problems. You will be exposed to the latest technology and new ideas at a worksite helping you understand your field of work more extensively. During the Co-op, you will make valuable connections with professionals in your field. A cooperative education can enhance and strengthen you academically, professionally and personally.

Below are the five-year curricula for the Co-op programs leading to the Bachelor of Science in Electrical Engineering, the Bachelor of Science in Electrical Engineering with a concentration in Computer Engineering, and the Bachelor of Science in Electrical Engineering with a concentration in Bioelectrical Engineering. The minimum requirement for graduation is 127 semester hours.

## Bachelor of Science in Electrical Engineering with Cooperative Experience

Requirements for New Students starting in the 2013-2014 Academic Year

| First Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 1041 | Calculus I | 4 |  |
| Chemistry | 1035 | Chemistry for Engineers | 3 |  |
| Chemistry | 1033 | General Chemistry I Lab | 1 |  |
| Engineering | 1101 | Introduction to Engineering \& Engineering Technology (Prerequisite: Engineering admission) | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Semester Total |  |  | 15 |  |
| Second Semester |  |  |  |  |
| Mathematics | 1042 | Calculus II (Prerequisite: Mathematics 1041) | 4 |  |
| Physics | 1061 | Elementary Classical Physics I (Prerequisite: Mathematics 1041) | 4 |  |
| Computer \& Information Science <br> (Engineering) | $\begin{aligned} & 1057 * \\ & (1117) \end{aligned}$ | Computer Programming in C <br> (Engineering Graphics) | 4 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Semester Total |  |  | 15 |  |

*Computer \& Information Science 1057 is a required course for all ECE students. If you completed Engineering 1117 before declaring an ECE major, you must take Computer \& Information Science 1057 in your third semester. Engineering 1117 will be counted as a free elective. See your advisor for more information.

Third Semester

| Mathematics | 2043 | Calculus III (Prerequisite: Mathematics 1042) | 4 |  |
| :---: | :---: | :---: | :---: | :---: |
| Physics | 1062 | Elementary Classical Physics II (Prerequisite: Physics 1061) | 4 |  |
| Electrical Engineering | 2312 | Electrical Engineering Science I (Prerequisite: Mathematics 1041) | 3 |  |
| Electrical Engineering | 2313 | Electrical Engineering Science I Lab | 1 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Semester Total |  |  | 15 |  |
| Fourth Semester |  |  |  |  |
| Mathematics | 3041 | Differential Equations I (Prerequisite: Mathematics 2043) | 3 |  |
| Electrical Engineering | 2322 | Electrical Engineering Science II (Prerequisites: Electrical Engineering 2312, Mathematics 1042) | 3 |  |
| Electrical Engineering | 2323 | Electrical Engineering Science II Lab | 1 |  |
| Electrical Engineering | 2612 | Digital Circuit Design <br> (Prerequisite: Electrical Engineering 2312) | 3 |  |
| Electrical Engineering | 2613 | Digital Circuit Design Lab | 1 |  |


| Engineering | 2011 | Engineering Analysis \& Applications <br> (Prerequisites: Computer \& Information Science 1057, Mathematics 2043) | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Semester Total |  |  | 17 |  |
| Fifth Semester |  |  |  |  |
| Electrical Engineering | 3512 | Signals: Continuous \& Discrete (Prerequisites: Electrical Engineering 2322, Mathematics 2043) | 4 |  |
| Electrical Engineering | 3612 | Microprocessor Systems (Prerequisites: Electrical Engineering 2322, 2612, 2613) | 3 |  |
| Electrical Engineering | 3613 | Microprocessor Systems Lab | 1 |  |
| Electrical Engineering | 3712 | Introduction to Electromagnetic Fields \& Waves (Prerequisites: Physics 1062, Electrical Engineering 2322, Mathematics 2043) | 3 |  |
| Engineering | 3334 | Mechanical Systems (Prerequisites: Mathematics 1042, Physics 1061) | 3 |  |
| Engineering | 2196 | Technical Communication <br> (Prerequisites: Mathematics 1042, Physics 1061) | 3 | WI |
| Semester Total |  |  | 17 |  |
| Sixth Semester |  |  |  |  |
| Electrical Engineering | 3412 | Classical Control Systems (Prerequisites: <br> Electrical Engineering 3512, Mathematics 3041) | 3 |  |
| Electrical Engineering | 3413 | Classical Control Lab (Prerequisites: Electrical Engineering 3512, Mathematics 3041) | 1 |  |
| Electrical Engineering | 3522 | Stochastic Processes in Signals \& Systems (Prerequisite: Electrical Engineering 3512) | 3 |  |
| Electrical Engineering | 3312 | Microelectronics I <br> (Prerequisite: Electrical Engineering 2322) | 3 |  |
| Electrical Engineering | 3313 | Microelectronics I Lab | 1 |  |
| Engineering | 4169 | Engineering Seminar <br> (Prerequisite: Engineering 2196 or English 2696) | 1 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Semester Total |  |  | 15 |  |
| Seventh Semester |  |  |  |  |
| Engineering | 2181 or 3181 | Co-op Experience I or II | 3 |  |
|  |  |  |  |  |
| Eighth Semester |  |  |  |  |
| Engineering | 3181 | Co-op Experience II | 3 |  |
|  |  |  |  |  |
| Ninth Semester |  |  |  |  |
| Engineering | 4196 | Senior Design Project I <br> (Prerequisite: Engineering 4169) | 1 | WI |
| Electrical Engineering | 4512 | Digital Communication Systems (Prerequisites: EE3512, Electrical Engineering 3522) | 3 |  |


| Electrical Engineering | 4513 | Digital Communication Systems Lab (Prerequisites: EE3512, Electrical Engineering 3522) | 1 |  |
| :---: | :---: | :---: | :---: | :---: |
| Electrical Engineering | elective | Electrical Engineering Elective | 3 |  |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Semester Total |  |  | 14 |  |
| Tenth Semester |  |  |  |  |
| Engineering | 4296 | Senior Design Project II (Prerequisite: Engineering 4196) | 3 | WI |
| Electrical Engineering | elective | Electrical Engineering Elective | 4 |  |
| Engineering | elective | Electrical Engineering or Engineering Elective | 3 |  |
| GenEd | 08xx or 09xx | Arts | 3 | GA |
| Elective | elective | Free Elective/Electrical Engineering Elective | 3 |  |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Total Hours for Electrical Engineering: |  |  | 127 (minimum) |  |

## Electives

Electrical Engineering 3622: Embedded System Design (Prerequisites: Electrical Engineering 3612/3613)
Electrical Engineering 3623: Embedded System Design Lab (Co-requisite: Electrical Engineering 3622)
Electrical Engineering 3722: Electromagnetic Wave Propagation (Prerequisite: Electrical Engineering 3712)

Electrical Engineering 3723: Electromagnetic Wave Propagation Lab (Co-requisite: Electrical Engineering 3722)
Electrical Engineering 3732: Electromechanical Energy Systems (Prerequisites: Electrical Engineering 2322, Electrical Engineering 3712, Mathematics 3041)
Electrical Engineering 3733: Electromechanical Energy Systems Lab^ (Co-requisite: Electrical Engineering 3732)
Electrical Engineering 4312: Microelectronics II (Prerequisites: Electrical Engineering 3312/3313)
Electrical Engineering 4322: VLSI Systems Design (Prerequisite: Electrical Engineering 4312)
Electrical Engineering 4412: Modern Control Theory (Prerequisites: Electrical Engineering 3412/3413)
Electrical Engineering 4422: Digital Control Systems (Prerequisites: Electrical Engineering 3412)
Electrical Engineering 4522: Digital Signal Processing (Prerequisites: Electrical Engineering 3522)
Electrical Engineering 4532: Data and Computer Communication (Prerequisite: Electrical Engineering 4512/4513)
Electrical Engineering 4542: Telecommunications Engineering (Prerequisites: Electrical Engineering 4512/4513)
Electrical Engineering 4612: Advanced Processor Systems (Prerequisites: Electrical Engineering 3622/3623)
Electrical Engineering 4712: Modern Power Engineering \& Electronics (Prerequisites: Electrical Engineering 2322, Electrical Engineering 3312)
Engineering 3033: Entrepreneurial Engineering
Engineering 4116: Spacecraft Systems Engineering (Prerequisite: Mathematics 3041)
Engineering xx81: Co-op Work Experience
Engineering xx85: Internship Experience
Electrical Engineering xx82: Independent Study in Electrical \& Computer Engineering Electrical Engineering xx91: Independent Research in Electrical \& Computer Engineering $\wedge$ pending approval

## Bachelor of Science in Electrical Engineering - Computer Engineering Concentration with Cooperative Experience

Requirements for New Students starting in the 2013-2014 Academic Year

| First Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 1041 | Calculus I | 4 |  |
| Chemistry | 1035 | Chemistry for Engineers | 3 |  |
| Chemistry | 1033 | General Chemistry I Lab | 1 |  |
| Engineering | 1101 | Introduction to Engineering \& Engineering Technology <br> (Prerequisite: Engineering admission) | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Semester Total |  |  | 15 |  |
| Second Semester |  |  |  |  |
| Mathematics | 1042 | Calculus II <br> (Prerequisite: Mathematics 1041) | 4 |  |
| Physics | 1061 | Elementary Classical Physics I (Prerequisite: Mathematics 1041) | 4 |  |
| Computer \& Information Science <br> (Engineering) | $\begin{aligned} & 1057 * \\ & (1117) \\ & \hline \end{aligned}$ | Computer Programming in C <br> (Engineering Graphics) | 4 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Semester Total |  |  | 15 |  |
| *Computer \& Information Science 1057 is a required course for all ECE students. If you completed Engineering 1117 before declaring an ECE major, you must take Computer \& Information Science 1057 in your third semester. Engineering 1117 will be counted as a free elective. See your advisor for more information. |  |  |  |  |
| Third Semester |  |  |  |  |
| Mathematics | 2043 | Calculus III (Prerequisite: Mathematics 1042) | 4 |  |
| Physics | 1062 | Elementary Classical Physics II (Prerequisite: Physics 1061) | 4 |  |
| Electrical Engineering | 2312 | Electrical Engineering Science I (Prerequisite: Mathematics 1041) | 3 |  |
| Electrical Engineering | 2313 | Electrical Engineering Science I Lab | 1 |  |
| Computer \& Information Science | 1166 | Mathematical Concepts in Computing I | 4 |  |
| Semester Total |  |  | 16 |  |
| Fourth Semester |  |  |  |  |
| Mathematics | 3041 | Differential Equations I (Prerequisite: Mathematics 2043) | 3 |  |
| Electrical Engineering | 2322 | Electrical Engineering Science II (Prerequisites: Electrical Engineering 2312, Mathematics 1042) | 3 |  |
| Electrical Engineering | 2323 | Electrical Engineering Science II Lab | 1 |  |


| Electrical Engineering | 2612 | Digital Circuit Design <br> (Prerequisite: Electrical Engineering 2312) | 3 |  |
| :--- | :--- | :--- | :---: | :---: |
| Electrical Engineering | 2613 | Digital Circuit Design Lab | 1 |  |
| Engineering | 2011 | Engineering Analysis \& Applications | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 4 | GZ |
| Semester Total |  | $\mathbf{1 7}$ |  |  |

Fifth Semester

| Electrical Engineering | 3512 | Signals: Continuous \& Discrete <br> (Prerequisites: Electrical Engineering 2322, <br> Mathematics 2043) | 4 |  |
| :--- | :--- | :--- | :---: | :---: |
| Electrical Engineering | 3612 | Microprocessor Systems (Prerequisites: <br> Electrical Engineering 2322, 2612, 2613) | 3 |  |
| Electrical Engineering | 3613 | Microprocessor Systems Lab | 1 |  |
| GenEd | $08 x x$ or 09xx | Global/World Society | 3 | GG |
| GenEd | $08 x x$ or 09xx | U.S. Society | 3 | GU |
| Engineering | 2196 | Technical Communication <br> (Prerequisites: Mathematics 1042, Physics 1061) | 3 | WI |
| Semester Total |  | $\mathbf{1 7}$ |  |  |

Sixth Semester

| Electrical Engineering | 3622 | Embedded System Design (Prerequisites: <br> Electrical Engineering 3612/3613) | 3 |  |
| :--- | :--- | :--- | :---: | :---: |
| Electrical Engineering | 3623 | Embedded System Design Lab (Prerequisites: <br> Electrical Engineering 3612/3613) | 1 |  |
| Electrical Engineering | 3522 | Stochastic Processes in Signals \& Systems <br> (Prerequisite: Electrical Engineering 3512) | 3 |  |
| Engineering | 4169 | Engineering Seminar | 1 |  |
| Computer \& Information <br> Science | 1068 | Program Design \& Abstraction | 4 |  |
| Elective | elective | Free Elective | 2 |  |
| Semester Total |  |  | $\mathbf{1 4}$ |  |


| Seventh Semester |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Engineering | 2181 or 3181 | Co-op Experience I or II | $\mathbf{3}$ |  |
|  |  |  |  |  |


| Eighth Semester |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
| Engineering | 3181 | Co-op Experience II | 3 |  |
|  |  |  |  |  |

Ninth Semester

| Engineering | 4196 | Senior Design Project I <br> (Prerequisite: Senior student) | 1 | WI |
| :--- | :--- | :--- | :---: | :---: |
| Electrical Engineering | 4512 | Digital Communication Systems (Prerequisites: <br> Electrical Engineering 3512 and 3522) | 3 |  |
| Electrical Engineering | 4513 | Digital Communication Systems Lab <br> (Prerequisites: Electrical Engineering 3512 and <br> $3522)$ | 1 |  |
| Electrical Engineering | 4612 | Advanced Processor Systems (Prerequisite: <br> Electrical Engineering 3622 and 3623) | 3 |  |


| Computer \& Information <br> Science | 2168 | Data Structures | 4 |  |
| :--- | :--- | :--- | :---: | :---: |
| GenEd | 08 xx or 09xx | Human Behavior | 3 | GB |
| Semester Total |  | 15 |  |  |
|  |  |  | 3 | WI |
| Tenth Semester | 4296 | Senior Design Project II <br> (Prerequisite: Engineering 4196) |  |  |
| Engineering | Data and Computer Communication <br> (Prerequisites: Electrical Engineering 4512 and <br> 4513) | 3 |  |  |
| Electrical Engineering | 4532 | Electrical Engineering/ <br> Computer \& Information Science Elective | 3 |  |
| Electrical Engineering/ | xxxx | Arts |  |  |
| Computer \& Information |  | Race \& Diversity | 3 | GA |
| GenEd | 08xx or 09xx |  | 3 | GD |
| GenEd | 08xx or 09xx | $\mathbf{1 5}$ |  |  |
| Semester Total |  |  | $\mathbf{1 2 7}$ (minimum) |  |

## Electives

Electrical Engineering 3312: Microelectronics I (Prerequisite: Electrical Engineering 2322/2323)
Electrical Engineering 3313: Microelectronics I Lab (Co-requisite: Electrical Engineering 3312)
Electrical Engineering 3412: Classical Control Systems (Prerequisite: Electrical Engineering 3512, Mathematics 3041)
Electrical Engineering 3413: Classical Control Systems Lab (Co-requisite: Electrical Engineering 3412)
Electrical Engineering 3622: Embedded System Design (Prerequisites: Electrical Engineering 3612/3613)
Electrical Engineering 3623: Embedded System Design Lab (Co-requisite: Electrical Engineering 3622)
Electrical Engineering 3712: Introduction to Electromagnetic Fields \& Waves (Prerequisites: Physics 1062, Electrical Engineering 2322, Mathematics 2043)
Electrical Engineering 3722: Electromagnetic Wave Propagation (Prerequisite: Electrical Engineering 3712)

Electrical Engineering 3723: Electromagnetic Wave Propagation Lab (Co-requisite: Electrical Engineering 3722)
Electrical Engineering 3732: Electromechanical Energy Systems (Prerequisites: Electrical Engineering 2322, Electrical Engineering 3712, Mathematics 3041)
Electrical Engineering 3733: Electromechanical Energy Systems Lab^ (Co-requisite: Electrical Engineering 3732)
Electrical Engineering 4322: VLSI Systems Design (Prerequisite: Electrical Engineering 4312)
Electrical Engineering 4522: Digital Signal Processing (Prerequisites: Electrical Engineering 3522)
Electrical Engineering 4542: Telecommunications Engineering (Prerequisites: Electrical Engineering 4512/4513)
Electrical Engineering 4712: Modern Power Engineering \& Electronics (Prerequisites: Electrical Engineering 2322, Electrical Engineering 3312)
Electrical Engineering 4312: Microelectronics II (Prerequisites: Electrical Engineering 3312/3313)
Electrical Engineering 4412: Modern Control Theory (Prerequisites: Electrical Engineering 3412/3413)
Electrical Engineering 4422: Digital Control Systems (Prerequisites: Electrical Engineering 3412)
Engineering 3033: Entrepreneurial Engineering
Engineering 4116: Spacecraft Systems Engineering (Prerequisite: Mathematics 3041)

Engineering xx81: Co-op Work Experience
Engineering xx85: Internship Experience
Electrical Engineering xx82: Independent Study in Electrical \& Computer Engineering
Electrical Engineering xx91: Independent Research in Electrical \& Computer Engineering Computer \& Information Science: Approved Electives
$\wedge$ pending approval

## Bachelor of Science in Electrical Engineering - Bioelectrical Engineering Concentration with Cooperative Experience

Requirements for New Students starting in the 2013-2014 Academic Year

| First Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 1041 | Calculus I | 4 |  |
| Chemistry | 1035 | Chemistry for Engineers | 3 |  |
| Chemistry | 1033 | General Chemistry I Lab | 1 |  |
| Engineering | 1101 | Introduction to Engineering \& Engineering Technology <br> (Prerequisite: Engineering admission) | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Semester Total |  |  | 15 |  |
| Second Semester |  |  |  |  |
| Mathematics | 1042 | Calculus II (Prerequisite: Mathematics 1041) | 4 |  |
| Physics | 1061 | Elementary Classical Physics I (Prerequisite: Mathematics 1041) | 4 |  |
| Computer \& Information Science <br> (Engineering) | $\begin{aligned} & 1057^{*} \\ & (1117) \\ & \hline \end{aligned}$ | Computer Programming in C <br> (Engineering Graphics) | 4 |  |
| Biology | 1011 | General Biology I | 4 |  |
| Semester Total |  |  | 16 |  |

*Computer \& Information Science 1057 is a required course for all ECE students. If you completed Engineering 1117 before declaring an ECE major, you must take Computer \& Information Science 1057 in your third semester. Engineering 1117 will be counted as a free elective. See your advisor for more information.

| Third Semester | 2043 | Calculus III <br> (Prerequisite: Mathematics 1042) | 4 |  |
| :--- | :--- | :--- | :---: | :---: |
| Mathematics | 1062 | Elementary Classical Physics II <br> (Prerequisite: Physics 1061) | 4 |  |
| Physics | Electrical Engineering Science I <br> (Prerequisite: Mathematics 1041) | 4 |  |  |
| Electrical Engineering | 2312 | Electrical Engineering Science I Lab | 1 |  |
| Electrical Engineering | 2313 | Mosaic: Humanities Seminar I | 3 | GY |
| Intellectual Heritage | 0851 or 0951 |  | $\mathbf{1 5}$ |  |
| Semester Total |  |  |  |  |
|  |  |  |  |  |
| Fourth Semester |  |  |  |  |


| Mathematics | 3041 | Differential Equations I <br> (Prerequisite: Mathematics 2043) | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Electrical Engineering | 2322 | Electrical Engineering Science II (Prerequisites: Electrical Engineering 2312, Mathematics 1042) | 3 |  |
| Electrical Engineering | 2323 | Electrical Engineering Science II Lab | 1 |  |
| Electrical Engineering | 2612 | Digital Circuit Design (Prerequisite: Electrical Engineering 2312) | 3 |  |
| Electrical Engineering | 2613 | Digital Circuit Design Lab | 1 |  |
| Engineering | 2011 | Engineering Analysis \& Applications | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Semester Total |  |  | 17 |  |
| Fifth Semester |  |  |  |  |
| Electrical Engineering | 3512 | Signals: Continuous \& Discrete (Prerequisites: Electrical Engineering 2322, Mathematics 2043) | 4 |  |
| Electrical Engineering | 3612 | Microprocessor Systems (Prerequisites: Electrical Engineering 2322, 2612, 2613) | 3 |  |
| Electrical Engineering | 3613 | Microprocessor Systems Lab | 1 |  |
| Electrical Engineering | 3712 | Introduction to Electromagnetic Fields \& Waves | 3 |  |
| Kinesiology | 1223 | Human Anatomy and Physiology I | 4 |  |
| Engineering | 2196 | Technical Communication <br> (Prerequisites: Mathematics 1042, Physics 1061) | 3 | WI |
| Semester Total |  |  | 18~ |  |

Note: Semester credit totals in excess of 17 s.h. are additionally assessed at the per semester credit hour tuition rate.

## Sixth Semester

| Electrical Engineering | 3412 | Classical Control Systems | 3 |  |
| :--- | :--- | :--- | :---: | :---: |
| Electrical Engineering | 3413 | Classical Control Lab | 1 |  |
| Electrical Engineering | 3522 | Stochastic Processes in Signals \& Systems <br> (Prerequisite: Electrical Engineering 3512) | 3 |  |
| Kinesiology | 1224 | Human Anatomy and Physiology II | 4 |  |
| GenEd | Race \& Diversity | 3 | GD |  |
| Engineering | 4169 | Engineering Seminar | 1 |  |
| Semester Total |  | $\mathbf{1 5}$ |  |  |

Seventh Semester

| Engineering | 2181 or 3181 | Co-op Experience I or II | $\mathbf{3}$ |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
|  |  |  |  |  |
| Eighth Semester | 3181 | Co-op Experience II | $\mathbf{3}$ |  |
| Engineering |  |  |  |  |
|  |  |  |  |  |
| Ninth Semester | 4196 | Senior Design Project I <br> (Prerequisite: Senior student) |  |  |
| Engineering | Digital Signal Processing | 1 | WI |  |
| Electrical Engineering | 4522 | Electrical Engineering/Biology Elective | 3 |  |
| Electrical Engineering | elective | U.S. Society | 3 | GU |
| GenEd | 08xx or 09xx |  | 3 |  |


| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| :---: | :---: | :---: | :---: | :---: |
| Semester Total |  |  | 13 |  |
| Year 4 - Spring |  |  |  |  |
| Engineering | 4296 | Senior Design Project II (Prerequisite: Engineering 4196) | 3 | WI |
| GenEd | 08xx or 09xx | Arts | 3 | GA |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Electrical Engineering | elective | Electrical Engineering Elective | 3 |  |
| Free | elective | Free Elective/Electrical Engineering Elective | 3 |  |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Total Hours for Electrical Engineering - Bioelectrical Engineering Concentration: |  |  | 127 (minimum) |  |

## Electives

Electrical Engineering 3312: Microelectronics I (Prerequisite: Electrical Engineering 2322/2323)
Electrical Engineering 3313: Microelectronics I Lab (Co-requisite: Electrical Engineering 3312)
Electrical Engineering 3622: Embedded System Design (Prerequisites: Electrical Engineering 3612/3613)
Electrical Engineering 3623: Embedded System Design Lab (Co-requisite: Electrical Engineering 3622)
Electrical Engineering 3722: Electromagnetic Wave Propagation (Prerequisite: Electrical Engineering 3712)

Electrical Engineering 3723: Electromagnetic Wave Propagation Lab (Co-requisite: Electrical Engineering 3722)
Electrical Engineering 3732: Electromechanical Energy Systems (Prerequisites: Electrical Engineering 2322, Electrical Engineering 3712, Mathematics 3041)
Electrical Engineering 3733: Electromechanical Energy Systems Lab^ (Co-requisite: Electrical
Engineering 3732)
Electrical Engineering 4312: Microelectronics II (Prerequisite: Electrical Engineering 3312/3313)
Electrical Engineering 4322: VLSI Systems Design (Prerequisite: Electrical Engineering 4312)
Electrical Engineering 4412: Modern Control Theory (Prerequisite: Electrical Engineering 3412/3413)
Electrical Engineering 4542: Telecommunications Engineering (Prerequisites: Electrical Engineering 4512/4513)
Electrical Engineering 4422: Digital Control Systems (Prerequisites: Electrical Engineering 3412)
Electrical Engineering 4512: Digital Communication Systems (Prerequisites: Electrical Engineering 3512, Electrical Engineering 3522)
Electrical Engineering 4513: Digital Communication Systems Lab (Co-requisite: Electrical Engineering 4512)

Electrical Engineering 4612: Advanced Processor Systems (Prerequisite: Electrical Engineering 3622/3623)
Electrical Engineering 4712: Modern Power Engineering (Prerequisite: Electrical Engineering 2322, EE3312)
Engineering 4116: Spacecraft Systems Engineering (Prerequisite: Mathematics3041)
Engineering 3033: Entrepreneurial Engineering
Engineering 4116: Spacecraft Systems Engineering (Prerequisite: Mathematics 3041)
Engineering xx81: Co-op Work Experience
Engineering xx85: Internship Experience
Electrical Engineering xx82: Independent Study in Electrical \& Computer Engineering
Electrical Engineering xx91: Independent Research in Electrical \& Computer Engineering
^pending approval

# Engineering 

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## Engineering Program

## Goals, Objectives \& Design Integration

The mission of the general Engineering Program at Temple University is to provide an excellent educational experience for its students. This experience includes an emphasis on the technical, communication, teamwork and life-long learning skills that graduate engineers need to succeed, in both the workplace and society in general. The general engineering program is structured to prepare the graduate for the practice of engineering and graduate school or professional programs in business, law and medicine. The curriculum emphasizes a rigorous treatment of the mathematical and scientific approach to the solution of engineering problems. The program has design across the curriculum and is capped with an integrated design experience in the form of a senior project.

The general Engineering Program shall produce graduates who:

- have the theoretical and practical ability to research, analyze, design and evaluate engineering systems for modern practice and/or graduate and professional programs;
- can communicate effectively in oral, written and electronic media and have the necessary teamwork and leadership skills to work and participate effectively in a team environment; and
- are committed to life-long learning and continuous improvement and who can contribute to the economic, technical, social and educational development of the Commonwealth of Pennsylvania, the country and the world.


## Summary of Requirements

## University Requirements:

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

All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific writing-intensive courses required for this major are listed below and are identified by "WI" in the Attribute column.

## Department Requirements:

## Engineering Program

| Foundation Science \& Math Courses in Engineering |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 1041 | Calculus I | 4 |  |
| Mathematics | 1042 | Calculus II | 4 |  |
| Mathematics | 2043 | Calculus III | 4 |  |
| Mathematics | 3041 | Differential Equations I | 3 |  |
| Math <br> Electives <br> (depending on study plan) |  | Group I (Statistics 2103 \& Engineering 2011) <br> or <br> Group II (Engineering 2011 \& Electrical Engineering 3522) | 6-7 |  |
| Physics | 1061 | Elementary Classical Physics I | 4 |  |
| Physics | 1062 | Elementary Classical Physics II | 4 |  |
| Chemistry | 1035 | Chemistry for Engineers | 3 |  |
| Chemistry | 1033 | General Chemistry Laboratory I | 1 |  |
| Subtotal |  |  | $\begin{gathered} 33 \\ \text { (minimum) } \end{gathered}$ |  |
|  |  |  |  |  |
| Required Communications, Humanities, \& Social Science |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | Electives | Humanities and Social Science Various* | $\begin{gathered} 21 \\ \text { (minimum) } \\ \hline \end{gathered}$ |  |
| Subtotal |  |  | 25 |  |
|  |  |  |  |  |
| Required Engineering Courses for Engineering (common) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Engineering | 2196 | Technical Communication | 3 | WI |
| Engineering | 4169 | Engineering Seminar | 1 |  |
| Engineering | 4196 | Senior Design Project I* | 1 | WI |
| Engineering | 4296 | Senior Design Project II* | 3 | WI |
| Subtotal |  |  | 8 |  |
|  |  |  |  |  |
| Study Plan |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Varies |  | Study Plan courses | 45-46 |  |
| Electives |  | Engineering/Science/Management Electives | 9-10 |  |
| Elective |  | Free Elective | 3 |  |
| Subtotal |  |  | 58 |  |
|  |  |  |  |  |
| Total Hours for B.S.E. in Engineering |  |  | 124 (minimum) |  |

* Senior Design topic must be approved by the chair of the Department of Civil \& Environmental

Engineering.

## Study Plan Course Lists

| 1. Basic Study Plan |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Engineering | 1101 | Introduction to Engineering \& Engineering Technology | 3 |  |
| Engineering | 1117 | Engineering Graphics | 2 |  |
| Electrical Engineering | 2112 | Electrical Devices \& Systems I | 3 |  |
| Electrical Engineering | 2113 | Electrical Devices \& Systems I Lab | 1 |  |
| Engineering | 2331 | Engineering Statics | 3 |  |
| Engineering | 2332 | Engineering Dynamics | 3 |  |
| Engineering | 2333 | Mechanics of Solids | 3 |  |
| Mechanical Engineering | 2305 | Measurements \& Dynamics Laboratory | 1 |  |
| Engineering | 3096 | Economic Analysis | 3 | WI |
| Engineering | 3496 | Materials Science for Engineers | 3 | WI |
| Mechanical Engineering | 3305 | Materials Laboratory | 1 |  |
| Engineering | 3553 | Mechanics of Fluids | 3 |  |
| Mechanical Engineering | 3506 | Fluids and Energy Laboratory | 1 |  |
| Engineering | 3571 | Classical \& Statistical Thermodynamics | 3 |  |
| Engineering | xxxx | Engineering Elective 1 | 3 |  |
| Engineering | xxxx | Engineering Elective 2 | 3 |  |
| Engineering | xxxx | Engineering Elective 3 | 3 |  |
| Engineering | xxxx | Engineering Elective 4 | 3 |  |
| Engineering/Science | xxxx | Engineering/Science Electives | 10 |  |
| Free | Xxxx | Free Elective | 3 |  |
| Basic Study Plan Subtotal: |  |  | 58 |  |
|  |  |  |  |  |
| 2. Alternative Energy Study Plan |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Engineering | 1101 | Introduction to Engineering \& Engineering Technology | 3 |  |
| Engineering | 1117 | Engineering Graphics | 2 |  |
| Engineering | 2331 | Engineering Statics | 3 |  |
| Engineering | 2332 | Engineering Dynamics | 3 |  |
| Engineering | 3571 | Classical \& Statistical Thermodynamics | 3 |  |
| Mechanical Engineering | 4576 | Photovoltaic System Design for Engineers | 3 |  |
| Mechanical Engineering | 4575 | Renewable and Alternative Energy | 3 |  |
| Mechanical Engineering | 4173 | Data Acquisition and Analysis for Engineers | 3 |  |
| Electrical Engineering | 2312 | Electrical Engineering Science I | 3 |  |
| Electrical Engineering | 2313 | Electrical Engineering Science I Lab | 1 |  |
| Electrical Engineering | 2322 | Electrical Engineering Science II | 3 |  |
| Electrical Engineering | 2323 | Electrical Engineering Science II Lab | 1 |  |
| Electrical Engineering | 3512 | Signals: Continuous and Discrete | 4 |  |
| Electrical Engineering | 3712 | Introduction to Electromagnetic Fields and Waves | 3 |  |
| Electrical Engineering | 3412 | Classical Control Systems | 3 |  |
| Electrical Engineering | 3413 | Classical Control Laboratory | 1 |  |
| Electrical Engineering | 3312 | Microelectronics I | 3 |  |
| Electrical Engineering | 3313 | Microelectronics I Laboratory | 1 |  |
| Electrical Engineering | 3732 | Electromechanical Energy Systems | 3 |  |
| Electrical Engineering | 4712 | Modern Power Engineering and Electronics | 3 |  |
| Computer \& Information Science | 1057 | Computer Programming in C | 4 |  |
| Free | Xxxx | Free Elective | 3 |  |


| Alternative Energy Study Plan S | Subtotal: |  | 59 |  |
| :---: | :---: | :---: | :---: | :---: |
| 3. BioElectronics Study Plan |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Engineering | 1101 | Introduction to Engineering \& Engineering Technology | 3 |  |
| Electrical Engineering | 2312 | Electrical Engineering Science I | 3 |  |
| Electrical Engineering | 2313 | Electrical Engineering Science I Lab | 1 |  |
| Electrical Engineering | 2322 | Electrical Engineering Science II | 3 |  |
| Electrical Engineering | 2323 | Electrical Engineering Science II Lab | 1 |  |
| Electrical Engineering | 2612 | Digital Circuit Design | 3 |  |
| Electrical Engineering | 2613 | Digital Circuit Design Laboratory | 1 |  |
| Electrical Engineering | 3512 | Signals: Continuous and Discrete | 4 |  |
| Electrical Engineering | 3612 | Microprocessor Systems | 3 |  |
| Electrical Engineering | 3613 | Microprocessor Systems Laboratory | 1 |  |
| Electrical Engineering | 3712 | Introduction to Electromagnetic Fields and Waves | 3 |  |
| Electrical Engineering | 3412 | Classical Control Systems | 3 |  |
| Electrical Engineering | 3413 | Classical Control Laboratory | 1 |  |
| Electrical Engineering | 3312 | Microelectronics I | 3 |  |
| Electrical Engineering | 3313 | Microelectronics I Laboratory | 1 |  |
| Engineering | 3719 | Introduction to Bioengineering | 3 |  |
| Mechanical Engineering | 4173 | Data Acquisition and Analysis for Engineers | 3 |  |
| Computer \& Information Science | 1057 | Computer Programming in C | 4 |  |
| Engineering | xxxx | Engineering Elective | 3 |  |
| Science/Free Electives | xxxx | Science Electives/Free Electives <br> Select from: <br> Biology 1011; <br> Biology 1012; <br> Chemistry 1032 \& 1034; <br> Chemistry 2201-2204 or <br> Chemistry 2211-2214 or <br> Chemistry 2921-2924 | 12 |  |
| BioElectronics Study Plan Subtotal: |  |  | 59 |  |
| 4. BioMechanics Study Plan |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Engineering | 1101 | Introduction to Engineering \& Engineering Technology | 3 |  |
| Engineering | 1117 | Engineering Graphics | 2 |  |
| Electrical Engineering | 2112 | Electrical Devices \& Systems I | 3 |  |
| Electrical Engineering | 2113 | Electrical Devices \& Systems I Lab | 1 |  |
| Engineering | 2331 | Engineering Statics | 3 |  |
| Engineering | 3096 | Economic Analysis | 3 | WI |
| Engineering <br> and <br> Mechanical Engineering | $\begin{gathered} 2332 \\ \& \\ 2305 \\ \hline \end{gathered}$ | Engineering Dynamics and <br> Measurements \& Dynamics Laboratory | 3 1 |  |
| Engineering | 2333 | Mechanics of Solids | 3 |  |
| Engineering <br> $\quad$ and <br> Mechanical Engineering | $\begin{gathered} 3496 \\ \& \\ 3305 \end{gathered}$ | Materials Science for Engineers and <br> Materials Laboratory | 3 <br> 1 | WI |


| Engineering <br> and <br> Mechanical Engineering | $\begin{gathered} 3553 \\ \& \\ 3506 \end{gathered}$ | Mechanics of Fluids and <br> Fluids and Energy Laboratory | $\begin{aligned} & 3 \\ & 1 \\ & \hline \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Engineering | 3719 | Introduction to Bioengineering | 3 |  |
| Mechanical Engineering | 4731 | Cardiovascular Fluid Dynamics | 3 |  |
| Engineering | 3725 | Cell Biology for Engineers | 3 |  |
| Engineering | 3033 | Entrepreneurial Engineering | 3 |  |
| Engineering | xxxx | Engineering Electives | 4 |  |
| Science/Free Electives | Xxxx | Science Electives/Free Electives <br> Select from: <br> Biology 1011; <br> Biology 1012; <br> Chemistry 1032 \& 1034; <br> Chemistry 2201-2204 or <br> Chemistry 2211-2214 or <br> Chemistry 2921-2924 | 12 |  |
| BioMechanics Study Plan Subtotal: |  |  | 58 |  |
| 5. Construction Management Study Plan |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Engineering | 1101 | Introduction to Engineering \& Engineering Technology | 3 |  |
| Engineering | 1117 | Engineering Graphics | 2 |  |
| Engineering | 2331 | Engineering Statics | 3 |  |
| Engineering | 3096 | Economic Analysis | 3 | WI |
| $\begin{aligned} & \hline \text { Engineering } \\ & \text { and } \\ & \text { Mechanical Engineering } \end{aligned}$ | $\begin{gathered} 2332 \\ \& \\ 2305 \end{gathered}$ | Engineering Dynamics <br> and <br> Measurements \& Dynamics Laboratory | $\begin{aligned} & 3 \\ & 1 \\ & \hline \end{aligned}$ |  |
| Engineering <br> $\quad$ and <br> Mechanical Engineering | $\begin{gathered} 3496 \\ \& \\ 3305 \\ \hline \end{gathered}$ | Materials Science for Engineers and <br> Materials Laboratory | $\begin{aligned} & 3 \\ & 1 \\ & \hline \end{aligned}$ | WI |
| Engineering | 3571 | Classical \& Statistical Thermodynamics | 3 |  |
| Engineering | 3553 | Mechanics of Fluids | 3 |  |
| Mechanical Engineering | 3506 | Fluids and Energy Laboratory | 1 |  |
| Mechanical Engineering | 4574 | Heating, Ventilating, and Air Conditioning | 3 |  |
| Civil Engineering | 2011 | Civil Engineering Materials | 2 |  |
| Civil Engineering | 3311 | Construction Engineering | 3 |  |
| Engineering | xxxx | Engineering Elective 1 | 3 |  |
| Engineering | xxxx | Engineering Elective 2 | 3 |  |
| Engineering | xxxx | Engineering Elective 3 | 3 |  |
| Engineering | xxxx | Engineering Elective 4 | 3 |  |
| Free | xxxx | Free Elective | 3 |  |
| Business Electives | Xxxx | Business Electives <br> Select from: <br> Economics 1101; <br> Economics 1102; <br> Accounting 2101; <br> Human Resource Management 1101; <br> Marketing 2101; <br> Management Science/Operations Management 3101 | 9 |  |
| Construction Management Study Plan Subtotal: |  |  | 58 |  |

## 6. Engineering Management Study Plan

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Engineering | 1101 | Introduction to Engineering \& Engineering Technology | 3 |  |
| Engineering | 1117 | Engineering Graphics | 2 |  |
| Engineering | 2331 | Engineering Statics | 3 |  |
| Engineering | 3096 | Economic Analysis | 3 | WI |
| ```Engineering and Mechanical Engineering``` | 2332 <br> $\&$ <br> 2305 | ```Engineering Dynamics and Measurements \& Dynamics Laboratory``` | 3 1 |  |
| ```Engineering and Mechanical Engineering``` | 3496 $\&$ 3305 | Materials Science for Engineers and <br> Materials Laboratory | 1 | WI |
| Engineering | 3571 | Classical \& Statistical Thermodynamics | 3 |  |
| Engineering | 3553 | Mechanics of Fluids | 3 |  |
| Mechanical Engineering | 3506 | Fluids and Energy Laboratory | 1 |  |
| Mechanical Engineering | 4574 | Heating, Ventilating, and Air Conditioning | 3 |  |
| Engineering | 3033 | Entrepreneurial Engineering | 3 |  |
| Civil Engineering | 3311 | Construction Engineering | 3 |  |
| Civil Engineering | 3711 | Environmental Engineering | 3 |  |
| Engineering | xxxx | Engineering Elective 1 | 3 |  |
| Engineering | xxxx | Engineering Elective 2 | 3 |  |
| Engineering | xxxx | Engineering Elective 3 | 3 |  |
| Free | xxxx | Free Elective | 3 |  |
| Business Electives | xxxx | Business Electives <br> Select from: <br> Economics 1101; <br> Economics 1102; <br> Accounting 2101; <br> Human Resource Management 1101 | 9 |  |
| Engineering Management Study Plan Subtotal: |  |  | 58 |  |
|  |  |  |  |  |
| 7. Mechatronics Study Plan |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Engineering | 1101 | Introduction to Engineering \& Engineering Technology | 3 |  |
| Engineering | 1117 | Engineering Graphics | 2 |  |
| Engineering | 2331 | Engineering Statics | 3 |  |
| Engineering | 3096 | Economic Analysis | 3 | WI |
| Engineering <br> and <br> Mechanical Engineering | $\begin{gathered} 2332 \\ \& \\ 2305 \end{gathered}$ | Engineering Dynamics <br> and <br> Measurements \& Dynamics Laboratory | 3 |  |
| Engineering | 3496 | Materials Science for Engineers | 3 | WI |
| Engineering | 3571 | Classical \& Statistical Thermodynamics | 3 |  |
| Mechanical Engineering | 4173 | Data Acquisition and Analysis for Engineers | 3 |  |
| Electrical Engineering | 2312 | Electrical Engineering Science I | 3 |  |
| Electrical Engineering | 2313 | Electrical Engineering Science I Lab | 1 |  |
| Electrical Engineering | 2322 | Electrical Engineering Science II | 3 |  |
| Electrical Engineering | 2323 | Electrical Engineering Science II Lab | 1 |  |
| Electrical Engineering | 2612 | Digital Circuit Design | 3 |  |
| Electrical Engineering | 2613 | Digital Circuit Design Laboratory | 1 |  |
| Electrical Engineering | 3512 | Signals: Continuous and Discrete | 4 |  |


| Electrical Engineering | 3712 | Introduction to Electromagnetic Fields and Waves | 3 |  |
| :--- | :--- | :--- | :---: | :---: |
| Electrical Engineering | 3412 | Classical Control Systems | 3 |  |
| Electrical Engineering | 3413 | Classical Control Laboratory | 1 |  |
| Electrical Engineering | 3312 | Microelectronics I | 3 |  |
| Electrical Engineering | 3313 | Microelectronics I Laboratory | 1 |  |
| Computer \& Information Science | 1057 | Computer Programming in C | 4 |  |
| Free | xxxx | Free Elective | 3 |  |
| Mechatronics Study Plan Subtotal: |  | $\mathbf{5 8}$ |  |  |

## Suggested Semester By Semester Plans

## Bachelor of Science in Engineering (B.S.E.) in Engineering - Full Time (Day) Basic Study Plan

Requirements for New Students starting in the 2013-2014 Academic Year

| Year 1-Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Engineering | 1101 | Introduction to Engineering \& Engineering Technology | 3 |  |
| Mathematics | 1041 | Calculus I | 4 |  |
| Chemistry | 1035 | Chemistry for Engineers | 3 |  |
| Chemistry | 1033 | General Chemistry Laboratory I | 1 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Year 1 - Spring |  |  |  |  |
| Mathematics | 1042 | Calculus II | 4 |  |
| Physics | 1061 | Elementary Classical Physics I | 4 |  |
| Engineering | 1117 | Engineering Graphics | 2 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Semester Total |  |  | 13 |  |
|  |  |  |  |  |
| Year 2-Fall |  |  |  |  |
| Mathematics | 2043 | Calculus III | 4 |  |
| Physics | 1062 | Elementary Classical Physics II | 4 |  |
| Engineering | 2331 | Engineering Statics | 3 |  |
| Engineering | 2011 | Engineering Analysis \& Applications | 3 |  |
| Semester Total |  |  | 14 |  |
|  |  |  |  |  |
| Year 2 - Spring |  |  |  |  |
| Mathematics | 3041 | Differential Equations I | 3 |  |
| Engineering | 2332 | Engineering Dynamics | 3 |  |
| Engineering | 2333 | Mechanics of Solids | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08 xx or 09xx | Human Behavior | 3 | GB |
| Mechanical Engineering | 2305 | Measurements \& Dynamics Laboratory | 1 |  |
| Semester Total |  |  | 16 |  |


| Year 3 - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Electrical Engineering | 2112 | Electrical Devices \& Systems I | 3 |  |
| Electrical Engineering | 2113 | Electrical Devices \& Systems I Lab | 1 |  |
| Engineering | 3496 | Materials Science for Engineers | 3 | WI |
| Engineering | 3571 | Classical \& Statistical Thermodynamics | 3 |  |
| Statistics | 2103 | Business Statistics | 4 |  |
| Mechanical Engineering | 3305 | Materials Laboratory | 1 |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Year 3 - Spring |  |  |  |  |
| Engineering | 3553 | Mechanics of Fluids | 3 |  |
| Mechanical Engineering | 3506 | Fluids and Energy Laboratory | 1 |  |
| Engineering | 4169 | Professional Seminar | 1 |  |
| Engineering | 2196 | Technical Communication | 3 | WI |
| Engineering | xxxx | Engineering Elective 1 | 3 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| FREE | Xxxx | Elective | 3 |  |
| Semester Total |  |  | 17 |  |
|  |  |  |  |  |
| Year 4 - Fall |  |  |  |  |
| Engineering | 3096 | Economic Analysis | 3 | WI |
| Engineering | 4196 | Senior Design Project I | 1 | WI |
| Engineering | xxxx | Engineering Elective 2 | 3 |  |
| Engineering/Science | Xxxx | Engineering/Science Elective 1 | 4 |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| GenEd | 08 xx or 09xx | Global/World Society | 3 | GG |
| Semester Total |  |  | 17 |  |
|  |  |  |  |  |
| Year 4 - Spring |  |  |  |  |
| Engineering | 4296 | Senior Design Project II | 3 | WI |
| GenEd | 08xx or 09xx | The Arts | 4 | GA |
| Engineering | xxxx | Engineering Elective 3 | 3 |  |
| Engineering | xxxx | Engineering Elective 4 | 3 |  |
| Engineering/Science | Xxxx | Engineering/Science Elective 2 | 4 |  |
| Semester Total |  |  | 17 |  |
|  |  |  |  |  |
| Total Hours for Engineering (Full Time - Day): |  |  | 124 (minimum) |  |

## Bachelor of Science in Engineering (B.S.E.) in Engineering - Part-Time (Night) Basic

 Study PlanRequirements for New Students starting in the 2013-2014 Academic Year


| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities II | 3 | GZ |
| :---: | :---: | :---: | :---: | :---: |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Semester Total |  |  | 6 |  |
| Year 4 - Fall |  |  |  |  |
| Engineering | 3096 | Economic Analysis | 3 | WI |
| Engineering | 3496 | Materials Science for Engineers | 3 | WI |
| Semester Total |  |  | 6 |  |
| Year 4 - Spring |  |  |  |  |
| Engineering | 2332 | Engineering Dynamics | 3 |  |
| Engineering | 3571 | Classical \& Statistical Thermodynamics | 3 |  |
| Semester Total |  |  | 6 |  |
| Year 4 - Summer I \& II |  |  |  |  |
| Mechanical Engineering | 2305 | Measurements \& Dynamics Laboratory | 1 |  |
| Mechanical Engineering | 3305 | Materials Laboratory | 1 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Semester Total |  |  | 5 |  |
| Year 5 - Fall |  |  |  |  |
| Electrical Engineering | 2112 | Electrical Devices \& Systems I | 3 |  |
| Electrical Engineering | 2113 | Electrical Devices \& Systems I Lab | 1 |  |
| Free | Xxxx | Free Elective | 3 |  |
| Semester Total |  |  | 7 |  |
| Year 5 - Spring |  |  |  |  |
| Engineering | 3553 | Mechanics of Fluids | 3 |  |
| Engineering | Xxxx | Engineering Elective 1 | 3 |  |
| Semester Total |  |  | 6 |  |
| Year 5 - Summer I \& II |  |  |  |  |
| Mechanical Engineering | 3506 | Fluids and Energy Laboratory | 1 |  |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Semester Total |  |  | 4 |  |
| Year 6 - Fall |  |  |  |  |
| Engineering | 4169 | Engineering Seminar | 1 |  |
| Engineering | 2196 | Technical Communication | 3 | WI |
| Semester Total |  |  | 4 |  |
| Year 6 - Spring |  |  |  |  |
| Engineering | 4196 | Senior Design Project I | 1 | WI |
| Engineering | Xxxx | Engineering Elective 2 | 3 |  |
| Semester Total |  |  | 4 |  |
| Year 6 - Summer I \& II |  |  |  |  |
| GenEd | 08xx or 09xx | The Arts | 4 | GA |
| Engineering | Xxxx | Engineering Elective 3 | 3 |  |


| Semester Total |  |  | 7 |  |
| :---: | :---: | :---: | :---: | :---: |
| Year 7 - Fall |  |  |  |  |
| Engineering | 4296 | Senior Design Project II | 3 | WI |
| Engineering | Xxxx | Engineering Elective 4 | 3 |  |
| Semester Total |  |  | 6 |  |
| Year 7 - Spring |  |  |  |  |
| Engineering/Science | xxxx | Engineering/Science Elective 1 | 4 |  |
| Engineering/Science | xxxx | Engineering/Science Elective 2 | 4 |  |
| Semester Total |  |  | 8 |  |
|  |  |  |  |  |
| Total Hours for Engineering (Part Time - Night): |  |  | 124 | imum) |

# Mechanical Engineering 

Mohammad Kiani, Chair<br>Richard Cohen, Program Coordinator<br>Room 607A, Engineering Building<br>215-204-6245<br>rscohen@temple.edu

http://engineering.temple.edu/department/mechanical-engineering

The Mechanical Engineering Program is accredited by the Engineering Accreditation Commission (EAC) of ABET, http://www.abet.org.

## Program Goals, Objectives \& Design Integration

The mission of the Mechanical Engineering Department is to provide an excellent educational experience for the students in its programs. This experience includes an emphasis on the technical, communication, and teamwork skills that graduate engineers need to succeed, in both the workplace and society in general. In order to achieve these goals, the department places great importance on teaching, research, scholarship, engineering practice, and service to the university community and the Engineering profession. The mechanical engineering program is structured to prepare the graduate for the professional practice of engineering and/or graduate school. The curriculum emphasizes a rigorous treatment of the mathematical and scientific approach to the solution of engineering problems. It provides a coherent set of courses in energy conversion and structures/motion in mechanical systems. The program has design across the curriculum and is capped with an integrated design experience in the form of a senior project.

Most technical courses in the program are offered during the day only.

## Summary of Requirements

## University Requirements:

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

All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific writing-intensive courses required for this major are listed below and are identified by "WI" in the Attribute column.

## Department Requirements:

## Foundation Science \& Math Courses for Mechanical Engineering

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Calculus Sequence Plus Elective |  |  |  |  |
| Mathematics | 1041 | Calculus I | 4 |  |
| Mathematics | 1042 | Calculus II | 4 |  |
| Mathematics | 2043 | Calculus III | 4 |  |
| Mathematics | 3041 | Differential Equations I | 3 |  |
| Physics | 1061 | Elementary Classical Physics I | 4 |  |
| Physics | 1062 | Elementary Classical Physics II | 4 |  |
| Chemistry | 1035 | Chemistry for Engineers | 3 |  |
| Chemistry | 1033 | General Chemistry Laboratory I | 1 |  |
| Subtotal |  |  | 27 |  |

Required Communications, Humanities, \& Social Science for Mechanical Engineering

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| English | 00802,0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Engineering | 2196 | Technical Communication | 3 | WI |
| GenEd | Electives | Humanities and Social Science | 21 |  |
| Elective |  | Free Elective | 2 (minimum) |  |
| Subtotal |  |  | $\mathbf{3 0}$ |  |

## Required Engineering Courses for Mechanical Engineering

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Mechanical | 2011 | Linear Systems | 3 |  |
| Engineering | 2305 | Measurements \& Dynamics Laboratory | 1 |  |
|  | 3301 | Machine Theory \& Design | 3 |  |
|  | 3305 | Materials Laboratory | 1 |  |
|  | 3421 | Dynamic Systems | 3 |  |
|  | 3506 | Fluids \& Energy Laboratory | 1 |  |
|  | 4572 | Heat \& Mass Transfer | 3 |  |


| Mechanical Engineering | $\begin{aligned} & 4422 \& 4405 \\ & \text { or } \\ & 4571 \end{aligned}$ | *Concentration dependent - See below <br> Mechanical Vibrations and Vibrations \& Controls Laboratory or <br> Advanced Thermodynamics \& Combustion and Energy Conversion Laboratory | $\begin{aligned} & 3 / 1 \\ & 3 / 1 \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Electrical Engineering | $\begin{aligned} & 2112 \\ & 2113 \\ & \hline \end{aligned}$ | Electrical Devices \& Systems I <br> Electrical Devices \& Systems I Lab | 3 <br> 1 |  |
| Engineering | 1101 <br> 1117 <br> 2331 <br> 2332 <br> 2333 <br> 3096 <br> 3117 <br> 3496 <br> 3553 <br> 3571 <br> 4169 <br> 4196 <br> 4296 | Introduction to Engineering \& Engineering Technology <br> Engineering Graphics <br> Engineering Statics <br> Engineering Dynamics <br> Mechanics of Solids <br> Economic Analysis <br> Computer-Aided Design <br> Materials Science for Engineers <br> Mechanics of Fluids <br> Classical \& Statistical Thermodynamics <br> Engineering Seminar <br> Senior Design Project I <br> Senior Design Project II | $\begin{aligned} & \hline \hline 3 \\ & 2 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 1 \\ & 1 \\ & 1 \\ & \hline \end{aligned}$ | WI <br> WI <br> WI <br> WI |
| Mechanical Engineering | Electives | See faculty advisor for courses | 9 |  |
| Subtotal |  |  | 66 |  |
| Total Hours for the Mechanical Engineering Major: |  |  | 124 (minimum) |  |

*Students in the Bachelor of Science in Mechanical Engineering Program must take either of the following sequences of courses (excludes Bioengineering concentration):

- Mechanical Engineering 4422: Mechanical Vibrations (technical elective; offered every fall semester) and
- Mechanical Engineering 4405: Vibrations \& Controls Laboratory (lab elective)

OR

- Mechanical Engineering 4571: Advanced Thermodynamics \& Combustion (technical elective; offered every fall semester) and
- Mechanical Engineering 4506: Energy Conversion Laboratory (lab elective)


## Required Engineering Courses for Mechanical Engineering - Bioengineering Concentration

Students in the optional Concentration in Bioengineering within the B.S. in Mechanical Engineering program must take the following sequence of courses:

- Engineering 1101: Introduction to Engineering \& Engineering Technology (required course within the B.S.M.E. program)
- Engineering 3496: Materials Science for Engineers (required course within the B.S.M.E. program)
- Engineering 3553: Mechanics of Fluids (required course within the B.S.M.E. program)
- Engineering 3571: Classical \& Statistical Thermodynamics (required course within the B.S.M.E. program)
- Biology 3334: Mammalian Physiology (technical elective)
- Bioengineering 3719: Introduction to Bioengineering (technical elective; offered every other spring semester)
- Bioengineering 3725: Cell Biology for Engineers (technical elective; offered every fall semester)
- One Bioengineering elective from below: Bioengineering 4741: Biomaterials for Engineers (offered every other spring semester) Mechanical Engineering 4731: Cardiovascular Fluid Dynamics (offered every other spring semester)

A highly recommended free elective is Engineering 3033: Entrepreneurial Engineering, offered every semester.

Students are required to complete a minimum of 124 credit hours for the Concentration in Bioengineering in the Mechanical Engineering major.

## Required Engineering Courses for Mechanical Engineering - Energy Systems Concentration

Students in the optional Concentration in Energy Systems within the B.S. in Mechanical Engineering program must take the following sequence of courses:

- Mechanical Engineering 4506: Energy Conversion Laboratory (technical elective)
- Mechanical Engineering 4571: Advanced Thermodynamics \& Combustion (technical elective)
- Mechanical Engineering 4572: Heat \& Mass Transfer (required course within the B.S.M.E. program)
- Mechanical Engineering 4574: Heating, Ventilating \& Air Conditioning (technical elective; offered every fall semester)
- Mechanical Engineering 4575: Renewable \& Alternative Energy (technical elective; offered every other spring semester)
- Engineering 1101: Introduction to Engineering \& Engineering Technology (required course within the B.S.M.E. program)
- Engineering 3571: Classical \& Statistical Thermodynamics (required course within the B.S.M.E. program)
- Civil Engineering 3711: Environmental Engineering (as a technical elective)

A highly recommended free elective is Engineering 3033: Entrepreneurial Engineering, offered every semester.

Students are required to complete a minimum of 124 credit hours for the Concentration in Energy Systems in the Mechanical Engineering major.

## Suggested Semester by Semester Plans

## Bachelor of Science in Mechanical Engineering

## Requirements for New Students starting in the 2013-2014 Academic Year

| First Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 1041 | Calculus I | 4 |  |
| Chemistry | 1035 | Chemistry for Engineers | 3 |  |
| Chemistry | 1033 | General Chemistry Laboratory I | 1 |  |
| Engineering | 1101 | Introduction to Engineering \& Engineering Technology | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Semester Total |  |  | 15 |  |
| Second Semester |  |  |  |  |
| Engineering | 1117 | Engineering Graphics | 2 |  |
| Mathematics | 1042 | Calculus II | 4 |  |
| Physics | 1061 | Elementary Classical Physics I | 4 |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Semester Total |  |  | 13 |  |
|  |  |  |  |  |
| Third Semester |  |  |  |  |
| Mathematics | 2043 | Calculus III | 4 |  |
| Physics | 1062 | Elementary Classical Physics II | 4 |  |
| Engineering | 2331 | Engineering Statics | 3 |  |
| Engineering | 2196 | Technical Communication | 3 | WI |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Semester Total |  |  | 17 |  |
|  |  |  |  |  |
| Fourth Semester |  |  |  |  |
| Mathematics | 3041 | Differential Equations I | 3 |  |
| Engineering | 3571 | Classical \& Statistical Thermodynamics | 3 |  |
| Engineering | 2333 | Mechanics of Solids | 3 |  |
| Mechanical Engineering | 2305 | Measurements \& Dynamics Laboratory | 1 |  |
| Engineering | 2332 | Engineering Dynamics | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Semester Total |  |  | 16 |  |
|  | Fifth Semester |  |  |  |
| Electrical Engineering | 2112 | Electrical Devices \& Systems I | 3 |  |
| Electrical Engineering | 2113 | Electrical Devices \& Systems I Lab | 1 |  |
| Engineering | 3496 | Materials Science for Engineers | 3 | WI |
| Mechanical Engineering | 2011 | Linear Systems | 3 |  |
| Mechanical Engineering | 3301 | Machine Theory \& Design | 3 |  |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Mechanical Engineering | 3305 | Materials Laboratory | 1 |  |
| Semester Total |  |  | 17 |  |


| Sixth Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Mechanical Engineering | 3421 | Dynamic Systems | 3 |  |
| Engineering | 3553 | Mechanics of Fluids | 3 |  |
| Engineering | 3117 | Computer-Aided Design | 3 |  |
| Mechanical Engineering | 3506 | Fluids \& Energy Laboratory | 1 |  |
| Mechanical Engineering | xxxx | Technical Elective \#1 | 3 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Engineering | 4169 | Engineering Seminar | 1 |  |
| Semester Total |  |  | 17 |  |
|  |  |  |  |  |
| Seventh Semester |  |  |  |  |
| Engineering | 3096 | Economic Analysis | 3 | WI |
| Engineering | 4196 | Senior Design Project I | 1 | WI |
| Mechanical Engineering | 4572 | Heat \& Mass Transfer | 3 |  |
| Mechanical Engineering | xxxx | Technical Elective \#2 \& Lab* | 4 |  |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Semester Total |  |  | 14 |  |
|  |  |  |  |  |
| Eighth Semester |  |  |  |  |
| Engineering | 4296 | Senior Design Project II | 3 | WI |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| Mechanical Engineering | xxxx | Technical Elective \#3 \& Lab* | 4 |  |
| Mechanical Engineering | xxxx | Technical Elective \#4 | 3 |  |
| Elective | xxxx | Free Elective | 2 |  |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Total Hours for Mechanical Engineering: |  |  | 124 | imum) |
| *Either Mechanical Engineering 4422 \& 4405 (in Fall) OR Mechanical Engineering 4571 \& 4506 (in Spring) are required in the Mechanical Engineering Program. When the choice is made, one credit of free elective replaces the lab in the other term. |  |  |  |  |
| Bachelor of Science in Mechanical Engineering - Bioengineering Concentration |  |  |  |  |

## Requirements for New Students starting in the 2013-2014 Academic Year

\(\left.\begin{array}{|l|l|l|c|c|c|}\hline First Semester \& Course \# \& Course Title \& Hours \& Attribute <br>
\hline Subject \& 1041 \& Calculus I \& 4 \& <br>
\hline Mathematics \& 1035 \& Chemistry for Engineers \& 3 \& <br>
\hline Chemistry \& 1033 \& General Chemistry Laboratory I \& 1 \& <br>
\hline Chemistry \& 1101 \& Introduction to Engineering \& Engineering <br>

\hline Technology\end{array}\right] 3\)|  |
| :--- |
| Engineering |
| English |
| Semester Total |
| Second Semester |
| Engineering |
| Mathematics |
| Physics |


| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| :---: | :---: | :---: | :---: | :---: |
| Semester Total |  |  | 13 |  |
| Third Semester |  |  |  |  |
| Mathematics | 2043 | Calculus III | 4 |  |
| Physics | 1062 | Elementary Classical Physics II | 4 |  |
| Engineering | 2331 | Engineering Statics | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Engineering | 2196 | Technical Communication | 3 | WI |
| Semester Total |  |  | 17 |  |
| Fourth Semester |  |  |  |  |
| Mathematics | 3041 | Differential Equations I | 3 |  |
| Mechanical Engineering | 2011 | Linear Systems | 3 |  |
| Engineering | 2333 | Mechanics of Solids | 3 |  |
| Mechanical Engineering | 2305 | Measurements \& Dynamics Laboratory | 1 |  |
| Engineering | 2332 | Engineering Dynamics | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Semester Total |  |  | 16 |  |
| Fifth Semester |  |  |  |  |
| Electrical Engineering | 2112 | Electrical Devices \& Systems I | 3 |  |
| Electrical Engineering | 2113 | Electrical Devices \& Systems I Laboratory | 1 |  |
| Engineering | 3496 | Materials Science for Engineers | 3 | WI |
| Engineering | 3571 | Classical \& Statistical Thermodynamics | 3 |  |
| Mechanical Engineering | 3301 | Machine Theory \& Design | 3 |  |
| Biongineering | 3719 | Introduction to Bioengineering | 3 |  |
| Mechanical Engineering | 3305 | Materials Laboratory | 1 |  |
| Semester Total |  |  | 17 |  |
| Sixth Semester |  |  |  |  |
| Mechanical Engineering | 3421 | Dynamic Systems | 3 |  |
| Engineering | 3553 | Mechanics of Fluids | 3 |  |
| Engineering | 3117 | Computer-Aided Design | 3 |  |
| Mechanical Engineering | 3506 | Fluids \& Energy Laboratory | 1 |  |
| Bioengineering | 3725 | Cell Biology for Engineers | 3 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Engineering | 4169 | Engineering Seminar | 1 |  |
| Semester Total |  |  | 17 |  |
| Seventh Semester |  |  |  |  |
| Engineering | 3096 | Economic Analysis | 3 | WI |
| Engineering | 4196 | Senior Design Project I | 1 | WI |
| Mechanical Engineering | 4572 | Heat \& Mass Transfer | 3 |  |
| Mechanical Engineering | xxxx | Technical Elective \#1* | 3 |  |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Semester Total |  |  | 13 |  |


| Engineering | 4296 | Senior Design Project II | 3 | WI |
| :--- | :--- | :--- | :---: | :---: |
| GenEd | $08 \times x$ or 09xx | Arts | $3-4$ | GA |
| GenEd | $08 \times x$ or 09xx | Human Behavior | 3 | GB |
| Elective | xxxx | Free Elective | 4 |  |
| Mechanical Engineering | xxxx | Technical Elective \#2* | 3 |  |
| Semester Total |  | $\mathbf{1 6}$ |  |  |
|  |  |  |  |  |
| Total Hours for Mechanical Engineering - Bioengineering Concentration: |  |  |  |  |

*Select from Biology 3334, and Bioengineering 4741 or Engineering 4731.

## Bachelor of Science in Mechanical Engineering - Energy Systems Concentration

## Requirements for New Students starting in the 2013-2014 Academic Year

| First Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 1041 | Calculus I | 4 |  |
| Chemistry | 1035 | Chemistry for Engineers | 3 |  |
| Chemistry | 1033 | General Chemistry Laboratory I | 1 |  |
| Engineering | 1101 | Introduction to Engineering \& Engineering Technology | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Semester Total |  |  | 15 |  |
| Second Semester |  |  |  |  |
| Engineering | 1117 | Engineering Graphics | 2 |  |
| Mathematics | 1042 | Calculus II | 4 |  |
| Physics | 1061 | Elementary Classical Physics I | 4 |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Semester Total |  |  | 13 |  |
| Third Semester |  |  |  |  |
| Mathematics | 2043 | Calculus III | 4 |  |
| Physics | 1062 | Elementary Classical Physics II | 4 |  |
| Engineering | 2331 | Engineering Statics | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Engineering | 2196 | Technical Communication | 3 | WI |
| Semester Total |  |  | 17 |  |
|  |  |  |  |  |
| Fourth Semester |  |  |  |  |
| Mathematics | 3041 | Differential Equations I | 3 |  |
| Mechanical Engineering | 2011 | Linear Systems | 3 |  |
| Engineering | 2333 | Mechanics of Solids | 3 |  |
| Mechanical Engineering | 2305 | Measurements \& Dynamics Laboratory | 1 |  |
| Engineering | 2332 | Engineering Dynamics | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Fifth Semester |  |  |  |  |
| Electrical Engineering | 2112 | Electrical Devices \& Systems I | 3 |  |


| Electrical Engineering | 2113 | Electrical Devices \& Systems I Laboratory | 1 |  |
| :---: | :---: | :---: | :---: | :---: |
| Engineering | 3496 | Materials Science for Engineers | 3 | WI |
| Engineering | 3571 | Classical \& Statistical Thermodynamics | 3 |  |
| Mechanical Engineering | 3301 | Machine Theory \& Design | 3 |  |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Mechanical Engineering | 3305 | Materials Laboratory | 1 |  |
| Semester Total |  |  | 17 |  |
| Sixth Semester |  |  |  |  |
| Mechanical Engineering | 3421 | Dynamic Systems | 3 |  |
| Engineering | 3553 | Mechanics of Fluids | 3 |  |
| Engineering | 3117 | Computer-Aided Design | 3 |  |
| Mechanical Engineering | 3506 | Fluids \& Energy Laboratory | 1 |  |
| GenEd | 08 xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Engineering | 4169 | Engineering Seminar | 1 |  |
| Semester Total |  |  | 17 |  |
|  |  |  |  |  |
| Seventh Semester |  |  |  |  |
| Engineering | 3096 | Economic Analysis | 3 | WI |
| Engineering | 4196 | Senior Design Project I | 1 | WI |
| Mechanical Engineering | 4572 | Heat \& Mass Transfer | 3 |  |
| Mechanical Engineering | 4574 | Heating, Ventilating, \& Air Conditioning | 3 |  |
| Mechanical Engineering | 4575 | Renewable \& Alternative Energy | 3 |  |
| Semester Total |  |  | 13 |  |
|  |  |  |  |  |
| Eighth Semester |  |  |  |  |
| Engineering | 4296 | Senior Design Project II | 3 | WI |
| GenEd | 08 xx or 09xx | Arts | 3-4 | GA |
| Mechanical Engineering | 4506 | Energy Conversion Laboratory | 1 |  |
| Mechanical Engineering | 4571 | Advanced Thermodynamics \& Combustion | 3 |  |
| Mechanical Engineering | xxxx | Technical Elective \#1* | 3 |  |
| Elective | xxxx | Free Elective | 3 |  |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Total Hours for Mechanical Engineering - Energy Systems Concentration: |  |  | 124 (minimum) |  |

*Civil Engineering 3711 is the technical elective.

## Cooperative Education Programs

A Cooperative Education (Co-op) is an optional program available at the College of Engineering where you have the opportunity to gain professional work experience before graduation. It is designed to give you the chance to apply the knowledge learned in the classroom to real life problems. You will be exposed to the latest technology and new ideas at a worksite helping you understand your field of work more extensively. During the Co-op, you will make valuable connections with professionals in your field. A cooperative education can enhance and strengthen you academically, professionally and personally.

Below are the five-year curricula for the Co-op programs leading to the Bachelor of Science in Mechanical Engineering, the Bachelor of Science in Mechanical Engineering with a concentration in Bioengineering, and the Bachelor of Science in Mechanical Engineering with a concentration in Energy Systems. The minimum requirement for graduation is 127 semester hours.

## Bachelor of Science in Mechanical Engineering with Cooperative Experience

Requirements for New Students starting in the 2013-2014 Academic Year

| First Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 1041 | Calculus I | 4 |  |
| Chemistry | 1035 | Chemistry for Engineers | 3 |  |
| Chemistry | 1033 | General Chemistry Laboratory I | 1 |  |
| Engineering | 1101 | Introduction to Engineering \& Engineering Technology | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Semester Total |  |  | 15 |  |
| Second Semester |  |  |  |  |
| Engineering | 1117 | Engineering Graphics | 2 |  |
| Mathematics | 1042 | Calculus II | 4 |  |
| Physics | 1061 | Elementary Classical Physics I | 4 |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Semester Total |  |  | 13 |  |
|  |  |  |  |  |
| Third Semester |  |  |  |  |
| Mathematics | 2043 | Calculus III | 4 |  |
| Physics | 1062 | Elementary Classical Physics II | 4 |  |
| Engineering | 2331 | Engineering Statics | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Engineering | 2196 | Technical Communication | 3 | WI |
| Semester Total |  |  | 17 |  |
|  |  |  |  |  |
| Fourth Semester |  |  |  |  |
| Mathematics | 3041 | Differential Equations I | 3 |  |
| Engineering | 3571 | Classical \& Statistical Thermodynamics | 3 |  |
| Engineering | 2333 | Mechanics of Solids | 3 |  |
| Mechanical Engineering | 2305 | Measurements \& Dynamics Laboratory | 1 |  |
| Engineering | 2332 | Engineering Dynamics | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Fifth Semester |  |  |  |  |
| Electrical Engineering | 2112 | Electrical Devices \& Systems I | 3 |  |
| Electrical Engineering | 2113 | Electrical Devices \& Systems I Laboratory | 1 |  |
| Engineering | 3496 | Materials Science for Engineers | 3 | WI |
| Mechanical Engineering | 2011 | Linear Systems | 3 |  |


*Either Mechanical Engineering 4422 \& 4405 (in Fall) OR Mechanical Engineering 4571 \& 4506 (in Spring) are required in the Mechanical Engineering Program. When the choice is made, one credit of free elective replaces the lab in the other term.

## Bachelor of Science in Mechanical Engineering - Bioengineering Concentration with Cooperative Experience

## Requirements for New Students starting in the 2013-2014 Academic Year

| First Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 1041 | Calculus I | 4 |  |
| Chemistry | 1035 | Chemistry for Engineers | 3 |  |
| Chemistry | 1033 | General Chemistry Laboratory I | 1 |  |
| Engineering | 1101 | Introduction to Engineering \& Engineering Technology | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Semester Total |  |  | 15 |  |
| Second Semester |  |  |  |  |
| Engineering | 1117 | Engineering Graphics | 2 |  |
| Mathematics | 1042 | Calculus II | 4 |  |
| Physics | 1061 | Elementary Classical Physics I | 4 |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Semester Total |  |  | 13 |  |
| Third Semester |  |  |  |  |
| Mathematics | 2043 | Calculus III | 4 |  |
| Physics | 1062 | Elementary Classical Physics II | 4 |  |
| Engineering | 2331 | Engineering Statics | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Engineering | 2196 | Technical Communication | 3 | WI |
| Semester Total |  |  | 17 |  |
| Fourth Semester |  |  |  |  |
| Mathematics | 3041 | Differential Equations I | 3 |  |
| Mechanical Engineering | 2011 | Linear Systems | 3 |  |
| Engineering | 2333 | Mechanics of Solids | 3 |  |
| Mechanical Engineering | 2305 | Measurements \& Dynamics Laboratory | 1 |  |
| Engineering | 2332 | Engineering Dynamics | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Semester Total |  |  | 16 |  |
| Fifth Semester |  |  |  |  |
| Electrical Engineering | 2112 | Electrical Devices \& Systems I | 3 |  |
| Electrical Engineering | 2113 | Electrical Devices \& Systems I Lab | 1 |  |
| Engineering | 3496 | Materials Science for Engineers | 3 | WI |
| Engineering | 3571 | Classical \& Statistical Thermodynamics | 3 |  |
| Mechanical Engineering | 3301 | Machine Theory \& Design | 3 |  |
| Bioengineering | 3719 | Introduction to Bioengineering | 3 |  |
| Mechanical Engineering | 3305 | Materials Laboratory | 1 |  |
| Semester Total |  |  | 17 |  |
| Sixth Semester |  |  |  |  |
| Mechanical Engineering | 3421 | Dynamic Systems | 3 |  |
| Engineering | 3553 | Mechanics of Fluids | 3 |  |
| Engineering | 3117 | Computer-Aided Design | 3 |  |
| Mechanical Engineering | 3506 | Fluids \& Energy Laboratory | 1 |  |


| Bioengineering | 3725 | Cell Biology for Engineers | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Engineering | 4169 | Engineering Seminar | 1 |  |
| Semester Total |  |  | 17 |  |
|  |  |  |  |  |
| Seventh Semester |  |  |  |  |
| Engineering | 2181 or 3181 | Co-op Experience I or II | 3 |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Eighth Semester |  |  |  |  |
| Engineering | 3181 | Co-op Experience II | 3 |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Ninth Semester |  |  |  |  |
| Engineering | 3096 | Economic Analysis | 3 | WI |
| Engineering | 4196 | Senior Design Project I | 1 | WI |
| Mechanical Engineering | 4572 | Heat \& Mass Transfer | 3 |  |
| Mechanical Engineering | xxxx | Technical Elective \#1* | 3 |  |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Semester Total |  |  | 13 |  |
|  |  |  |  |  |
| Tenth Semester |  |  |  |  |
| Engineering | 4296 | Senior Design Project II | 3 | WI |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Elective | xxxx | Free Elective(s) | 4 |  |
| Mechanical Engineering | xxxx | Technical Elective \#2* | 3 |  |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Total Hours for Mechanical Engineering - Bioengineering Concentration (Cooperative Experience): |  |  | 127 (minimum) |  |

*Select from Biology 3334, and Bioengineering 4741 or Engineering 4731.

## Bachelor of Science in Mechanical Engineering - Energy Systems Concentration with Cooperative Experience

Requirements for New Students starting in the 2013-2014 Academic Year

| First Semester | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Subject | 1041 | Calculus I | 4 |  |
| Mathematics | 1035 | Chemistry for Engineers | 3 |  |
| Chemistry | 1033 | General Chemistry Laboratory I | 1 |  |
| Chemistry | 1101 | Introduction to Engineering \& Engineering |  |  |
| Technology | 3 |  |  |  |
| Engineering | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| English |  | $\mathbf{1 5}$ |  |  |
| Semester Total |  |  |  |  |
|  |  |  |  |  |
| Second Semester |  |  |  |  |


| Engineering | 1117 | Engineering Graphics | 2 |  |
| :---: | :---: | :---: | :---: | :---: |
| Mathematics | 1042 | Calculus II | 4 |  |
| Physics | 1061 | Elementary Classical Physics I | 4 |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Semester Total |  |  | 13 |  |
| Third Semester |  |  |  |  |
| Mathematics | 2043 | Calculus III | 4 |  |
| Physics | 1062 | Elementary Classical Physics II | 4 |  |
| Engineering | 2331 | Engineering Statics | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Engineering | 2196 | Technical Communication | 3 | WI |
| Semester Total |  |  | 17 |  |
| Fourth Semester |  |  |  |  |
| Mathematics | 3041 | Differential Equations I | 3 |  |
| Mechanical Engineering | 2011 | Linear Systems | 3 |  |
| Engineering | 2333 | Mechanics of Solids | 3 |  |
| Mechanical Engineering | 2305 | Measurements \& Dynamics Laboratory | 1 |  |
| Engineering | 2332 | Engineering Dynamics | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Semester Total |  |  | 16 |  |
| Fifth Semester |  |  |  |  |
| Electrical Engineering | 2112 | Electrical Devices \& Systems I | 3 |  |
| Electrical Engineering | 2113 | Electrical Devices \& Systems I Laboratory | 1 |  |
| Engineering | 3496 | Materials Science for Engineers | 3 | WI |
| Engineering | 3571 | Classical \& Statistical Thermodynamics | 3 |  |
| Mechanical Engineering | 3301 | Machine Theory \& Design | 3 |  |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Mechanical Engineering | 3305 | Materials Laboratory | 1 |  |
| Semester Total |  |  | 17 |  |
| Sixth Semester |  |  |  |  |
| Mechanical Engineering | 3421 | Dynamic Systems | 3 |  |
| Engineering | 3553 | Mechanics of Fluids | 3 |  |
| Engineering | 3117 | Computer-Aided Design | 3 |  |
| Mechanical Engineering | 3506 | Fluids \& Energy Laboratory | 1 |  |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Engineering | 4169 | Engineering Seminar | 1 |  |
| Semester Total |  |  | 17 |  |
| Seventh Semester |  |  |  |  |
| Engineering | 2181 or 3181 | Co-op Experience I or II | 3 |  |
| Eighth Semester |  |  |  |  |
| Engineering | 3181 | Co-op Experience II | 3 |  |


| Ninth Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Engineering | 3096 | Economic Analysis | 3 | WI |
| Engineering | 4196 | Senior Design Project I | 1 | WI |
| Mechanical Engineering | 4572 | Heat \& Mass Transfer | 3 |  |
| Mechanical Engineering | 4574 | Heating, Ventilating, \& Air Conditioning | 3 |  |
| Mechanical Engineering | 4575 | Renewable \& Alternative Energy | 3 |  |
| Semester Total |  |  | 13 |  |
| Tenth Semester |  |  |  |  |
| Engineering | 4296 | Senior Design Project II | 3 | WI |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| Mechanical Engineering | 4506 | Energy Conversion Laboratory | 1 |  |
| Mechanical Engineering | 4571 | Advanced Thermodynamics \& Combustion | 3 |  |
| Mechanical Engineering | Xxxx | Technical Elective \#1* | 3 |  |
| Elective | Xxxx | Free Elective | 3 |  |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Total Hours for Mechanical Engineering - Energy Systems Concentration (Cooperative Experience) : |  |  | 127 (minimum) |  |

*Civil Engineering 3711 is the technical elective.

## Construction Management Technology

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## Program Goals \& Objectives

The baccalaureate curriculum in Construction Management Technology (CMT) prepares a student for a practitioner's role in industry, government or institution in the area of construction management.

Graduates are qualified for jobs as construction field supervisors, estimators, expediters, construction cost analysts, schedulers, plan examiners for government agencies that control construction, and in safety. Graduates can communicate effectively and have the necessary teamwork and leadership skills to work and participate effectively in a team environment. Also, graduates will have professional growth and life-long learning skills that engineering technologists need to succeed in both the workplace and the society in general

Day and evening courses are available; however, most technical courses are offered in the evening only. While the day program requires a minimum of four years, a completed evening program may extend up to eight years or more.

The Construction Management Technology Program is accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, http://www.abet.org.

## Summary of Requirements

## University Requirements

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

All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific writing-intensive courses required for this major are listed below and are identified by "WI" in the Attribute column.

## Foundation Science \& Math Courses

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Mathematics | 1022 | Precalculus | 4 |  |
| Mathematics | 1031 | Differential \& Integral Calculus | 4 |  |
| Statistics | 2103 | Business Statistics | 4 |  |
| Physics | 1021 | Introduction to General Physics I | 4 |  |
| Physics | 1022 | Introduction to General Physics II | 4 |  |
| Science Elective: Select from the following: | 4 |  |  |  |
| Chemistry <br> or | $1031 / 1033$ <br> or | General Chemistry I and Lab <br> or <br> Introductory Geology |  |  |
| Earth \& Environmental Science | 1001 |  |  |  |$|$| Subtotal |  |
| :--- | :--- |

Required Communications, Humanities, \& Social Science

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| English | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| English | 2696 | Technical Writing | 3 | WI |
| Economics | 1101 <br> or <br> 1102 | Macroeconomic Principles <br> or <br> Microeconomic Principles | 3 |  |
| Humanities/ |  |  |  |  |
| Social Science* | Electives | GenEd Requirements | 21 |  |
| Subtotal |  |  |  |  |
|  |  |  |  |  |
| See advisor for recommended courses, particularly if a transfer student. |  |  |  |  |

## Required Engineering Courses for CMT

| Subject | Course \# | Course Title | Hours |
| :--- | :--- | :--- | :--- |
| Attribute |  |  |  |


| Construction Management Technology | 2124 | Construction Methods \& Materials | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Construction Management Technology | 2125 | Construction Contracts \& Specifications | 3 |  |
| Construction Management Technology | 2271 | Building Systems | 3 |  |
| Construction Management Technology | 3121 | Construction Estimating | 3 |  |
| Construction Management Technology | 3123 | Construction Estimating Laboratory | 1 |  |
| Construction Management Technology | 3145 | Structural Analysis | 3 |  |
| Construction Management Technology | 3322 | Construction Planning \& Scheduling | 3 |  |
| Construction Management Technology | 3333 | Soil Mechanics | 3 |  |
| Construction Management Technology | 3351 | Applied Hydraulics | 3 |  |
| Construction Management Technology | 3396 | Environmental \& Safety Aspects of Construction | 2 | WI |
| Construction Management Technology | 4335 | Steel \& Wood Structures | 3 |  |
| Construction Management Technology | 4336 | Concrete \& Masonry Design | 3 |  |
| Construction Management Technology | 4355 | Transportation Systems Management | 3 |  |
| Construction Management <br> Technology | 4396 | Capstone in Construction | 3 | WI |
| Subtotal for Construction | Manage | nt Technology | 39 |  |
|  |  |  |  |  |
| Civil Engineering | 1105 | Surveying | 2 |  |
| Civil Engineering | 2011 | Civil Engineering Materials | 2 |  |
| Subtotal for Civil Enginee |  |  | 4 |  |
|  |  |  |  |  |
| Engineering | 1101 | Introduction to Engineering \& Engineering Technology | 3 |  |
| Engineering | 1117 | Engineering Graphics | 2 |  |
| Engineering | 2331 | Engineering Statics | 3 |  |
| Engineering | 2333 | Mechanics of Solids | 3 |  |
| Engineering <br> or <br> Finance | $\begin{aligned} & \hline 3096 \\ & \text { or } \\ & 3101 \\ & \hline \end{aligned}$ | Economic Analysis <br> or <br> Financial Management | 3 3 | WI |
| Subtotal for Engineering |  |  | 14 |  |
|  |  |  |  |  |
| Engineering Technology | 4119 | Professional Seminar | 1 |  |
| Subtotal for Engineering | chnolo |  | 1 |  |
|  |  |  |  |  |
| Specialty Electives |  | Must be approved prior to registration (see list below for suggested courses) | 9 |  |
| Subtotal for electives |  |  | 9 |  |
|  |  |  |  |  |
| Subtotal for Required Courses |  |  | 67 |  |


|  |  |
| :--- | :--- |
| Total Required Hours for Construction Management Technology | 124 |

Students may take the following Business courses for their electives to count towards a Minor in Business:
$\left.\begin{array}{|l|l|l|l|l|}\hline \text { Approved Specialty Electives } & \text { Course \# } & \text { Course Title } & \text { Hours } & \text { Attribute } \\ \hline \text { Subject } & 2101 & \text { Financial Accounting } & 3 & \\ \hline \text { Accounting } & 2102 & \text { Managerial Accounting } & 3 & \\ \hline \text { Accounting } & \begin{array}{l}1101 \\ \text { or } \\ 1102\end{array} & \begin{array}{l}\text { Macroeconomic Principles } \\ \text { or } \\ \text { Microeconomic Principles }\end{array} \\ \hline \text { Economics } & 1101 & \text { Leadership \& Organizational Management } & 3 & \\ \hline \text { Human Resource Management } & 3101 & \text { Operations Management } & 3 & \\ \hline \text { Management Science/Operations } & 2101 & \text { Marketing Management } & 3 & \\ \hline \text { Management } & 3101 & \text { Financial Management } \\ \text { or } \\ \text { Marketing } & \text { or }\end{array}\right)$

## Suggested Semester by Semester Plans

Please note that these are suggested academic plans. Depending on your situation, your academic plan may look different.

## Bachelor of Science in Engineering Technology in Construction Management Technology

Requirements for New Students starting in the 2013-2014 Academic Year
Year 1-Fall

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Engineering | 1101 | Introduction to Engineering \& Engineering <br> Technology | 3 |  |
| Mathematics | 1022 | Precalculus | 4 |  |
| English | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | $08 x x$ or 09xx | Global/World Society | 3 | GG |
| GenEd | Race \& Diversity | 3 | GD |  |
| Semester Total |  | $\mathbf{1 7}$ |  |  |

Year 1 - Spring

| Civil Engineering | 1105 | Surveying | 2 |  |
| :--- | :--- | :--- | :---: | :---: |
| Engineering | 1117 | Engineering Graphics | 2 |  |
| Mathematics | 1031 | Differential \& Integral Calculus | 4 |  |
| Physics | 1021 | Introduction to General Physics I | 4 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Semester Total |  | $\mathbf{1 5}$ |  |  |

## Year 2 - Fall

| Construction Management | 2124 | Construction Methods \& Materials | 3 |  |
| :--- | :--- | :--- | :---: | :---: |
| Technology |  |  |  |  |
| Engineering | 2331 | Engineering Statics | 3 |  |
| Physics | 1022 | Introduction to General Physics II | 4 |  |
| GenEd | $08 x x$ or 09xx | U.S. Society | 3 | GU |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Semester Total |  | $\mathbf{1 6}$ |  |  |

## Year 2 - Spring



## Year 3 - Fall

| Construction Management <br> Technology | 3121 | Construction Estimating | 3 |  |
| :--- | :--- | :--- | :---: | :---: |
| Construction Management <br> Technology | 3123 | Construction Estimating Laboratory | 1 |  |
| Construction Management <br> Technology | 3333 | Soil Mechanics | 3 |  |
| Construction Management <br> Technology | 3396 | Environmental \& Safety Aspects of <br> Construction | 2 | WI |
| Chemistry <br> or <br> Earth \& Environmental Science | $1031 / 1033$ <br> or <br> 1001 | General Chemistry I and Lab <br> or <br> Introductory Geology | 4 |  |
| GenEd | Human Behavior |  | 3 | GB |
| Semester Total |  | $\mathbf{1 6}$ |  |  |

## Year 3 - Spring

| Construction Management <br> Technology | 3322 | Construction Planning \& Scheduling | 3 |  |
| :--- | :--- | :--- | :---: | :---: |
| Construction Management <br> Technology | 3145 | Structural Analysis | 3 |  |
| Construction Management <br> Technology | 3351 | Applied Hydraulics | 3 |  |
| English | 2696 | Technical Writing | 3 | WI |


| Engineering or <br> Finance | $\begin{gathered} 3096 \\ \text { or } \\ 3101 \end{gathered}$ | Economic Analysis or <br> Financial Management | 3 | WI |
| :---: | :---: | :---: | :---: | :---: |
| Semester Total |  |  | 15 |  |
| Year 4 - Fall |  |  |  |  |
| Construction Management Technology | 4336 | Concrete \& Masonry Design | 3 |  |
| Construction Management Technology | 4355 | Transportation Systems \& Management | 3 |  |
| Engineering Technology | 4119 | Professional Seminar | 1 |  |
| GenEd | 08xx or 09xx | The Arts | 3 | GA |
| Economics | $\begin{gathered} 1101 \\ \text { or } \\ 1102 \end{gathered}$ | Macroeconomic Principles <br> or <br> Microeconomic Principles | 3 |  |
| Elective | Xxxx | Approved Specialty Elective | 3 |  |
| Semester Total |  |  | 16 |  |
| Year 4 - Spring |  |  |  |  |
| Construction Management Technology | 4335 | Steel \& Wood Structures | 3 |  |
| Construction Management Technology | 4396 | Capstone in Construction | 3 | WI |
| Elective | xxxx | Free Elective | 2 |  |
| Elective | xxxx | Approved Specialty Elective | 3 |  |
| Elective | Xxxx | Approved Specialty Elective | 3 |  |
| Semester Total |  |  | 14 |  |
|  |  |  |  |  |
| Total Hours for Construction Management Technology: |  |  | 124 (minimum) |  |

## Cooperative Education Program

A Cooperative Education (Co-op) is an optional program available at the College of Engineering where you have the opportunity to gain professional work experience before graduation. It is designed to give you the chance to apply the knowledge learned in the classroom to real life problems. You will be exposed to the latest technology and new ideas at a worksite helping you understand your field of work more extensively. During the Co-op, you will make valuable connections with professionals in your field. A cooperative education can enhance and strengthen you academically, professionally and personally.

Below are suggested five-year plans for the Co-op program leading to the Bachelor of Science in Engineering Technology in Construction Management Technology. The minimum requirement for graduation is 127 semester hours.

## Bachelor of Science in Engineering Technology in Construction Management Technology with Cooperative Experience

Requirements for New Students starting in the 2013-2014 Academic Year

| First Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 1022 | Precalculus | 4 |  |
| Engineering | 1101 | Introduction to Engineering \& Engineering Technology | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Semester Total |  |  | 17 |  |
|  |  |  |  |  |
| Second Semester |  |  |  |  |
| Engineering | 1117 | Engineering Graphics | 2 |  |
| Mathematics | 1031 | Differential \& Integral Calculus | 4 |  |
| Civil Engineering | 1105 | Surveying | 2 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Physics | 1021 | Introduction to General Physics I | 4 |  |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Third Semester |  |  |  |  |
| Construction Management Technology | 2124 | Construction Methods \& Materials | 3 |  |
| Engineering | 2331 | Engineering Statics | 3 |  |
| Physics | 1022 | Introduction to General Physics II | 4 |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Fourth Semester |  |  |  |  |
| Construction Management Technology | 2125 | Construction Contracts \& Specifications | 3 |  |
| Construction Management Technology | 2271 | Building Systems | 3 |  |
| Civil Engineering | 2011 | Civil Engineering Materials | 2 |  |
| Engineering | 2333 | Mechanics of Solids | 3 |  |
| Statistics | 2103 | Business Statistics | 4 |  |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Fifth Semester |  |  |  |  |
| Construction Management Technology | 3121 | Construction Estimating | 3 |  |
| Construction Management Technology | 3123 | Construction Estimating Laboratory | 1 |  |
| Construction Management Technology | 3333 | Soil Mechanics | 3 |  |


| Construction Management Technology | 3396 | Environmental \& Safety Aspects of Construction | 2 | WI |
| :---: | :---: | :---: | :---: | :---: |
| $\qquad$ | $\begin{gathered} 1031 / 1033 \\ \text { or } \\ 1001 \end{gathered}$ | General Chemistry I and Lab or <br> Introductory Geology | 4 |  |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Semester Total |  |  | 16 |  |
| Sixth Semester |  |  |  |  |
| Construction Management Technology | 3322 | Construction Planning \& Scheduling | 3 |  |
| Construction Management Technology | 3145 | Structural Analysis | 3 |  |
| Construction Management Technology | 3351 | Applied Hydraulics | 3 |  |
| English | 2696 | Technical Writing | 3 | WI |
| Engineering <br> or <br> Finance | $\begin{gathered} 3096 \\ \text { or } \\ 3101 \end{gathered}$ | Economic Analysis or <br> Financial Management | 3 | WI |
| Semester Total |  |  | 15 |  |
| Seventh Semester |  |  |  |  |
| Engineering | 2181 or 3181 | Co-op Work Experience I or II | 3 |  |
|  |  |  |  |  |
| Eighth Semester |  |  |  |  |
| Engineering | 3181 | Co-op Work Experience II | 3 |  |
|  |  |  |  |  |
| Ninth Semester |  |  |  |  |
| Engineering Technology | 4119 | Professional Seminar | 1 |  |
| Construction Management Technology | 4336 | Concrete \& Masonry Design | 3 |  |
| Construction Management Technology | 4355 | Transportation Systems Management | 3 |  |
| GenEd | 08xx or 09xx | The Arts | 3 | GA |
| Economics | $\begin{gathered} \hline 1101 \\ \text { or } \\ 1102 \\ \hline \end{gathered}$ | ```Macroeconomic Principles or Microeconomic Principles``` | 3 |  |
| Semester Total |  |  | 13 |  |
| Tenth Semester |  |  |  |  |
| Construction Management Technology | 4335 | Steel \& Wood Structures | 3 |  |
| Construction Management Technology | 4396 | Capstone in Construction | 3 |  |
| Elective | xxxx | Free Elective | 2 |  |
| Elective | XXXX | Approved Specialty Elective | 3 |  |
| Elective | Xxxx | Approved Specialty Elective | 3 |  |
| Semester Total |  |  | 14 |  |
|  |  |  |  |  |

# Engineering Technology 

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## Program Objectives

This program is offered on the Main Campus with some courses available at Temple University Ambler. Students may complete all required coursework at night on the main campus. The curriculum in Engineering Technology provides a broad base of technological skills extending across the traditional fields of engineering technology with a concentration designed by the student and faculty advisor to meet personal and career objectives. A plan of study can be developed with a focused track such as construction, environmental, computer, mechatronics, or energy. Mechatronics is only available at the campus of Lehigh Carbon Community College.

The Engineering Technology Program is accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, http://www.abet.org.

## University Requirements

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

All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific writing-intensive courses required for this major are listed below and are identified by "WI" in the Attribute column.

## Foundation Science \& Math Courses in Engineering Technology

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Mathematics | 1022 | Precalculus | 4 |  |
| Mathematics | 1041 | Calculus I | 4 |  |
| Mathematics | 1042 | Calculus II | 4 |  |
| Statistics | 2103 | Business Statistics | 4 |  |
| Physics | 1021 | Introduction to General Physics I | 4 |  |
| Physics | 1022 | Introduction to General Physics II | 4 |  |
| Chemistry | 1031 | General Chemistry I | 3 |  |
| Chemistry | 1033 | General Chemistry Laboratory I | 1 |  |
| Subtotal |  |  | $\mathbf{2 8}$ |  |

## Required Communications, Humanities, \& Social Science

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| English | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| English | 2696 | Technical Writing | 3 | WI |
| Strategic Communication | 1111 | Public Speaking | 3 |  |
| GenEd | Electives | GenEd Requirements (see table below) | 21 |  |
| Economics | Microeconomic Principles | 3 |  |  |
| Subtotal |  | $\mathbf{3 4}$ |  |  |

## GenEd Requirements

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | $08 x x$ or 09xx | U.S. Society | 3 | GU |
| GenEd | $08 x x$ or 09xx | Global/World Society | 3 | GG |
| GenEd | $08 x x$ or 09xx | Human Behavior | 3 | GB |
| GenEd | 08xx or 09xx | Arts | 3 | GA |
| GenEd | $08 x x$ or 09xx | Race \& Diversity | 3 | GD |
| Subtotal |  |  | $\mathbf{2 1}$ |  |

## Required Engineering Courses for Engineering Technology

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Electrical Engineering | 2112 | Electrical Devices \& Systems I | 3 |  |
| Electrical Engineering | 2113 | Electrical Devices \& Systems I Lab | 1 |  |
| Engineering | 1101 | Introduction to Engineering \& Engineering Technology | 3 |  |
| Engineering | 1117 | Engineering Graphics | 2 |  |
| Engineering | 2331 | Engineering Statics | 3 |  |
| Engineering | 2333 | Mechanics of Solids | 3 |  |
| Engineering | 3096 | Economic Analysis | 3 | WI |
| Environment Elective |  | Choose one from the following: Environmental Studies 1051 or 1951 Environmental Studies 1052 | 3 |  |
| Engineering Technology | $\begin{gathered} 2521 \\ \text { or } \\ 3532 \\ \hline \end{gathered}$ | Applied Fluid Mechanics or Thermodynamics | 3 |  |
| Engineering Technology | 3396 | Materials Technology | 3 | WI |
| Engineering Technology | 4119 | Professional Seminar | 1 |  |
| Engineering Technology | 4161 | Capstone Project | 3 |  |
| Electives (must include 3 labs) |  | Technical Electives | 24 |  |
| Subtotal |  |  | 55 |  |
|  |  |  |  |  |
| Electives |  | Free Open Electives | 7 |  |

## Suggested Semester By Semester Plan

## Bachelor of Science in Engineering Technology

## Requirements for New Students starting in the 2013-2014 Academic Year

| Year 1 - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 1022 | Precalculus | 4 |  |
| Chemistry | 1031 | General Chemistry I | 3 |  |
| Chemistry | 1033 | General Chemistry Laboratory I | 1 |  |
| Engineering | 1101 | Introduction to Engineering \& Engineering Technology | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Semester Total |  |  | 15 |  |
| Year 1 - Spring |  |  |  |  |
| Mathematics | 1041 | Calculus I | 4 |  |
| Engineering | 1117 | Engineering Graphics | 2 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Arts | 3 | GA |
| Free | xxxx | Approved Elective | 2 |  |
| Semester Total |  |  | 14 |  |
|  |  |  |  |  |
| Year 2-Fall |  |  |  |  |
| Mathematics | 1042 | Calculus II | 4 |  |
| Physics | 1021 | Introduction to General Physics I | 4 |  |
| Strategic Communication | 1111 | Public Speaking | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Environment Elective: Choose one from the following: |  |  | 3 | GZ |
| Environmental Studies Environmental Studies | $\begin{aligned} & 1051 \text { or } 1951 \\ & 1052 \end{aligned}$ | Environment and Society Introduction to the Physical Environment |  |  |
| Semester Total |  |  | 17 |  |
| Year 2-Spring |  |  |  |  |
| Physics | 1022 | Introduction to General Physics II | 4 |  |
| Engineering | 2331 | Engineering Statics | 3 |  |
| Tech | xxxx | Approved Technical Elective | 3 |  |
| Economics | 1102 | Microeconomic Principles | 3 |  |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Year 3-Fall |  |  |  |  |
| Tech | xxxx | Approved Technical Elective | 3 |  |
| Statistics | 2103 | Business Statistics | 4 |  |
| Engineering | 2333 | Mechanics of Solids | 3 |  |
| Engineering | 3096 | Economic Analysis | 3 | WI |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |


| Semester Total |  |  | 16 |  |
| :---: | :---: | :---: | :---: | :---: |
| Year 3 - Spring |  |  |  |  |
| Engineering Technology | 3396 | Materials Technology | 3 | WI |
| Engineering Technology | $\begin{gathered} 2521 \\ \text { or } \\ 3532 \end{gathered}$ | Applied Fluid Mechanics or Thermodynamics | 3 |  |
| Engineering Technology | 4119 | Professional Seminar | 1 |  |
| Tech | xxxx | Approved Technical Elective | 3 |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Free | xxxx | Approved Elective | 3 |  |
| Semester Total |  |  | 16 |  |
| Year 4 - Fall |  |  |  |  |
| Electrical Engineering | 2112 | Electrical Devices \& Systems I | 3 |  |
| Electrical Engineering | 2113 | Electrical Devices \& Systems I Lab | 1 |  |
| English | 2696 | Technical Writing | 3 | WI |
| Tech | xxxx | Approved Lab Elective | 1 |  |
| Tech | xxxx | Approved Lab Elective | 1 |  |
| Tech | xxxx | Approved Technical Elective | 3 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Semester Total |  |  | 15 |  |
| Year 4 - Spring |  |  |  |  |
| Engineering Technology | 4161 | Capstone Project | 3 |  |
| Tech | xxxx | Approved Technical Elective | 3 |  |
| Tech | xxxx | Approved Technical Elective | 3 |  |
| Tech | xxxx | Approved Technical Elective | 3 |  |
| Tech | xxxx | Approved Lab Elective | 1 |  |
| Free | xxxx | Approved Elective | 2 |  |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Total Hours for Engineering Technology Major: |  |  | 124 | imum) |

## Cooperative Education Programs

A Cooperative Education (Co-op) is an optional program available at the College of Engineering where you have the opportunity to gain professional work experience before graduation. It is designed to give you the chance to apply the knowledge learned in the classroom to real life problems. You will be exposed to the latest technology and new ideas at a worksite helping you understand your field of work more extensively. During the Co-op, you will make valuable connections with professionals in your field. A cooperative education can enhance and strengthen you academically, professionally and personally.

Below is the five-year curriculum for the Co-op program leading to the Bachelor of Science in Engineering Technology. The minimum requirement for graduation is 127 semester hours.

## Bachelor of Science in Engineering Technology

## Requirements for New Students starting in the 2013-2014 Academic Year

| First Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 1022 | Precalculus | 4 |  |
| Chemistry | 1031 | General Chemistry I | 3 |  |
| Chemistry | 1033 | General Chemistry Laboratory I | 1 |  |
| Engineering | 1101 | Introduction to Engineering \& Engineering Technology | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Semester Total |  |  | 15 |  |
| Second Semester |  |  |  |  |
| Mathematics | 1041 | Calculus I | 4 |  |
| Engineering | 1117 | Engineering Graphics | 2 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Arts | 3 | GA |
| Free | Xxxx | Approved Elective | 2 |  |
| Semester Total |  |  | 14 |  |
|  |  |  |  |  |
| Third Semester |  |  |  |  |
| Mathematics | 1042 | Calculus II | 4 |  |
| Physics | 1021 | Introduction to General Physics I | 4 |  |
| Strategic Communication | 1111 | Public Speaking | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Environment Elective: Choose one from the following: |  |  | 3 |  |
| Environmental Studies Environmental Studies | $\begin{aligned} & 1051 \text { or } 1951 \\ & 1052 \end{aligned}$ | Environment and Society Introduction to the Physical Environment |  |  |
| Semester Total |  |  | 17 |  |
| Fourth Semester |  |  |  |  |
| Physics | 1022 | Introduction to General Physics II | 4 |  |
| Engineering | 2331 | Engineering Statics | 3 |  |
| Tech | Xxxx | Approved Technical Elective | 3 |  |
| Economics | 1102 | Microeconomic Principles | 3 |  |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Fifth Semester |  |  |  |  |
| Tech | xxxx | Approved Technical Elective | 3 |  |
| Statistics | 2103 | Business Statistics | 4 |  |
| Engineering | 2333 | Mechanics of Solids | 3 |  |
| Engineering | 3096 | Economic Analysis | 3 | WI |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Sixth Semester |  |  |  |  |
| Engineering Technology | 3396 | Materials Technology | 3 | WI |


| Engineering Technology | 2521 <br> or <br> 3532 | Applied Fluid Mechanics <br> or <br> Thermodynamics | 3 |  |
| :--- | :--- | :--- | :--- | :---: |
| Engineering Technology | 4119 | Professional Seminar | 1 |  |
| Tech | xxxx | Approved Technical Elective | 3 |  |
| GenEd | $08 \times x$ or 09xx | U.S. Society | 3 | GU |
| Free | Axxx |  | 3 |  |
| Semester Total | $\mathbf{1 6}$ |  |  |  |

## Seventh Semester

| Engineering | 2181 or 3181 | Co-op Experience I or II | 3 |  |
| :--- | :--- | :--- | :--- | :--- |
| Semester Total |  | 3 |  |  |
|  |  |  |  |  |

Eighth Semester

| Engineering | 3181 | Co-op Experience II | 3 |  |
| :--- | :--- | :--- | :--- | :--- |
| Semester Total |  | 3 |  |  |
|  |  |  |  |  |

## Ninth Semester

| Electrical Engineering | 2112 | Electrical Devices \& Systems I | 3 |  |
| :--- | :--- | :--- | :---: | :---: |
| Electrical Engineering | 2113 | Electrical Devices \& Systems I Lab | 1 |  |
| English | 2696 | Technical Writing | 3 | WI |
| Tech | xxxx | Approved Lab Elective | 1 |  |
| Tech | xxxx | Approved Lab Elective | 1 |  |
| Tech | xxxx | Approved Technical Elective | 3 |  |
| GenEd | Rexx or 09xx | Race \& Diversity | 3 | GD |
| Semester Total |  | $\mathbf{1 5}$ |  |  |


| Tenth Semester | Capstone Project | 3 |  |  |
| :--- | :--- | :--- | :---: | :---: |
| Engineering Technology | 4161 | Approved Technical Elective | 3 |  |
| Tech | xxxx | Approved Technical Elective | 3 |  |
| Tech | xxxx | Approved Technical Elective | 3 |  |
| Tech | xxxx | Approved Lab Elective | 1 |  |
| Tech | Approved Elective | 2 |  |  |
| Free |  | $\mathbf{1 5}$ |  |  |
| Semester Total |  |  |  |  |
|  |  |  |  |  |
| Total Hours for Engineering Technology Major: | $\mathbf{1 2 7}$ (minimum) |  |  |  |

## Engineering (Undeclared)

Steven M. Ridenour, Program Coordinator
Room 326, Engineering Building
215-204-8825

The College of Engineering has added an undeclared engineering program for those students interested in engineering but undecided on a particular field of study. Courses in this program have been determined for the first year only, since it is assumed that students will choose a curriculum following their first year of study.

## Summary of Requirements

## University Requirements

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

Suggested First-Year Courses for this program are:

| Foundation for Undeclared Engineering Majors | Hours | Attribute |  |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course \# | Course Title | 4 |  |
| Mathematics | 1041 | Calculus I | 4 |  |
| Mathematics | 1042 | Calculus II | 4 |  |
| Physics | 1061 | Elementary Classical Physics I | 3 |  |
| Chemistry | 1035 | Chemistry for Engineers | 1 |  |
| Chemistry | 1033 | General Chemistry Laboratory I | 4 | GW |
| English | 0802,0812 or 0902 | Analytical Reading \& Writing | 6 |  |
| GenEd |  | GenEd Requirements |  |  |


| Required First Year Engineering Courses |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Engineering | 1101 | Introduction to Engineering \& Engineering Technology | 3 |  |
| Engineering | 1117 | Engineering Graphics or | 2 |  |
| Civil Engineering | 1105 \& 1115 | Surveying and Surveying Laboratory or | 3 |  |
| Computer \& Information Science | 1057 | Computer Programming in C | 4 |  |

## SCHOOL OF ENVIRONMENTAL DESIGN

Founded 2000
Teresa Scott Soufas, Dean
School location:
580 Meetinghouse Road
Ambler, PA 19002
267-468-8000
ambler@temple.edu
www.ambler.temple.edu
See the Ambler Campus Section of this Bulletin for more information on services, facilities, and student life.

## Introduction

Temple University Ambler has been connected to sustainable concepts and environmental stewardship for over a century. In June 2000, the Temple University Board of Trustees formally recognized Ambler College (now the School of Environmental Design) located at the Ambler Campus, as the 17th academic unit of Temple University. This designation provided Ambler College with the ability to plan and develop unique programs consistent with its mission. In July 2009, Ambler College was renamed the School of Environmental Design in the College of Liberal Arts. The School of Environmental Design (SED) is the home to the Department of Community and Regional Planning, the Department of Landscape Architecture and Horticulture, and the Center for Sustainable Communities (See Special Programs and Facilities below), with plans for future academic programs to be added under the school umbrella.

The mission of the School of Environmental Design is the enhancement of the relationship between individuals, social patterns, and political systems and the natural, built, and cultural environments of contemporary life. The School of Environmental Design upholds the environmental traditions established by the Pennsylvania School of Horticulture for Women and carried forward by our founding Department of Landscape Architecture and Horticulture. As Temple University's 17th college, the School of Environmental Design has a commitment to the health of communities, the preservation and appreciation of the natural and historical landscape, and the recognition of the connections between the natural and constructed worlds. (Adopted by the Faculty, Ambler College [now the School of Environmental Design], December, 2000.) The School of Environmental Design core values are: student-centered learning, community engagement, and environmental responsibility.

The Department of Landscape Architecture and Horticulture traces its origins to the Pennsylvania School of Horticulture for Women, founded in 1911 at Ambler Campus. Originally, the department offered only two-year Associate degree programs, but in 1988 added two four-year degree programs in Landscape Architecture and Horticulture. In Fall 2010 it added a Master of Landscape Architecture (M.L.Arch.) degree. The department's evolution has
combined theory with practice, continuing the tradition of blending art and science with practical experience. Committed to excellence in ecologically-based education, the department provides students with the knowledge and understanding of sustainable environments. Through an ecological approach to planning, design, development, and care of the land, the programs in Landscape Architecture and Horticulture promote the development of skills to improve the quality of urban, suburban, and rural communities. Courses and programs are offered that utilize the 187-acre Ambler Campus as both an arboretum and a living laboratory for faculty and students. Students also have the opportunity to conduct research in a state-of-the-art greenhouse.

Established in 2001, the Department of Community and Regional Planning supports the preparation of skilled practitioners for the dynamic and growing fields of community development and community and regional planning. Through the Bachelor of Science in Community Development, students learn to understand and think critically about the social, political, economic, and cultural dynamics shaping various types of communities. Particular emphasis is given to empowering disadvantaged communities to address inequalities and improve their long-term social, economic, and environmental sustainability. The Master of Science in Community and Regional Planning cultivates an understanding of the physical and economic context of planning, sensitivity to the social and environmental impact of public policies, and knowledge of governmental structures as they apply to planning. Both degree programs enable students to lead efforts to create and maintain healthy, sustainable communities by providing a broad-based understanding and awareness of multi-dimensional aspects of urban, suburban, and rural community challenges and the means of effecting change from both grassroots and public policy perspectives.

The Ambler Campus continues to be the home of the School of Environmental Design and is also a teaching site for many courses and full degree programs sponsored by other schools and colleges of Temple University. See the Degree Programs Chart for a listing of the full degree programs and the Ambler Campus section for additional information on campus facilities and services.

## Accreditations

The Bachelor of Science in Landscape Architecture and the first professional Master of Landscape Architecture programs are both accredited by the Landscape Architectural Accreditation Board of the American Society of Landscape Architects.

The Master of Science program in Community and Regional Planning is accredited by the Planning Accreditation Board.

## Admissions Information

Ambler Admissions Office
267-468-8100
ambler@temple.edu
www.temple.edu/ambler/admissions/

A strong interest in the environment, planning, and/or design is highly desirable for students who enroll in all programs offered by the School of Environmental Design. Students interested in Community Development also should have a desire to develop computer, social science, and communications skills. Applicants to the Landscape Architecture and Horticulture programs, depending on the intended area of study, should have a background that includes courses in art, geometry, biology, and geography.
Due to the sequential nature of the required studio classes, students pursuing the Landscape Architecture degree will need to attend for at least seven semesters regardless of the amount of transfer credits accumulated, unless they are transfer students from another Landscape Architecture program.

## Lehigh Carbon Community College (LCCC) Agreement

In 2009 Lehigh Carbon Community College and the School of Environmental Design signed a program-to-program articulation agreement to facilitate the transfer of LCCC students with an Associate's in Science in Natural Science-Horticulture and Plant Science to the School of Environmental Design Bachelor of Science in Horticulture program. For details, call the Office of Academic Advising at 268-468-8200.

## Longwood Gardens Agreement

Students who graduate from the Longwood Gardens Professional Gardener Program and are admissible to Temple University may receive credits toward the Bachelor of Science degree in Horticulture. This agreement is based on an assessment of prior learning for the completion of the Longwood program and is not a course by course articulation. Call the Ambler Office of Academic Advising at 267-468-8200 or visit www.temple.edu/vpus/transfer/agreements/longwood.html for detailed information. Note: Since programs and requirements are subject to change, students are advised to consult with an advisor at Longwood Gardens.

For a listing of all Temple University articulation agreements, go to www.temple.edu/vpus/transfer/agreements.htm.

## Financial Aid and Scholarships

In addition to assistance from the Department of Student Financial Services, there are several scholarships and grants-in-aid that are available only to School of Environmental Design students: Horticulture, Landscape Architecture, Community Development, and Community and Regional Planning. Also see the Financial Aid section of this Bulletin.

## W. B. Saul High School of Agricultural Sciences Scholarships

Two scholarships, the Robert Hunt Scholarship and the William Mifflin Scholarship, are available to students graduating from Philadelphia's W. B. Saul High School who are admissible to Temple University and wish to study Horticulture, Landscape Architecture, or Community Development. Interested Saul students should contact the principal of the high school for information.

## Scholarships for All School of Environmental Design Students

Peter G. Schlotterer and Elizabeth M. Zipf Scholarships are awarded to students with financial need, with preference for giving four or more $\$ 13,000$ scholarships each year, based on need, to: one undergraduate student enrolled in either the Landscape Architecture or Horticulture program; one graduate student enrolled in the Master's of Landscape Architecture program; one graduate student enrolled in the Community and Regional Planning program; and one undergraduate or graduate student who is either taking more than $51 \%$ of his or her courses at Ambler or one graduate or undergraduate student enrolled in the School of Environmental Design.

## Grants and Scholarships for Community and Regional Planning Students

Recipients are selected by faculty members in the Department of Community and Regional Planning; there are no applications.

- Arthur F. Loeben Scholarship in Community and Regional Planning: awarded to undergraduate or graduate students who plan to enter or continue in the Community and Regional Planning programs.
- Toward Sustainability Scholarship: provides support for a sophomore or junior majoring in Community Development or Community and Regional Planning who has demonstrated a commitment to community service. Recipients must have a minimum grade point average of 2.75 or higher.


## Grants and Scholarships for Landscape Architecture and Horticulture Students

Applications for the following are available in the Department of Landscape Architecture and Horticulture office and at www.temple.edu/ambler/ac_services/scholarshipslah.htm.

- Honorable Judge David Addy Scholarship: provides tuition assistance for a current student enrolled in the School of Environmental Design, majoring in Horticulture, with financial need and a grade point average of 2.5 or above.
- Wilmer Atkinson Memorial Scholarship: provides tuition assistance of varying amounts based on academic performance and financial need.
- Louise and James Bush-Brown Alumni Scholarship: presented annually by the Alumni Association of the School of Environmental Design to a current sophomore or junior based on character, worthiness, interest in chosen vocation, and academic excellence during the past year.
- John Collins Academic Scholarship: awarded to one junior in Landscape Architecture and one junior in Horticulture based on financial need, demonstrated leadership ability, and commitment to interdisciplinary collaboration.
- Barry and Denise Cyphers Horticulture Scholarship: awarded to a Horticulture student based on financial need.
- Doylestown Nature Club Scholarship: awarded annually based on academic performance and financial need. Preference is given to students from Bucks County.
- John Paul Endicott Summer Internship: annual internship for a Temple Ambler student to manage the food crops garden and the volunteers, to harvest the produce and distribute to local area food cupboards, and to assist with events.
- Lou Henry Hoover Girl Scout Scholarship: awarded annually to a student who has been active in the Girl Scouts for at least five years and who completes an endorsement sheet obtained through the Girl Scouts Council, and has good academic standing, aptitude for horticulture, and financial need.
- Horticulture/Landscape Architecture Alumni Scholarship: funded by the Alumni Association of the School of Environmental Design and awarded to a full-time student who has completed half of the credit requirement for the major, based on financial need, academic achievement, and volunteer service contributing to the well-being of the Ambler gardens and greenhouse. (Note: Recipients are not eligible for the Louise and James Bush-Brown Alumni Scholarship.)
- Larkin Family Scholarship: renewable scholarships awarded annually to students from Maryland based on financial need.
- Jane R. Martin Memorial Scholarship: awarded to students entering their sophomore year based on academic achievement and demonstrated potential for future success in Horticulture or Landscape Architecture.
- Pennsylvania Landscape and Nursery Association (PLNA) Foundation Scholarship: tuition award to a Horticulture major, in year two of the Associate's degree program or in year three or four of the Bachelor's degree program, with a grade point average of at least 3.0 in the major and at least 2.5 cumulatively, who has excelled in projects demonstrating ability to apply the knowledge gained to real-life situations. Students are nominated by department faculty.
- Peter G. Schlotterer Ecological Restoration Scholarship: awarded annually to junior or senior students who reside in southeastern Pennsylvania and demonstrate commitment to environmental preservation and restoration. The scholarships are based on academic performance and financial need.
- Solomon Scholarship for Academic Excellence in Landscape Architecture: recognizes a minority and/or female student in Landscape Architecture who demonstrates high academic achievement and financial need.
- Lenora Friesleben Vaughan Scholarship: awarded annually to a student entering the sophomore year, based on academic performance and financial need.
- Dr. Eugene Udell Scholarship Endowment Fund: established in 2009 by the Udell Family and Friends to remember the first dean of the Ambler Campus, it provides scholarships to students in Landscape Architecture and/or Horticulture who demonstrate academic achievement and financial need.
- Val Udell Scholarship: awarded to a student enrolled in Landscape Architecture or Horticulture who demonstrates financial need and academic achievement.
- Woman's National Farm and Garden Association, National Level, Scholarship: scholarships awarded annually to female student(s) based on academic performance and financial need.
- Woman's National Farm and Garden Association, Pennsylvania Division: scholarship awarded annually to a female student, preferably from western Pennsylvania, based on academic performance and financial need.


## Special Programs and Facilities

## Ambler Arboretum of Temple University

Jenny Rose Carey, Director
Anne Brennan, Horticulture and Ambler Arboretum Supervisor
Pauline Hurley-Kurtz, R.L.A., A.S.L.A., M.L.A., Academic Director
267-468-8400
www.temple.edu/ambler/arboretum/index.htm
The Temple University Ambler Campus has a long history and rich tradition of horticulture and landscape design. Established as the Pennsylvania School of Horticulture for Women in 1911, the 187-acre campus represents a unique mix of natural and designed landscapes.

The gardens and campus serve as an excellent outdoor teaching laboratory for numerous classes and as a source of inspiration for students, faculty, and visitors. The campus was officially designated an arboretum in March 2000. Now known as the Ambler Arboretum of Temple University, this historic, public garden continues to develop as a living laboratory. The formal gardens have been revitalized to express the character of their original design, and many new garden additions are included throughout the grounds.

As the home of Temple University's Department of Landscape Architecture and Horticulture, the Ambler Campus has a myriad of learning gardens, including a ground cover garden, native plant garden, formal gardens, green roof garden, rock wall, woodland garden, sustainable wetland garden, trial garden, the Viola Anders Herb Garden, the Philip A. and Barbara F. Albright Winter Garden, the Ernesta Ballard Healing Garden with labyrinth, the Colibraro Conifer Garden, and large perennial borders. The arboretum's three areas of focus are sustainability, the health benefits of gardens, and the history of women in horticulture, agriculture, and design.

Center for Sustainable Communities (CSC) at Temple University Ambler Jeffrey Featherstone, Ph.D., Director,<br>Susan E. Spinella Sacks, M.S., Assistant Director<br>Md. Mahbubur Meenar, M.U.P., Assistant Director, Geographic Information Systems Operations and Research<br>www.csc.temple.edu

The Center for Sustainable Communities develops and promotes new approaches to protecting and preserving quality of life through sustainable development, balancing the relationship between environmental integrity, economic prosperity, and social equity. It was designed to build on Temple University Ambler's strengths in horticulture and landscape architecture and to draw upon the expertise of all Temple University faculty. A working resource for government agencies, community organizations, and developers, the center provides objective information and services to improve decision-making relative to land use and water resources planning, in addition to conducting interdisciplinary research and offering educational and community outreach programs. Students in degree programs in Community Development, Community and Regional Planning, Horticulture, Landscape Architecture, and other University programs have the opportunity to take full advantage of the CSC to obtain practical experience.

## Greenhouse

Anne Brennan, Horticulture and Ambler Arboretum Supervisor
Merrill Miller, Horticultural Technician
Kathryn Reber, Horticultural Technician
267-468-8191
www.temple.edu/ambler/about/facilities.htm\#special
The Greenhouse provides students with a first-class facility to study plant and soil science. The energy-efficient greenhouse includes computerized climate controls and thermal blankets to protect the plants in the winter and shade them in the summer. Modern fertilizer injection systems water and fertilize plants simultaneously. In addition to being used for coursework, the greenhouse provides faculty and students with a facility to conduct horticulture research that is at the forefront of the industry.

## Semester Abroad

After careful consultation with their advisors, juniors and seniors in Landscape Architecture and Horticulture and students in other School of Environmental Design programs may elect to enroll in a semester abroad. Many options are available, including the Rome or Japan campuses. For more information about Study Abroad options, see Education Abroad.

## Awards for Achievement and Honor Societies

## Academic and Leadership Awards

All Ambler Campus students are eligible to qualify for the academic and leadership awards presented annually that are described in the Ambler Campus section of this Bulletin.

The following annual awards are available to Department of Community and Regional Planning students only. Recipients are selected by faculty members in the Department of Community and Regional Planning; there are no applications.

- Community and Regional Planning Award for Academic Excellence: recognizes students for outstanding achievement in the classroom.
- Community and Regional Planning Award for Outstanding Planning Studio Leadership: recognizes leadership among Planning Studio peers, a high level of professionalism, and a strong commitment to effective planning practice.
- Community and Regional Planning Award for Outstanding Service: recognizes a Community and Regional Planning student for exceptional leadership and service that furthers planning education and professional practice.

The following annual awards are available to Department of Landscape Architecture and Horticulture students only. For applications, go to www.temple.edu/ambler/ac_services/scholarshipslah.htm

- American Society of Landscape Architects (ASLA) Student Awards of Honor and Merit: recognize students, with cumulative averages of at least 3.0, who, in the opinions of their faculty and professionals from the local ASLA chapter, have achieved a sustained level of outstanding performance in their studies and show promise of making significant contributions to the profession.
- Viola Anders Merit Award: funded by the Alumni Association of the School of Environmental Design and presented to one graduating student and one undergraduate in Horticulture or Landscape Architecture for meritorious service in the greenhouse or the Ambler Arboretum of Temple University.
- Bierhuizen Family Undergraduate Research Award: presented annually to a Horticulture student to help defray the costs associated with the Senior Research Project.
- The Emma Blakiston-Frances Lukens Book Award: for the purchase of books, given to the member of the graduating class in Horticulture and Landscape Architecture who ranks highest in academic achievement.
- John Collins Drawing Award: presented to a graduating student in Landscape Architecture, the recipient is chosen by a selection panel of three landscape architects, nominated by the Pennsylvania/Delaware Chapter of the American Society of Landscape Architects, including at least one Temple University School of Environmental Design representative.
- Landscape Architecture and Horticulture Faculty Award: presented to graduating students in Horticulture (A.S.), Horticulture (B.S.), and Landscape Architecture (B.S.) for academic excellence and personal growth during their years at Ambler.
- Philadelphia Flower Show Commendation: recognizes students for distinguished leadership and service in the planning and implementation of the department's annual exhibit.
- The Pi Alpha Xi National Honor Society Award: recognizes outstanding service and dedication to the department, school, and university by a member of Pi Alpha Xi.
- School of Environmental Design Alumni Association Award: to a graduating student in Horticulture or Landscape Architecture for dedication, unselfishness, and contribution to the School of Environmental Design.


## Landscape Architecture and Horticulture Honor Societies

Pi Alpha Xi is the national honor society for students majoring in horticulture. To be admitted to the society, a student must be a junior or senior, have a cumulative grade point average of at least 2.75 , and have a grade point average of at least 3.0 in all horticulture courses. This chapter sponsors several fundraising events during the academic year, the largest being the annual Plant Sale that takes place in early May.

Sigma Lambda Alpha is the honor society for landscape architecture majors. To be admitted to the society, a student must be a junior or be in the fifth semester of their program and have a cumulative grade point average of at least 3.2. A student who does not qualify in the junior year may be elected in the senior year.

## Student Associations

## Landscape Architecture and Horticulture Student Association

This organization, which incorporates a Pennsylvania/Delaware Student Chapter of the American Society of Landscape Architects (ASLA), holds annual fundraising events, such as plant sales, and sponsors a student-mentoring program.

## Society for Ecological Restoration (SER)

For Master of Landscape Architecture students, this society promotes Restoration Ecology worldwide through books, online networks, and conferences.

## Temple Planning Student Organization (T.P.S.O.)

The Temple Planning Student Organization is affiliated with the American Planning Association. Its mission is to promote awareness of the benefits of regional and sustainable planning by participating in educational programs, engaging in outreach through community service, and encouraging an open dialogue with the community at large. Bi-weekly meetings provide a platform for students and professors to discuss current issues related to the field of planning.

In addition, all the School of Environmental Design students may participate in the student organizations listed in the Ambler Campus section of this Bulletin.

## Academic Advising Information

## Susan McCaffrey

Director - Academic Advising
Disability Resources and Services Coordinator
Academic Advising and Career Development
West Hall 109
267-468-8200
tuaadvis@temple.edu
www.temple.edu/ambler/advising/
The Office of Academic Advising and Career Development provides access for School of Environmental Design students to both professional and faculty advisors who assist students with their choice of programs and curricula, help students understand the university and its policies and procedures, and aid students in attaining their vocational and post-graduation goals.

Students must assume primary responsibility for knowing the requirements for their degree and for acquiring current information about their academic status. Academic advisors attempt to avoid errors when advising students about their program requirements, but schools and colleges cannot assume liability for errors in advising.

Newly-admitted freshmen and transfer students are advised for their first semester by professional advisors. After their first semester, students maintaining at least a 2.0 grade point average may independently register for classes online, but they are encouraged to also meet with an advisor. A graduation review is required before a student's final semester.

The services provided by this office include:

## For New Students (Freshmen and Transfer):

- Freshmen: Academic Preview during the New Student Orientation Program.
- Transfers: required online orientation and small group information sessions.
- Academic counseling.
- Registration.


## For Continuing Students:

- Individual academic counseling.
- Academic progress reviews.
- Career development coaching and workshops.
- Curriculum advising.
- Final graduation clearance.
- Pre-professional advising.
- Transfers between colleges and campuses within the university (IUT), withdrawal, reenrollment, reinstatement and Leave of Absence interviews.
- Registration assistance.
- Veterans advising.


## For Continuing Studies (Non-Degree) Students, including Visiting and High School Students:

- Academic counseling.
- Registration.


## For Students with Disabilities:

- Documentation review.
- Accommodation arrangements.


## For Prospective Students:

- Academic counseling.
- Information sessions.


## For All Students:

- Referrals to other university programs and services.
- Information on academic grievance procedures. (Non-academic grievances should be directed to the Ambler Campus Office of Student Life.)


## Academic Policies \& Regulations

Please see Academic Policies. Students are responsible for complying with all university-wide academic policies that apply to their individual academic status. Additional and unique policies, or exceptions, for the School of Environmental Design appear below.

## Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List policy for specific GPA and credit-hour requirements.

## Leave of Absence/Re-enrollment/Reinstatement

School of Environmental Design students who wish to voluntarily withdraw from the university for one or two semesters (fall and/or spring) are strongly encouraged to apply for a Leave of Absence (LOA). If approved, these students remain eligible for the same requirements as when they declared their major and will have access to Temple e-mail, university library systems, and priority and self registration for the approved semester of return. By contrast, students who leave the university without any notice and without an approved LOA must apply to be re-enrolled and, if allowed to return, must follow the most recent university curricular requirements in place for the semester of their return. If no LOA was filed, before students return, they must indicate any course(s) taken since leaving Temple and provide a copy of an official transcript from each institution attended. Both the academic advisor and the student have the right to request an interview as part of the re-enrollment process. Students who received a medical withdrawal may be asked to provide medical documentation clearing them to return to school and to schedule an interview with an advisor before a re-enrollment decision can be made. Leave of Absence and Re-enrollment forms may be obtained in the Office of Academic Services, West Hall 102, through their academic advisor, or online. Further details can be viewed at:
http://policies.temple.edu/getdoc.asp?policy_no=02.10.16

Students who were dismissed for academic reasons should see the university policy on Academic Standing.

## Second Degrees

Students who have earned a bachelor's degree may earn a second bachelor's degree in Landscape Architecture or Horticulture, but they should also consider the Master of Landscape Architecture degree. Students who are interested in Community Development should consider enrolling in the Community and Regional Planning Master of Science degree program. Schools and colleges
may waive up to 9 credits of degree requirements outside the second major for students who already have a bachelor's degree. See Second Degrees in the Academic Policies section. For information on graduate programs, see the Graduate Bulletin.

## Student Grievance Procedures

All students have the right to adjudicate grievances concerning academic matters in a fair and expeditious manner. Consult your academic advisor for information on procedures. Nonacademic grievances should be directed to the Ambler Campus Office of Student Life. Also see Grievances at www.temple.edu/bulletin/Responsibilities_rights/rights/rights.shtm\#grievance.

## General College Graduation Requirements

Please see Academic Policies. The following policies apply to all School of Environmental Design students:

## Academic Residency Requirements

All undergraduates must take 30 of their last 45 semester hours at Temple University. Community Development majors must complete at least half of the courses required in the major at Temple. While candidates for a degree at Temple, students wishing to take academic work at another institution, either classroom or online courses offered during the regular year or in summer sessions, must have an advisor's prior approval before enrolling at the other institution. See Academic Policies.

## Courses Inapplicable to Graduation

Credits earned in the following courses are not applicable toward degrees awarded by the School of Environmental Design: ELECT, Russell Conwell Center (SRAP), Mathematics 0015, and lower-level courses in Military Science. A maximum of 4 courses or up to 12 semester hours for upper-level Military Science (Army ROTC), Naval Science (Navy ROTC), or Aerospace Studies (Air Force ROTC) courses will be applicable toward graduation credits. For the Department of Landscape Architecture and Horticulture (LAH), Horticulture 1001, unless it is the student's first LAH course or part of a successful credit certificate, is not applicable toward degree credit.

## Grades and Grade Point Average

To be awarded a School of Environmental Design degree, students must have a cumulative grade point average of at least 2.0 and pass all General Education required courses with a C- or higher. In addition, Community Development majors must pass every course required for the Community Development major with a C- or higher and have a cumulative average of at least 2.0 for all courses in the major. For degrees in Landscape Architecture and Horticulture, no more than one grade below a C - is allowed in any course in either Landscape Architecture or Horticulture and students must have a cumulative average of at least 2.0 for all courses in the major.

## Program Requirements

## Planning a Program of Study

The information in the following requirements sections is designed to provide students with guidance in planning their program of study. The requirements, electives, and, in some cases, sequences are detailed. Courses are scheduled for students to follow the planned sequence. If students do not follow their program as designed, they may face conflicts or not have required prerequisites that will necessitate enrolling for additional semesters to complete their requirements.

If students enter a program after the freshman year, they must understand that their degree requirements may not be met within the traditional eight semesters (or four semesters for the Associate's degree). When students first meet with their academic advisor, they should plan how long it will take to complete their degree requirements.

## Requirement Modifications

The requirements for the degrees are under continuing review and are, therefore, subject to modification. See the latest departmental degree requirements for any changes and meet with an advisor to ensure these changes are met.

## Additional Notes

The total number of credit hours at graduation may be greater for some students based on initial placement exams, transfer evaluations, individual curricular choices, and academic progress.

Certain courses may fulfill multiple requirements. In consultation with their academic advisor, students will be able to plan their curriculum more effectively.

Students must fulfill the necessary prerequisites for any given course or course sequence. See the Prerequisite and Co-requisite Policy in the university-wide Academic Policies section of this Bulletin.

## Important Student Contact Information

Contact information for academic departments can be found under the listing for each individual program.

Director-Academic Advising<br>Disability Resources and Services Coordinator<br>Susan McCaffrey<br>West Hall 109<br>267-468-8200<br>tuaadvis@temple.edu<br>www.temple.edu/ambler/advising/

Assistant Dean for Student Life, Ambler Campus
Wanda Lewis-Campbell, Ed.D.
Bright Hall 101
267-468-8425
e-mail: wanda.lewis-campbell@temple.edu
For other contact information, such as Financial Services, Registration, Career Services, and Disability Services, see the Ambler Campus section of this Bulletin.

An up-to-date Directory of all Temple University Ambler and School of Environmental Design personnel (name, title, office location, telephone number, and e-mail address) is available at www.temple.edu/ambler/about/directories.htm.

## Faculty and Administration

For contact information or updates, go to www.temple.edu/ambler/about/directories.htm

## Administration

Teresa Scott Soufas, Dean, College of Liberal Arts, Ph.D., Duke University
Jeffrey Featherstone, Director, Center for Sustainable Communities; Research Professor, Department of Community and Regional Planning, Ph.D., Temple University

Bonnie Frumer, Assistant Dean for Curriculum, M.A., Temple University
Deborah Howe, F.A.I.C.P., Chair and Professor, Department of Community and Regional Planning, Ph.D., University of Michigan

Pauline Hurley-Kurtz, R.L.A., A.S.L.A., Chair and Associate Professor, Department of Landscape Architecture and Horticulture, M.L.A., University of Pennsylvania

Linda M. Lowe, Director of Development and Alumni Affairs, B.A., Duquesne University
Susan McCaffrey, Director-Academic Advising; Disability Resources and Services Coordinator, M.S., Western Maryland College
Md. Mahbubur Meenar, Assistant Director, Geographic Information Systems Operations and Research, Center for Sustainable Communities; Adjunct Instructor, Department of Community and Regional Planning, M.U.P., State University of New York at Buffalo

Susan E. Spinella Sacks, Assistant Director, Center for Sustainable Communities, M.S., Temple University

Staff

Anne Brennan, Horticulture and Ambler Arboretum Supervisor, ISA Certified Arborist, B.S., The Pennsylvania State University

Merrill Miller, Horticultural Technician, A.S., Temple University
Linda Palmarozza, Department Manager, Department of Landscape Architecture and Horticulture, B.A., Rutgers, The State University of New Jersey

Kathryn Reber, Horticultural Technician, B.A., Bryn Mawr College
Karen Sapp, Coordinator, School of Environmental Design, B.A., LaSalle University
Faculty

## Community and Regional Planning

## Professor

Deborah Howe, F.A.I.C.P., Chair, Ph.D., University of Michigan
Professor (Research)
Jeffrey Featherstone, Director, Center for Sustainable Communities, Ph.D., Temple University
Associate Professor

Lynn A. Mandarano, P.E., Ph.D., University of Pennsylvania
Associate Professor (Practice)
William Cohen, F.A.I.C.P., Ph.D., University of Pennsylvania

## Assistant Professor

Bradley Flamm, Ph.D., University of California, Berkeley
Instructor

Jeffrey P. Doshna, M.C.R.P., Rutgers, The State University of New Jersey
Adjunct Instructor

Michael Carroll, M.S., M.C.P., University of California, Berkeley
James P. Creedon, M.B.A., Lehigh University

Kyle Guie, M.S., Temple University

Charles Guttenplan, A.I.C.P., M.U.R.P., University of Pittsburgh
David Manhardt, A.I.C.P., M.S., Temple University
Md. Mahbubur Meenar, M.U.P.,State University of New York at Buffalo

Dennis Livrone, M.E.P.C., The Pennsylvania State University

Joanne Walker, J.D., M.P.A., Syracuse University

Ernest Weiler, Ph.D., University of Nebraska

Emeritus Faculty

James W. Hilty
Landscape Architecture and Horticulture
Professor

Lolly Tai, R.L.A., F.A.S.L.A., Ph.D., Heriot-Watt University, Edinburgh College of Art, Scotland

Associate Professor

Pauline Hurley-Kurtz, R.L.A., A.S.L.A., Chair, M.L.A., University of Pennsylvania

Robert Kuper, R.L.A., A.S.L.A., M.L.A., Auburn University
Baldev S. Lamba, R.L.A., A.S.L.A., M.L.A., University of Pennsylvania

Mary E. Myers, R.L.A., F.C.E.L.A., A.S.L.A., Ph.D., Heriot-Watt University, Edinburgh College of Art, Scotland

Michael Olszewski, Ph.D., University of Delaware

Assistant Professor

Sasha Eisenman, Ph.D., Rutgers, The State University of New Jersey

Senior Lecturer

Eva Monheim, M.A., Arcadia University

John Munro, Certified Senior Ecologist, B.A., Eastern University

Bess Wellborn Yates, A.S.L.A., M.L.A., University of Virginia

## Adjunct Faculty

Emad Abou-Sabe, R.L.A., B.S.L.A, Rutgers, The State University of New Jersey
Anna Anisko, M.L.Arch., Temple University
Allison Brown, Ph.D., University of California, Davis
Darrell Campana, R.L.A., B.L.A., The Pennsylvania State University
John Paul Carman, F.A.S.L.A., B.S.L.A., Cook College, Rutgers, The State University of New Jersey
K. Daryl Carrington, A.I.A., Ph.D., North Carolina State University

Barry Cyphers, M.S., Widener University
Victor DePallo, M.L.A., Harvard University
Johannah Fine, M.S., University of Massachusetts, Amherst
Kristen Ford-Haaf, M.L.A., North Carolina State University; M.C.R.P., University of North Carolina at Chapel Hill

Samara Danan Gray, M.S., Texas Tech University
Jeffrey Harris, M.S. University of Pennsylvania
Carl Erik Karlsson, M.L.A. University of Pennsylvania
Philip Larsen, M.L.A., University of Pennsylvania
Michael LoFurno, B.S.L.A, The Pennsylvania State University
Jean Marcucci, A.P.L.D., M.S., Columbia University
Emily McCoy, M.L.A., North Carolina State University
Susan Mrugal, R.L.A., M.S., West Chester University
Joseph Muldowney, Registered Surveyor and Regulator, B.S., Saint Joseph's University
Julie Regnier, R.L.A., M.L.A., University of Pennsylvania
David Robertson, Ph.D., University of Pittsburgh
Margaret Schofield, M.A., Villanova University
Kevin Selger, R.L.A., A.S.L.A., M.L.A., North Carolina State University

Priscilla Shaffer, B.A., Temple University
Daniel Sharp, M.L.A. University of Texas-Austin
Derik F. Sutphin, R.L.A., M.L.A., University of Pennsylvania
Brent Whiting, B.S., Temple University
Emeritus Faculty
George H. Manaker
George Whiting

## Hans Zutter

## Certificate in Environmental Sustainability

School of Environmental Design
Academic Advising and Career Development
West Hall 109
267-468-8200
tuaadvis@temple.edu
Students who are interested in the environment and in learning how to impact the world around them positively may want to consider completing the School of Environmental Design credit Certificate in Environmental Sustainability. This certificate provides students with the basic knowledge needed to evaluate environmental problems and to draw ecologically- and economically-sound connections between environmental needs, policy issues, and current research.

The certificate is available to all undergraduate degree students to complete as part of their studies, and is also available to non-degree students. Consult a School of Environmental Design academic advisor about how the required classes fit into academic and career plans. Most courses in this certificate program are offered during the daytime at the Ambler Campus; a few courses are available in the evening at the Ambler campus. In addition, some courses are also available at the Main Campus.

This credit certificate may be conferred upon a student by recommendation of the faculty and upon satisfactory completion of the required credits with a minimum cumulative GPA of 2.0. At least one half of the courses required for the certificate must be completed at Temple University.

Note: The symbol after the course number indicates that the class is offered ONLY in the semester indicated: $\mathrm{F}=$ offered fall only; $\mathrm{FE} / \mathrm{FO}=$ offered fall of even/odd numbered years; $\mathrm{S}=$ offered spring only; $\mathrm{SE} / \mathrm{SO}=$ offered spring of even/odd numbered years; $\mathrm{O}=$ offered occasionally

| Subject | Course \# | Course Title | Hours |
| :---: | :---: | :---: | :---: |
| REQUIRED COURSES: |  |  |  |
| Landscape Architecture <br> Landscape Architecture <br> Geography \& Urban Studies | 0841 <br> or <br> 1013 (S) <br> or <br> 1051 <br> 1 | ```Sustainable Design or Natural and the Built Environment or Environment and Society``` | 3 |
| ```Earth \& Environmental Science or Botany``` |  | ```Introductory Geology or Plant Ecology``` | $\begin{gathered} \hline 4 \\ \text { or } \\ 3 \\ \hline \end{gathered}$ |
| Community \& Regional Planning | $\begin{aligned} & 1017 \\ & \boldsymbol{o r} \\ & 1027(\mathrm{~S}) \\ & \hline \end{aligned}$ | Introduction to Community and Regional Planning or <br> History and Practice of Community and Regional Planning | 3 |
| SUSTAINABILITY TOPICS - Select two (2) courses (minimum of 6 s.h.) from: |  |  | 6 |
| Community Development <br> Community \& Regional Planning <br> Community \& Regional Planning <br> Community \& Regional Planning <br> Community \& Regional Planning <br> Community \& Regional Planning <br> Community \& Regional Planning <br> Community \& Regional Planning <br> Community \& Regional Planning <br> Community \& Regional Planning <br> Community \& Regional Planning <br> Community \& Regional Planning <br> Community \& Regional Planning <br> Horticulture <br> Horticulture <br> Horticulture <br> Horticulture <br> Horticulture <br> Horticulture <br> Horticulture <br> Landscape Architecture <br> Landscape Architecture |  | Housing and Community Development (3 s.h.) <br> Planning Policy and Law (3 s.h.) <br> Urban Form and Design (3 s.h.) <br> Land Use Planning (3 s.h.) <br> Environmental Planning (3 s.h.) <br> Sustainable Food Systems Planning (3 s.h.) <br> Ecological Planning and Development (3 s.h.) <br> Sustainability in Suburban Communities (3 s.h.) <br> Sustainable Community Design and Development (3 s.h.) <br> Urban and Regional Economics for Planning (3 s.h.) <br> Transportation Planning (3 s.h.) <br> Topics in Community and Regional Planning (1-3 s.h.)* <br> Special Topics (1-3 s.h.)* <br> Food Crops I (3 s.h.) <br> Food Crops II (3 s.h.) <br> Introduction to Public Horticulture (3 s.h.) <br> Special Topics in Horticulture/Landscape Architecture I (1 s.h.)* <br> Special Topics in Horticulture/Landscape Architecture II (2 s.h.)* <br> Special Topics (1-3 s.h.)* <br> Landscape Restoration (3 s.h.)** <br> Summer Field Ecology (3 s.h.) <br> Special Topics (1-3 s.h.)* <br> Other courses may be added to this list with approval of a School of Environmental Design academic advisor. <br> *Acceptable if the topic is appropriate and approved by a School of Environmental Design academic advisor. <br> **Prerequisites are Horticulture 1211 and 1212. <br> ^Contact a School of Environmental Design advisor for information on course scheduling rotations. |  |
| Total Credits for the Certificate in Environmental Sustainability |  |  | 15-16 |

* This course has a prerequisite(s). Visit the Course Catalog at https://www.temple.edu/apply/common/catcheck.asp.


## Minor in Ecological Planning \& Design

Students in the School of Environmental Design as well as students in other colleges, schools, and departments may choose a Minor in Ecological Planning and Design. Through this minor students pursue courses which deepen their understanding of the concept of ecological planning and design. That is, they learn a process of decision making that ensures that development is compatible with natural resources and processes and that takes into consideration social, political, economic, and governance factors to achieve sustainable outcomes. This prepares students for lifelong contributions to the environmental sustainability of the communities in which they live and work. Also the minor provides undergraduates with an opportunity to explore the option of graduate studies in planning, landscape architecture, or horticulture.

The curriculum for the Minor in Ecological Planning and Design involves 18 credits, with two required foundation courses and at least four elective courses. The two foundation courses ensure that all students understand the fundamentals of natural and built systems and ecological planning. The electives allow students to explore their own interests in different facets of horticulture, landscape architecture, and planning while also gaining an appreciation of the science of ecology and the concept of ecologically-sensitive development.

A student may not double count any course for the Minor in Ecological Planning and Design toward any other major, minor, or certificate. At least half of the courses for the minor must be taken at Temple University. Students must complete successfully each course for the minor with a grade of C - or better and all of the minor courses with a cumulative average of 2.0 or higher.

Note: The symbol after the course number indicates that the class is offered ONLY in the semester indicated: $\mathrm{F}=$ offered fall only; $\mathrm{FE} / \mathrm{FO}=$ offered fall of even/odd numbered years; $\mathrm{S}=$ offered spring only; $\mathrm{SE} / \mathrm{SO}=$ offered spring of even/odd numbered years; $\mathrm{O}=$ offered occasionally

| Subject | Course \# | Course Title | Hours |
| :--- | :--- | :--- | :---: |
| Foundation courses: Select two (2) courses for a minimum of 6 hours from the following: |  |  |  |
| Botany | 1112 (S) | Plant Ecology | 3 |
| Community \& Regional Planning | $2213(\mathrm{~F})$ | Environmental Planning | 3 |
| Community \& Regional Planning | $3155(\mathrm{FE})$ | Ecological Planning and Development | 3 |
| Community \& Regional Planning | $3256(\mathrm{O})$ | Sustainable Community Design and Development | 3 |
| Landscape Architecture | 1013 (F) | Natural and the Built Environment^ | 3 |
|  |  | May not be taken by students who have successfully <br> completed GenEd LARC 0841, Sustainable Design |  |
| Landscape Architecture | 2496 (F) | Landscape Traditions | 3 |
| Electives: Select four (4) courses for a minimum of 12 hours from the following: |  |  |  |
| (Note: Foundation courses beyond the minimum required may be used as electives.) |  |  |  |
| Community Development | $2155(\mathrm{O})$ | Housing and Community Development | 3 |
| Community \& Regional Planning | 1017 | Introduction to Community and Regional Planning | 3 |
| Community \& Regional Planning | 2114 (S) | Urban Form and Design | 3 |
| Community \& Regional Planning | 2166 (FO)* | Land Use Planning | 3 |
| Community \& Regional Planning | 2524 (F) | Fundamentals of Geographic Information Systems | 3 |


| Community \& Regional Planning | 3655 (F) | Transportation Planning | 3 |
| :--- | :--- | :--- | :---: |
| Horticulture | $2552(\mathrm{~S})$ | Trees in the Urban Landscape | 2 |
| Horticulture | $3514(\mathrm{~S})^{*}$ | Landscape Restoration | Design Communications |
| Landscape Architecture | 1142 | Surveying | 3 |
| Landscape Architecture | $1244(\mathrm{~S})$ | Introduction to CAD | 3 |
| Landscape Architecture | $1544(\mathrm{~S})$ | Water Design in the City | 3 |
| Landscape Architecture | $2754(\mathrm{~S})$ | Summer Field Ecology | 2 |
| Landscape Architecture | 2758 (Summer) | Sum | 3 |
| Total |  |  | $\mathbf{1 8}$ |

* This course has a prerequisite(s). Visit the Course Catalog at https://www.temple.edu/apply/common/catcheck.asp.


## Minor in Sustainable Food Systems

Students in the School of Environmental Design as well as students in other colleges, schools, and departments may choose a Minor in Sustainable Food Systems. Through this minor students investigate the complexities of food systems through an interdisciplinary approach that includes horticulture, planning, and public health. Students explore the relationship of farmland preservation, food production practices, and supply alternatives that improve local economies, reduce energy consumption, lower environmental impact, and ensure widespread access to affordable and healthy food. This prepares students to contribute to the overall sustainability of the communities in which they live and work and strengthens students' preparation to work as professionals in environmentally-oriented fields or as citizen activists. Also the minor provides undergraduates with an opportunity to explore the option of graduate studies in planning, horticulture, or related fields.

The curriculum for the Minor in Sustainable Food Systems consists of 18 credits, with two required foundation courses and at least four elective courses. The required courses ensure that students have a strong foundation for the study of food systems including food crops, planning for food systems, and nutrition. The electives allow students to delve deeper into different facets of food systems planning.

A student may not double count any course for the Minor in Sustainable Food Systems toward any other major, minor, or certificate. At least half of the courses for the minor must be taken at Temple University. Students must complete successfully each course for the minor with a grade of C- or better and all of the minor courses with a cumulative average of 2.0 or higher.

Note: The symbol after the course number indicates that the class is offered ONLY in the semester indicated: $\mathrm{F}=$ offered fall only; $\mathrm{FE} / \mathrm{FO}=$ offered fall of even/odd numbered years; $\mathrm{S}=$ offered spring only; $\mathrm{SE} / \mathrm{SO}=$ offered spring of even/odd numbered years; $\mathrm{O}=$ offered occasionally

| Subject | Course \# | Course Title | Hours |
| :--- | :--- | :--- | :---: |
| Foundation courses: Select two (2) courses for a minimum of 6 hours from the following: |  |  |  |
| Community \& Regional Planning | 2251 (F) | Sustainable Food Systems Planning | 3 |


| Horticulture | $2334(\mathrm{~S})$ | Food Crops I | 3 |
| :--- | :--- | :--- | :---: |
| Horticulture | $2353(\mathrm{O})^{*}$ | Food Crops II | 3 |
| Public Health | 1104 | Nutrition and Health | 3 |
| Electives: Select four (4) courses for a minimum of 12 hours from the following: | 3 |  |  |
| Community \& Regional Planning | 2166 (FO)* | Land Use Planning | 3 |
| Community \& Regional Planning | 2213 (F) | Environmental Planning | 3 |
| Community \& Regional Planning | $3155(\mathrm{FE})$ | Ecological Planning and Development | 3 |
| Community \& Regional Planning | $3255(\mathrm{SO})$ | Sustainability in Suburban Communities | 2 |
| Horticulture | 1001 | Fundamentals of Horticulture | 3 |
| Horticulture | $2323(\mathrm{~F})^{*}$ | Greenhouse Management | 3 |
| Horticulture | $2324(\mathrm{~S})$ | Plant Propagation | $\mathbf{1 8}$ |
| Total |  |  |  |

* This course has a prerequisite(s). Visit the Course Catalog at https://www.temple.edu/apply/common/catcheck.asp.


## Certificate in Sustainable Food Systems

The Certificate in Sustainable Food Systems is available to all undergraduate degree students to complete as part of their studies, and is also available to non-degree students. Through this certificate students investigate the complexities of food systems through an interdisciplinary approach that includes horticulture, planning, and public health. Students explore the relationship of farmland preservation, food production practices, and supply alternatives that improve local economies, reduce energy consumption, lower environmental impact, and ensure widespread access to affordable and healthy food. This prepares students to contribute to the overall sustainability of the communities in which they live and work and strengthens students' preparation to work as professionals in environmentally-oriented fields or as citizen activists. Also the certificate provides students with an opportunity to explore the option of further studies in planning, horticulture, or related fields.

The curriculum for the Certificate in Sustainable Food Systems consists of 12 credits, with two required foundation courses and at least two elective courses. The required courses ensure that students have a strong foundation for the study of food systems including food crops, planning for food systems, and nutrition. The electives allow students to delve deeper into different facets of food systems planning. Most courses in this certificate program are offered during the daytime at the Ambler Campus; a few courses are available in the evening at the Ambler Campus. In addition, some courses are also available at the Main Campus.

This credit certificate may be conferred upon a student by recommendation of the faculty and upon satisfactory completion of the required credits with a minimum cumulative GPA of 2.0. At least one half of the courses required for the certificate must be completed at Temple University.

Note: The symbol after the course number indicates that the class is offered ONLY in the semester indicated: $\mathrm{F}=$ offered fall only; $\mathrm{FE} / \mathrm{FO}=$ offered fall of even/odd numbered years; $\mathrm{S}=$ offered spring only; $\mathrm{SE} / \mathrm{SO}=$ offered spring of even/odd numbered years; $\mathrm{O}=$ offered occasionally.

| Subject | Course \# | Course Title | Hours |
| :--- | :--- | :--- | :---: |
| Foundation courses: Select two (2) courses for a minimum of 6 hours from the following: |  |  |  |
| Community \& Regional Planning | 2251 (F) | Sustainable Food Systems Planning | 3 |
| Horticulture | 2334 (S) | Food Crops I | 3 |
| Horticulture | 2353 (O)* | Food Crops II | 3 |
| Public Health | 1104 | Nutrition and Health | 3 |
| Electives: Select two (2) courses for a minimum of 6 hours from the following: |  |  |  |
| Community \& Regional Planning | 2166 (FO)* | Land Use Planning | 3 |
| Community \& Regional Planning | 2213 (F) | Environmental Planning | 3 |
| Community \& Regional Planning | $3155(\mathrm{FE})$ | Ecological Planning and Development | 3 |
| Community \& Regional Planning | $3255(\mathrm{SO})$ | Sustainability in Suburban Communities | 3 |
| Horticulture | 1001 | Fundamentals of Horticulture | 2 |
| Horticulture | $2323(\mathrm{~F})^{*}$ | Greenhouse Management | 3 |
| Horticulture | Plant Propagation | 3 |  |
| Total |  |  | $\mathbf{1 2}$ |

* This course has a prerequisite(s). Visit the Course Catalog at https://www.temple.edu/apply/common/catcheck.asp.


## Community \& Regional Planning

Founded 2001

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There is a need in this region and throughout the nation for professionals with the skills and knowledge to positively influence the growth and revitalization of communities. The Bachelor of Science in Community Development provides students with the skills to empower culturally, economically, or geographically disadvantaged communities to address inequalities and improve their long-term social, economic, and environmental sustainability. Students learn how to engage stakeholders; assess a community's assets, needs and opportunities; plan what the community wants to achieve; and develop strategies, programs, and policies to improve the quality of life in urban, rural, and suburban communities. Learning extends beyond the classroom with hands-on experience through service learning, field research, informal gatherings, and workshops.

The Community Development program prepares students for a variety of employment opportunities including community outreach efforts; economic development; community development corporations; nonprofit organizations; private foundations; and consultants. This major also prepares students for graduate studies in planning and related fields. Community Development majors with a minimum grade point average of 3.50 will be eligible to participate in a "four plus one" program in which they may take up to four graduate courses that count toward both the bachelor's degree in Community Development and the Master of Science in Community and Regional Planning.

The Department of Community and Regional Planning offers a four-year baccalaureate program (B.S.) in Community Development, undergraduate minors in Community Development and in Community and Regional Planning, a master's program (M.S.) in Community and Regional Planning, and two graduate certificates. The Master of Science in Community and Regional Planning is accredited by the Planning Accreditation Board.

## Community Development Degree Requirements

## Bachelor of Science

The Bachelor of Science degree in Community Development may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 124 semester hours of credit with a minimum cumulative GPA of 2.0 overall and in the major. A grade of C - or higher is required in all required General Education courses and in the required courses for the major. At least half of the courses required for the major must be completed at Temple University.

## Summary of Requirements for the Degree

## 1. University requirements

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. See below for a list of the specific courses that are required for Community Development majors.
- Students must complete requirements of the university General Education (GenEd) program (35-36 s.h.)

2. Community Development (CDEV) major requirements (13 courses with minimum of 39 s.h.)

- Two (2) Fundamentals courses (6 s.h.):
o One (1) statistics course chosen from: Mathematics 1013; Sociology 1167; Psychology 1167 or Psychology 1003; or Anthropology/Sociology/Psychology/Political Science 0825
o One (1) Economics course chosen from: Economics 1001, 1101, or 1102
- Seven (7) Community Development Core courses (21 s.h.): Community Development 1113; Community Development 2155 OR Community Development 3313; Community \& Regional Planning 2524; Community Development 2596; Community Development 3113; Community Development 3197; and Community Development 4889
- Four (4) Community Development electives from the approved list (12 s.h.) See list below.


## 3. Electives (approximately 49-50 s.h.)

- Students should consult with their advisor for recommended electives.


## Suggested Semester By Semester Plan

Note: The symbol (F) or (S) after the course number indicates that the class is offered ONLY in the semester indicated: (F) = offered only in fall semester; (S) = offered only in spring semester; (FA)/(SA) = offered only in fall/spring of alternate years.

| Year 1-Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Community Development | 1113 (F) | Introduction to Community Development | 3 |  |
| English | 0802, 0812, or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Elective |  | Consult with your advisor for suggested options. | 3 |  |
| Semester Total |  |  | 17 |  |
|  |  |  |  |  |
| Year 1-Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Community Development | 2596 (S)* | Community Planning Analysis | 3 | WI |
| Fundamentals |  | Statistics course option (see above) | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Semester Total |  |  | 15 |  |
| * Writing-intensive course for the major. |  |  |  |  |
| Year 2 - Fall |  |  |  |  |
|  |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Community \& Regional Planning | 2524 (F) | Fundamentals of Geographic Information Systems | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology | 3 | GS |
| Electives |  | Consult with your advisor for suggested options. | 6 |  |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Year 2-Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Community Development <br> Community Development | 2155 (SA) <br> or <br> 3313 (SA) | ```Housing and Community Development or Community Development Finance``` | 3 |  |
| Fundamentals |  | Economics course option (see above) | 3 |  |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| GenEd | 08xx or 09xx | Science \& Technology | 3 | GS |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Semester Total |  |  | 15-16 |  |
| Year 3 - Fall |  |  |  |  |


| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Community Development | 3113 (F) | Nonprofit Management | 3 |  |
| Community Development elective |  | Select from approved list | 3 |  |
| Electives |  | Consult with your advisor for suggested options. | 9 |  |
| Semester Total |  |  | 15 |  |
| Year 3 - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Community Development elective |  | Select from approved list | 3 |  |
| Electives |  | Consult with your advisor for suggested options. | 12 |  |
| Semester Total |  |  | 15 |  |
| Year 4 - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Community Development | 3197 (F)* | Community-based Organizations | 3 | WI |
| Community Development elective |  | Select from approved list | 3 |  |
| Electives |  | Consult with your advisor for suggested options. | 9 |  |
| Semester Total |  |  | 15 |  |
| * Writing-intensive course for the major. |  |  |  |  |
|  |  |  |  |  |
| Year 4 - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Community Development | 4889 (S) | Community Development Workshop | 3 |  |
| Community Development elective |  | Select from approved list | 3 |  |
| Electives |  | Consult with your advisor for suggested options. | 10-11 |  |
| Semester Total |  |  | 16-17 |  |
| Degree Total |  |  | 124 |  |

## Suggested Sequence of Required Courses for Students Who Begin the Community Development Major as Juniors

Note: The symbol (F) or (S) after the course number indicates that the class is offered ONLY in the semester indicated: (F) = offered only in fall semester; (S) = offered only in spring semester; (FA)/(SA) = offered only in fall/spring of alternate years.

| Year 3 - Fall | Course \# | Course Title |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Subject | 1113 (F) | Introduction to Community Development | Hours | Attribute |
| Community Development | 2524 (F) | Fundamentals of Geographic Information Systems | 3 |  |
| Community \& Regional Planning |  |  |  |  |


| Fundamentals |  | Statistics course option (see above) | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Year 3 - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Community Development | 2596 (S)* | Community Planning Analysis | 3 | WI |
| Community Development | 2155 (SA) <br> or <br> 3313 (SA) | Housing and Community Development or <br> Community Development Finance | 3 |  |
| Fundamentals |  | Economics course option (see above) | 3 |  |
| Community Development elective |  | Select from approved list | 3 |  |
| * Writing-intensive course for the major. |  |  |  |  |
|  |  |  |  |  |
| Year 4 - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Community Development | 3113 (F) | Nonprofit Management | 3 |  |
| Community Development | 3197 (F)* | Community-based Organizations | 3 | WI |
| Community Development elective |  | Select from approved list | 3 |  |
| * Writing-intensive course for the major. |  |  |  |  |
|  |  |  |  |  |
| Year 4 - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Community Development | 4889 (S) | Community Development Workshop | 3 |  |
| Community Development electives |  | Select from approved list | 6 |  |

## Community Development Approved Electives List

| Subject | Course \# | Course Title | Hours |
| :---: | :---: | :---: | :---: |
| Arts/Material Culture |  |  |  |
| American Studies | 2001 | Tourism in America | 3 |
| American Studies | 2011 | The Arts in America | 3 |
| American Studies | 2012 | American Things: Introduction to Material Culture | 3 |
| American Studies | 2022 | Museums and American Culture | 3 |
| American Studies | 3011 | Photography in America | 3 |
| Community as Place |  |  |  |
| American Studies | 2021 | Philadelphia Neighborhoods | 3 |
| American Studies | 2051 | American Places: Home, City, Region | 3 |
| American Studies | 3021 | Historic Preservation in Philadelphia | 3 |
| American Studies | 3022 | Architecture, Urban Design and American Culture | 3 |
| American Studies | 3051 | American Frontiers | 3 |
| Diversity |  |  |  |
| History/Jewish Studies | 3221 | Jewish Experience in America | 3 |
| Public Health | 2203 | AIDS and Society | 3 |
| Women's Studies | 2405 | Gay and Lesbian Lives | 3 |
| Women's Studies | 3259 | Women and Poverty | 3 |
| Women's Studies | 4097 | Gender, Race, Class and the City (WI) | 3 |
| Economics and Real Estate |  |  |  |
| Community Development | 2155* | Housing and Community Development | 3 |
| Community Development | 3313* | Community Development Finance | 3 |


| Economics | $3512^{* *}$ | Public Finance | 3 |
| :--- | :--- | :--- | :---: |
| Economics | $3547^{* *}$ | Economics of Development and Growth | 3 |
| Finance | $3509^{* *}$ | Real Estate Investment and Finance | 3 |
| Real Estate | 3501 | Real Estate Fundamentals | 3 |
| Real Estate | 3502 | Real Estate Practice | 3 |

Organization and Community Management

| Adult \& Organizational Development | 2214 | Conflict and Communication | 3 |
| :--- | :--- | :--- | :---: |
| Adult \& Organizational Development | 2215 | Mediation: Principles and Practice | 3 |
| Adult \& Organizational Development | 3316 | Negotiation Processes | 3 |
| Adult \& Organizational Development | 3376 | Facilitating Group Decision-Making | 3 |
| Adult \& Organizational Development | 3396 | Organizational Communication (WI) | 3 |
| P |  |  |  |

## Planning and Sustainability

| Community \& Regional Planning | 2114 | Urban Form and Design | 3 |
| :--- | :--- | :--- | :---: |
| Community \& Regional Planning | 2213 | Environmental Planning | 3 |
| Community \& Regional Planning | 2251 | Sustainable Food Systems Planning | 3 |
| Community \& Regional Planning | 3155 | Ecological Planning and Development | 3 |
| Community \& Regional Planning | $3256^{* *}$ | Sustainable Community Design and Development | 3 |
| Community \& Regional Planning | 3555 | Internet and Digital Technologies for Community | 3 |
|  |  | Engagement |  |
| Environmental Studies/Religion | 3001 | Earth Ethics | 3 |

Social Change

| American Studies | 2031 | Radicalism in the U.S. | 3 |
| :--- | :--- | :--- | :---: |
| American Studies | 2052 | The Class Experience in America | 3 |
| American Studies | 2071 | Immigrant Experiences in America | 3 |
| American Studies | 3032 | Literature and Political Change | 3 |
| American Studies | 3033 | Courtroom in American Society | 3 |
| American Studies | $3901^{* *}$ | Honors Ideal America: Reform, Revolution and Utopia | 3 |
| History | 3108 | Modern American Social History | 3 |

Public Policy

| Political Science | 2102 | American State and Local Politics | 3 |
| :--- | :--- | :--- | :---: |
| Political Science | $3131(3196)$ | Urban Politics and Problems (WI) | 3 |
| Political Science | $3132 / 4781$ | Urban Politics / Cooperative Education Project in <br> Political Science III | 6 |
| Political Science | 3134 | The Politics of Inequality | 3 |
| Political Science | 3153 | The Politics of Poverty | 3 |

Urban Crime and Justice

| Criminal Justice | 2002 | Victims in Society | 3 |
| :--- | :--- | :--- | :---: |
| Criminal Justice | 2201 | Criminal Courts and Criminal Justice | 3 |
| Criminal Justice | 2696 | Planned Change (WI) | 3 |
| Criminal Justice | 3302 | Prisons in America | 3 |
| Criminal Justice | 3403 | Organized Crime | 3 |
| Criminal Justice | 4002 | Drugs, Crime, and Criminal Justice | 3 |
| Criminal Justice | 4003 | Urban Minorities and the Criminal Justice System | 3 |
| Criminal Justice | 4402 | Violence, Crime, and Justice | 3 |
| Criminal Justice | 4403 | Psychology and Criminal Justice | 3 |

Note: This list will be modified periodically by adding appropriate courses and categories and deleting courses no longer offered. In addition, other courses may be added to this list with the
approval of the School of Environmental Design academic advisor and the Community \& Regional Planning Department Chair.

* May be used as approved Community Development elective if not used as the required Community Development Core course.
** This course has a prerequisite(s). Visit the Course Catalog at https://www.temple.edu/apply/common/catcheck.asp.


## Minor in Community Development

Students in the School of Environmental Design (except for Community Development majors) as well as students in other colleges, schools, and departments may choose to minor in Community Development. Community Development as a field embraces both citizen activists and professionals in planned efforts to identify, enhance and create social and physical assets that increase the capacity of residents to improve their quality of life. Through this minor students undertake formal studies about community development, thereby preparing themselves for contributions as informed citizens and civically engaged professionals. The minor provides students with stronger credentials to apply for graduate level work in planning and other related fields.

In this 18 credit minor, students will learn to understand and think critically about the social, political, economic, historic, and cultural dynamics shaping various types of communities. Courses provide important knowledge, values, and skills necessary for community development work. The three electives allow students to explore interests in different facets of community development.

A student may not double count any course for the Minor in Community Development toward any other major, minor, or certificate. At least half of the courses for the minor must be taken at Temple University. Students must complete successfully each of the following courses with a grade of C - or better and a cumulative average of 2.0 or higher for all courses in the minor:

Note: The symbol (F) or (S) after the course number indicates that the class is offered ONLY in the semester indicated: $(\mathrm{F})=$ offered only in fall semester; $(\mathrm{S})=$ offered only in spring semester; $(\mathrm{FA}) /(\mathrm{SA})=$ offered only in fall/spring of alternate years.

| Subject | Course \# | Course Title | Hours |
| :--- | :--- | :--- | :---: |
| Required |  |  |  |
| Community Development | 1113 (F) | Introduction to Community Development | 3 |
|  |  |  |  |
| Select two (2) of the following: | 2155 (SA) | Housing and Community Development | 6 |
| Community Development | 2596 (S) | Community Planning Analysis (WI) |  |
| Community Development | 3113 (F) | Nonprofit Management |  |
| Community Development | 3197 (F) | Community-based Organizations (WI) |  |
| Community Development | 3313 (SA) | Community Development Finance |  |
| Community Development |  |  |  |


| Community \& Regional Planning | $2524(\mathrm{~F})$ | Fundamentals of Geographic Information Systems |  |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| Electives |  | Select three (3) Community \& Regional Planning courses <br> numbered 2000-3999 from the list of approved electives for <br> the major in Community Development | 9 |
| Total |  |  | $\mathbf{1 8}$ |

## Minor in Community \& Regional Planning

Students in the School of Environmental Design (except for Community \& Regional Planning majors) as well as students in other colleges, schools, and departments may choose to minor in Community and Regional Planning. Through this minor students undertake formal studies about public planning, thereby preparing themselves for contributions as informed citizens, civically engaged professionals, or ultimately as professional planners. The minor provides students with the background and with stronger credentials to apply for graduate level work in planning.

In this 18 credit minor, the required courses provide common background in the basics of planning, including history, theory, comprehensive planning and its components, ethics and principles of planning practice with particular emphasis on citizen participation, and exposure to a range of analytical methods for understanding community planning issues. The four electives allow students to explore interests in different facets of community planning: land use; housing; economic development; transportation; sustainability and environmental planning.

A student may not double count any course for the Minor in Community \& Regional Planning toward any other major, minor, or certificate. At least half of the courses for the minor must be taken at Temple University. Students must complete successfully each of the following courses with a grade of C - or better and a cumulative average of 2.0 or higher for all courses in the minor:

Note: The symbol (F) or (S) after the course number indicates that the class is offered ONLY in the semester indicated: $(\mathrm{F})=$ offered only in fall semester; $(\mathrm{S})=$ offered only in spring semester.

| Subject | Course \# | Course Title | Hours |
| :--- | :--- | :--- | :---: |
| Required |  |  |  |
| Community \& Regional Planning | 1017 | Introduction to Community \& Regional Planning | 3 |
| Community Development | 2596 (S) | Community Planning Analysis (WI) <br> (formerly, Community \& Regional Planning 2513) | 3 |
| Electives |  | Community \& Regional Planning | Electives |
| Select four (4) Community \& Regional Planning courses <br> numbered 1000-3999 (except Community \& Regional <br> Planning 3889). <br> Note: One of the four electives may be a course from another <br> subject approved by a School of Environmental Design <br> Advisor. | 12 |  |  |
| Total |  |  | $\mathbf{1 8}$ |

# Landscape Architecture \& Horticulture 

Founded 1958
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The Department of Landscape Architecture and Horticulture offers four-year baccalaureate degree programs in Landscape Architecture and Horticulture; a two-year Associate in Science degree in Horticulture, with a general or business emphasis; minors in Environmental Horticulture and Landscape Studies; and credit certificates in horticulture. In Fall 2010, a Master of Landscape Architecture degree was added. The undergraduate degree in Landscape Architecture and the first professional master's degree are accredited by the Landscape Architectural Accreditation Board.

With origins that trace back to the Pennsylvania School of Horticulture for Women, founded at Ambler in 1911, the department, throughout its history, has combined theory with practice. Committed to excellence in ecologically-based education, the department provides students with the knowledge and understanding of sustainable environments. Through an ecological approach to planning, design, development, and care of the land, the programs in Landscape Architecture and Horticulture promote the development of skills to improve the quality of urban, suburban, and rural communities. The unique curricula integrate horticulture and landscape architecture. A state-of-the-art greenhouse is available to students. Students and faculty also utilize the 187-acre Temple University Ambler campus as both an arboretum and living laboratory.

Careers in horticulture and landscape architecture are available in both the public and private sector. For landscape architecture graduates, careers in public landscape architecture include positions with regional, county, and city planning commissions, and park, recreation, housing, and transportation agencies. Private practice includes the design of recreational, residential, commercial, institutional, and industrial projects, as well as the overall planning of new communities. Environmental protection, historical restoration, and land reclamation efforts could also be an important part of the role of a landscape architect.

Students with a degree in horticulture could be involved in the production, use, installation, and management of plants. They may:

- Produce plants in greenhouses and nurseries for sale and landscape use.
- Design, install, and/or maintain residential, commercial, or public landscapes.
- Work in arboreta, botanic gardens, parks, or golf courses.
- Teach in a high school, community college, or university.
- Research new technologies and plants in private and public institutions.
- Work toward registration as a horticultural therapist.
- Write about plants and horticulture for articles, books, and copy on web sites.
- Work as an extension agent or specialist helping residential and commercial clients.
- Work in interior landscaping or floral design.
- Work as a sales representative for horticultural or allied industries.
- Own and operate their own business.


## Financial Aid

In addition to assistance from the Department of Student Financial Services, there are several scholarships and grants-in-aid that are available only to Landscape Architecture and Horticulture students. Applications for department scholarships are available from the Department of Landscape Architecture and Horticulture office and at www.temple.edu/ambler/ac_services/scholarshipslah.htm. Also see Financial Aid.

## Continuing Studies

The Department offers a variety of credit courses and certificate programs in the late afternoon, in the evening, and on weekends. These courses and certificates are available to degree-seeking students as well as others interested in horticulture who are not seeking a degree. It is also possible, over a period of years, to complete all of the requirements for credit certificate programs or Associate in Science in Horticulture degree by attending late afternoon, evening, and weekend classes. For many, these courses are a means of advancing their careers; for others, they are a source of personal enrichment. For more information, contact the Department of Landscape Architecture and Horticulture.

## Policies and Regulations

The following departmental policy on Class Scheduling is in addition to the university policies and regulations that apply to all undergraduate students and to the policies that apply to all School of Environmental Design students.

## Class Scheduling

The Associate's Degree in Horticulture and some of the credit certificate programs can be completed through daytime classes only or through only late afternoon, evening, and Saturday classes. Students in the bachelor's degree programs in Horticulture and Landscape Architecture will be required to take classes during regular daytime hours, with some courses available in the evening and on weekends.

## Horticulture Degree Requirements

## Horticulture Bachelor of Science

The degree of Bachelor of Science in Horticulture may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 124
semester hours of credit with a minimum cumulative GPA of 2.0 overall and in the major. No more than one grade below a C- is allowed in any course in either Landscape Architecture or Horticulture. Also, a grade of C- or higher is required in all required General Education courses.

## Summary of Requirements for the Degree

## 1. University requirements

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. See below for a list of the specific courses that are required for Horticulture majors.
- Students must complete the requirements of the university General Education (GenEd) program (29-30 s.h.)


## 2. Department of Landscape Architecture and Horticulture bachelor's degree requirements (28 s.h.)

- Nine (9) courses are required:

Landscape Architecture 1013, 1142 and 2496; Botany 1111 and 1112; Horticulture 1211, 1212 , 2114, and 3514.

## 3. Horticulture major requirements (minimum of 54 s.h.)

- Two (2) Botany courses are required (7 s.h.): Botany 2121 and 3122.
- Nine (9) Horticulture courses are required (27 s.h.): Horticulture 2221, 2222, 2323, 2324, 2334, 3423, 3424, 3523, and 4896.
- Three (3) courses from other departments are required (11 s.h.): Chemistry 1021/1023 and 1022/1024; Strategic Communication 1111 OR Adult and Organizational Development 1166.
- Three (3) Landscape Architecture, Horticulture, or Botany electives are required (minimum 9 s.h.).


## 4. Electives (approximately 12 s.h.)

Suggested Semester By Semester Plans
Note: The symbol (F) or (S) after the course number indicates that the class is offered ONLY in the semester indicated: $(\mathrm{F})=$ offered only in fall semester; $(\mathrm{S})=$ offered only in spring semester.

| Year 1 - Fall | Course \# | Course Title |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Subject | $1111(\mathrm{~F})$ | General Botany | Hours | Attribute |
| Botany |  | 4 |  |  |


| Chemistry | $1021(\mathrm{~F})$ | Introduction to Chemistry I <br> and <br> Introduction to Chemistry Laboratory I | 1 | $*$ |
| :--- | :--- | :--- | :---: | :---: |
| Chemistry | $1023(\mathrm{~F})$ | 4 | $*$ |  |
| English | 0802,0812 or 0902 | Analytical Reading and Writing | 4 | GW |
| Landscape Architecture | $1013(\mathrm{~F})$ | Natural and the Built Environment | 3 |  |
| Semester Total |  | $\mathbf{1 5}$ |  |  |

*Satisfactory completion of Chemistry 1021, 1022, 1023, and 1024 will waive the two-course GenEd Science (GS) requirement.

Year 1 - Spring

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Botany | 1112 (S) | Plant Ecology | 3 |  |
| Chemistry | 1022 (S) | Introduction to Chemistry II <br> and | 3 | $*$ |
| Chemistry | $1024(\mathrm{~S})$ | Introduction to Chemistry Laboratory II | 1 |  |
| Intellectual Heritage | Ins1 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | Quxx or 09xx | Quantitative Literacy | 4 | GQ |
| GenEd | Human Behavior | 3 | GB |  |
| Semester Total |  | $\mathbf{1 7}$ |  |  |

*Satisfactory completion of Chemistry 1021, 1022, 1023, and 1024 will waive the two-course GenEd Science (GS) requirement.

Year 2 - Fall

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Horticulture | $1211(\mathrm{~F})$ | Woody Plants I | 3 |  |
| Horticulture | $2323(\mathrm{~F})$ | Greenhouse Management | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08 xx or 09xx | Arts | $3-4$ | GA |
| GenEd | 08 xx or 09xx | U.S. Society | 3 | GU |
| Semester Total |  | $\mathbf{1 5 - 1 6}$ |  |  |

Year 2 - Spring

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Botany | $2121(\mathrm{~S})$ | Plant Physiology | 4 |  |
| Horticulture | $1212(\mathrm{~S})$ | Woody Plants II | 3 |  |
| Horticulture | $2114(\mathrm{~S})$ | Soils | Plant Propagation | 3 |
| Horticulture | $2324(\mathrm{~S})$ | Design Communications | 3 |  |
| Landscape Architecture | 1142 |  | 3 |  |
| Semester Total |  | $\mathbf{1 6}$ |  |  |

Year 3 - Fall

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Horticulture | $2221(\mathrm{~F})$ | Herbaceous Plants I | 3 |  |
| Horticulture | $3523(\mathrm{~F})$ | Landscape Management | 3 |  |
| Landscape Architecture | $2496^{* *}$ | Landscape Traditions | 3 | WI |
| Landscape Architecture/ | Elective | 1000-level or higher | 3 |  |
| Horticulture/Botany |  |  |  |  |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Semester Total |  | $\mathbf{1 5}$ |  |  |
| ** Writing-intensive course for the major. |  |  |  |  |


| Year 3-Spring |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Horticulture | 2222 (S) | Herbaceous Plants II | 3 |  |
| Horticulture | 2334 (S) | Food Crops I | 3 |  |
| Horticulture | 3514 (S) | Landscape Restoration | 3 |  |
| Strategic Communication <br> Adult \& Organizational Development | $\begin{gathered} 1111 \\ o r \\ 1166 \end{gathered}$ | ```Public Speaking or Interpersonal Communication through the Life Span``` | 3 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Year 4 - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Botany | 3122 (F) | Applied Plant Physiology | 3 |  |
| Horticulture | 3423 (F) | Applied Entomology | 3 |  |
| Horticulture | 14896*** (F) | Senior Seminar | 3 | WI |
| Landscape Architecture/ Horticulture/Botany | Elective | 1000-level or higher | 3 |  |
| Elective |  |  | 3-4 |  |
| Semester Total |  |  | 15-16 |  |
| *** Writing-intensive capstone for the major. |  |  |  |  |
|  |  |  |  |  |
| Year 4-Spring |  |  |  |  |
| Subject | Course \# | Course Name | Hours | Attribute |
| Horticulture | 3424 (S) | Applied Plant Pathology | 3 |  |
| Landscape Architecture/ Horticulture/Botany | Elective | 1000-level or higher | 3 |  |
| Electives |  |  | 9 |  |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
|  |  |  | 124 |  |

## Minor in Environmental Horticulture

Students in the School of Environmental Design as well as students in other colleges, schools, and departments may choose a Minor in Environmental Horticulture. Students complete courses related to horticultural concepts and practices which allow them to develop an understanding of the science and practice of protecting, restoring, and managing existing and natural landscape resources. This minor provides students with the opportunity to explore the option of graduate level studies in Landscape Architecture or Horticulture.

The curriculum involves 18 credits, with two required courses and at least four elective courses. The required courses give students a solid basis for understanding the fundamentals of horticulture, botany, and plant identification. The electives allow students to explore their own interests in different facets of horticulture including soils, plantscaping, and food crops.

A student may not double count any course for the Minor in Environmental Horticulture toward any other major, minor, or certificate. At least half of the courses for the minor must be taken at Temple University. Students must complete successfully each of the courses for the minor with a grade of C- or better and all of the minor courses with a cumulative average of 2.0 or higher.

Note: The symbol after the course number indicates that the class is offered ONLY in the semester indicated: $\mathrm{F}=$ offered fall only; $\mathrm{FE} / \mathrm{FO}=$ offered fall of even/odd numbered years; $\mathrm{S}=$ offered spring only; $\mathrm{SE} / \mathrm{SO}=$ offered spring of even/odd numbered years; $\mathrm{O}=$ offered occasionally

| Subject | Course \# | Course Title | Hours |
| :---: | :---: | :---: | :---: |
| Required |  |  |  |
| Horticulture | 1001 | Fundamentals of Horticulture | 2 |
| Horticulture | 2324 (S) | Plant Propagation | 3 |
| Electives | Select a minimum of 13 hours from the following courses: |  |  |
| Botany | 1111 (F) | General Botany | 4 |
| Botany | 1112 (S) | Plant Ecology | 3 |
| Horticulture | 1211 (F) | Woody Plants I | 3 |
| Horticulture | 1212 (S)* | Woody Plants II | 3 |
| Horticulture | 2114 (S)* | Soils | 3 |
| Horticulture | 2221 (F) | Herbaceous Plants I | 3 |
| Horticulture | 2222 (S)* | Herbaceous Plants II | 3 |
| Horticulture | 2256 (O) | Interior Plantscaping | 3 |
| Horticulture | 2334 (S) | Food Crops I | 3 |
| Horticulture | 2353 (O)* | Food Crops II | 3 |
| Horticulture | 2366 (O)* | Nursery Operation, Management and Production Techniques | 3 |
| Horticulture | 2552 (S) | Trees in the Urban Landscape | 2 |
| Horticulture | 2555 (O)* | Arboriculture | 3 |
| Horticulture | 2575 (SO) | Introduction to Public Horticulture | 3 |
| Horticulture | 2753 (FO) | Introduction to Horticultural Therapy | 3 |
| Horticulture | 3423 (F)* | Applied Entomology | 3 |
| Total |  |  | 18 |

* This course has a prerequisite(s). Visit the Course Catalog at https://www.temple.edu/apply/common/catcheck.asp.


## Horticulture Associate in Science

The degree of Associate in Science in Horticulture may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 60 semester hours with a minimum cumulative GPA of 2.0 overall and in the major. No more than one grade below a C- is allowed in any course in either Landscape Architecture or Horticulture.

## General Horticulture Option

This option in the Associate's Degree is for students interested in developing a well-rounded background in all areas of horticulture or specializing in a particular area of interest such as floral design, integrated pest management, or arboriculture.

## Suggested Semester By Semester Plan

Note: The symbol (F) or (S) after the course number indicates that the class is offered ONLY in the semester indicated: ( F ) = offered only in fall semester; ( S ) = offered only in spring semester; $(\mathrm{FA}) /(\mathrm{SA})=$ offered only in fall/spring of alternate years.

| Year 1 - Fall |  |  |  |
| :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours |
| Botany | 1111 (F) | General Botany | 4 |
| Horticulture | 1001 | Fundamentals of Horticulture | 2 |
| Horticulture | 1211 (F) | Woody Plants I | 3 |
| English | 0802, 0812 or 0902 | Analytical Reading and Writing | 4 |
| Mathematics | $\begin{array}{\|c} \hline 0701 \\ \text { or } \end{array}$ | Elementary Algebra or | 3-4 |
| GenEd | $\begin{aligned} & 08 \mathrm{xx} \text { or } 09 \mathrm{xx} \\ & \text { or } \\ & \text { 10nt } \end{aligned}$ | Quantitative Literacy or |  |
| Statistics |  | Pre-Calculus for Business Students |  |
| Semester Total |  |  | 16-17 |
|  |  |  |  |
| Year 1 - Spring |  |  |  |
| Subject | Course \# | Course Title | Hours |
| Botany | 1112 (S) | Plant Ecology | 3 |
| Horticulture | 1212 (S) | Woody Plants II | 3 |
| Horticulture | 2334 (S) | Food Crops I | 3 |
| Landscape Architecture/Horticulture/Botany | Electives | 1000-level or higher | 5-6 |
| Semester Total |  |  | 14-15 |
|  |  |  |  |
| Year 2 - Fall |  |  |  |
| Subject | Course \# | Course Title | Hours |
| Horticulture | 2221 (F) | Herbaceous Plants I | 3 |
| Horticulture | 2323 (F) | Greenhouse Management | 3 |
| Horticulture | 3423 (F) | Applied Entomology | 3 |
| Horticulture | 3523 (F) | Landscape Management | 3 |
| Landscape Architecture/Horticulture/Botany | Elective | 1000-level or higher | 3 |
| Semester Total |  |  | 15 |
|  |  |  |  |
| Year 2 - Spring |  |  |  |
| Subject | Course \# | Course Title | Hours |
| Horticulture | 2114 (S) | Soils | 3 |
| Horticulture | 2222 (S) | Herbaceous Plants II | 3 |
| Horticulture | 2324 (S) | Plant Propagation | 3 |
| Horticulture | 3424 (S) | Applied Plant Pathology | 3 |
| Landscape Architecture/Horticulture/Botany | Elective | 1000-level or higher | 3 |
| Semester Total |  |  | 15 |
|  |  |  |  |
| DEGREE TOTAL |  |  | 60-62 |

## Horticulture Business Option

This option in the Associate's Degree is for students interested in developing a background in landscape horticulture and in business.

## Suggested Semester By Semester Plan

Note: The symbol (F) or (S) after the course number indicates that the class is offered ONLY in the semester indicated: ( F ) = offered only in fall semester; (S) = offered only in spring semester; (FA)/(SA) = offered only in fall/spring of alternate years.

| Year 1 - Fall |  |  |  |
| :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours |
| Horticulture | 1211 (F) | Woody Plants I | 3 |
| Economics | 1101 | Macroeconomic Principles | 3 |
| English | 0802, 0812 or 0902 | Analytical Reading and Writing | 4 |
| Legal Studies | 0856 <br> or <br> 1101 <br> or <br> 1102 | ```Law and American Society or Legal Environment of Business or Legal Contracts``` | 3 |
| Statistics | 1001 | Pre-Calculus for Business Students | 3 |
| Semester Total |  |  | 16 |
|  |  |  |  |
| Year 1-Spring |  |  |  |
| Subject | Course \# | Course Title | Hours |
| Botany | 1112 (S) | Plant Ecology | 3 |
| Horticulture | 1212 (S) | Woody Plants II | 3 |
| Accounting | 2101 | Financial Accounting | 3 |
| Elective |  | Economics 1102: Microeconomic Principles, strongly recommended | 3 |
| Human Resource Management | 1101 | Leadership and Organizational Management | 3 |
| Semester Total |  |  | 15 |
|  |  |  |  |
| Year 2 - Fall |  |  |  |
| Subject | Course \# | Course Title | Hours |
| Horticulture | 2221 (F) | Herbaceous Plants I | 3 |
| Horticulture | 3423 (F) | Applied Entomology | 3 |
| Marketing | 2101 | Marketing Management | 3 |
| Horticulture | Elective | Select two (2) : <br> Horticulture 2323 (F): Greenhouse Management <br> Horticulture 2366 (FA): Nursery Management <br> Horticulture 2555 (FA): Arboriculture <br> Horticulture 3523 (F): Landscape Management | 6 |
| Semester Total |  |  | 15 |
|  |  |  |  |
| Year 2 - Spring |  |  |  |
| Subject | Course \# | Course Title | Hours |
| Horticulture | 2114 (S) | Soils | 3 |
| Horticulture | 3424 (S) | Applied Plant Pathology | 3 |


| English | 2007 | Writing for Business and Industry | 3 |
| :---: | :---: | :---: | :---: |
| Risk Management \& Insurance | 2101 | Introduction to Risk Management | 3 |
| Horticulture | Electives | Select one (1): <br> Horticulture 2222 (S), Herbaceous Plants II Horticulture 2565 (SA), Turf Management Horticulture 3514 (S), Landscape Restoration | 3 |
| Semester Total |  |  | 15 |
|  |  |  |  |
| DEGREE TOTAL |  |  | 61 |

## Credit Certificates in Horticulture

Credit certificates are available to all undergraduate degree students to complete as part of their studies, regardless of their majors. All certificates are available also to non-degree-seeking students. Consult an academic advisor about how the required classes fit into academic and career plans.

Credit certificates may be conferred upon a student by recommendation of the faculty and upon satisfactory completion of the required credits for the specific topic area with a minimum cumulative GPA of 2.0 overall. At least one half of the courses required for the certificate must be completed at Temple University.

Note: The symbol (F) or (S) after the course number indicates that the class is offered ONLY in the semester indicated: ( F ) = offered only in fall semester; $(\mathrm{S})=$ offered only in spring semester; $(\mathrm{FA}) /(\mathrm{SA})=$ offered only in fall/spring of alternate years.

## Horticultural Therapy

This credit certificate course sequence meets the horticultural therapy course content required by the American Horticultural Therapy Association (AHTA) for registration as a Horticultural Therapist. View the AHTA web site (www.ahta.org) for ADDITIONAL requirements for the Voluntary Professional Registration program as a Horticultural Therapist, such as supervised experience. Required courses are:

| Subject | Course \# | Course Title | Hours |
| :--- | :--- | :--- | :---: |
| Horticulture | 1001 <br> or <br> 1651 | Fundamentals of Horticulture <br> or <br> Art of Floral Design I | 2 |
| Horticulture | 1651 | 3 |  |
| Horticulture | 2221 (F) | Herbaceous Plants I | 3 |
| Horticulture | 2753 (FA) | Introduction to Horticultural Therapy | 3 |
| Horticulture | 2754 (SA) | Horticultural Therapy Skills | 3 |
| Horticulture | 2755 (FA)* | Horticultural Therapy Program Management | 3 |
| Total Credits for the Temple Ambler Horticultural Therapy Certificate | $\mathbf{1 4 - 1 5}$ |  |  |

[^3]
## Landscape Plants

This credit certificate provides a brief introduction to the areas of horticulture and an intensive learning experience in both woody and herbaceous landscape plants. Learning the names and usage of plants provides a deeper understanding for anyone interested in gardening and landscaping. For the professional, it provides the essential knowledge of plants needed to design high-quality landscapes for clients. For the hobbyist, it provides information that enriches the gardening experience. Required courses are:

| Subject | Course \# | Course Title | Hours |
| :--- | :--- | :--- | :---: |
| Horticulture | 1001 | Fundamentals of Horticulture | 2 |
| Horticulture | $1211(\mathrm{~F})$ | Woody Plants I | 3 |
| Horticulture | $1212(\mathrm{~S})^{*}$ | Woody Plants II | 3 |
| Horticulture | $2221(\mathrm{~F})$ | Herbaceous Plants I | 3 |
| Horticulture | $2222(\mathrm{~S})^{*}$ | Herbaceous Plants II | 3 |
| Total Credits for the Landscape Plants Certificate | $\mathbf{1 4}$ |  |  |

* This course has a prerequisite(s). Visit the Course Catalog at https://www.temple.edu/apply/common/catcheck.asp.


## Native Perennial Garden Design

This credit certificate provides information that enriches the residential planting design experience. Certificate courses provide learning experiences with fundamentals of horticulture, herbaceous plants, and planting design. The skills necessary for a well designed and maintained residential perennial garden will be gained from learning plant identification, cultural conditions, and appropriate use of plants and planting design. Required courses are:

| Subject | Course \# | Course Title | Hours |
| :--- | :--- | :--- | :---: |
| Horticulture | 1001 | Fundamentals of Horticulture | 2 |
| Landscape Architecture | 1142 | Design Communications | 3 |
| Horticulture | $2221(\mathrm{~F})$ | Herbaceous Plants I | 3 |
| Horticulture | $2222(\mathrm{~S})^{*}$ | Herbaceous Plants II | 3 |
| Horticulture | $2666(\mathrm{~S})^{*}$ | Designing with Perennials <br> (Prerequisite: Horticulture 2221) | 3 |
| Total Credits for the Native Perennial Garden Design Certificate | $\mathbf{1 4}$ |  |  |

* This course has a prerequisite(s). Visit the Course Catalog at https://www.temple.edu/apply/common/catcheck.asp.

Other credit certificate areas are under consideration. See the Department of Landscape Architecture and Horticulture web site for the latest information.

# Landscape Architecture 

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## Bachelor of Science

The degree of Bachelor of Science in Landscape Architecture may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 124 semester hours of credit with a minimum cumulative GPA of 2.0 overall and in the major. No more than one grade below a C- is allowed in any course in either Landscape Architecture or Horticulture. Also, a grade of C- or higher is required in all required General Education courses.

## Summary of Requirements for the Degree

## 1. University requirements

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. See below for a list of the specific courses that are required for Landscape Architecture majors.
- Students must complete the requirements of the university General Education (GenEd) program (29-30 s.h.).


## 2. Department of Landscape Architecture and Horticulture requirements (28 s.h.)

- Nine (9) courses are required:

Landscape Architecture 1013, 1142, and 2496; Botany 1111 and 1112; Horticulture 1211, 1212, 2114 and 3514.

## 3. Landscape Architecture Major requirements (minimum of $\mathbf{6 0}$ s.h.)

- $\quad$ Seven (7) Landscape Architecture courses are required (21 s.h.):

Landscape Architecture 1244, 1544, 2241, 2242, 3243, 3345, and 3644.

- Six (6) Landscape Architecture studios are required (36 s.h.):

Landscape Architecture 2143, 2144, 3145, 3146, 4147, and 4198.

- One (1) Landscape Architecture, Horticulture, or Botany elective is required (minimum of 3 s.h.).


## 4. Electives (approximately 6 s.h.)

## Suggested Semester By Semester Plans

Note: The symbol (F) or (S) after the course number indicates that the class is offered ONLY in the semester indicated: $(\mathrm{F})=$ offered only in fall semester; $(\mathrm{S})=$ offered only in spring semester.

| Year 1 - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Landscape Architecture | 1013 (F) | Natural and the Built Environment | 3 |  |
| Botany | 1111 (F) | General Botany | 4 | * |
| English | 0802, 0812 or 0902 | Analytical Reading and Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Semester Total |  |  | 15 |  |
| *Satisfactory completion of Botany 1111 and Horticulture 2114 will waive the two-course GenEd Science (GS) requirement. |  |  |  |  |
|  |  |  |  |  |
| Year 1 - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Landscape Architecture | 1142 | Design Communications | 3 |  |
| Landscape Architecture | 1244 (S) | Surveying | 3 |  |
| Landscape Architecture | 1544 (S) | Introduction to CAD | 3 |  |
| Botany | 1112 (S) | Plant Ecology | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Year 2-Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Landscape Architecture | 2143 (F) | Landscape Architecture Design Studio I | 6 |  |
| Landscape Architecture | 2241 (F) | Landscape Engineering I | 3 |  |
| Landscape Architecture | 2496** | Landscape Traditions | 3 | WI |
| Horticulture | 1211 (F) | Woody Plants I | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Semester Total |  |  | 18 |  |
| ** Writing-intensive course for the major. |  |  |  |  |
| Note concerning tuition charges for 18 s.h.: |  |  |  |  |
| Credits in excess of 17 s.h. are additionally assessed at the per semester hour tuition rate. |  |  |  |  |
|  |  |  |  |  |
| Year 2 - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Landscape Architecture | 2144 (S) | Landscape Architecture Design Studio II | 6 |  |
| Landscape Architecture | 2242 (S) | Landscape Engineering II | 3 |  |
| Horticulture | 1212 (S) | Woody Plants II | 3 |  |
| Horticulture | 2114 (S) | Soils | 3 | * |
| Semester Total |  |  | 15 |  |


| *Satisfactory completion of Botany 1111 and Horticulture 2114 will waive the two-course GenEd Science (GS) requirement. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Year 3-Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Landscape Architecture | 3145 (F) | Landscape Architecture Design Studio III | 6 |  |
| Landscape Architecture | 3243 (F) | Landscape Engineering III | 3 |  |
| Landscape Architecture | 3345 (F) | Planting Design | 3 |  |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
|  |  |  |  |  |
|  |  |  |  |  |
| Year 3-Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Landscape Architecture | 3146 (S) | Landscape Architecture Design Studio IV: Design/Build | 6 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Year 4-Fall (Ambler, Japan, or Rome Option) |  |  |  |  |
| Ambler Option |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Landscape Architecture | 4147 (F) | Landscape Architecture Design Studio V: Fall Senior Studio | 6 |  |
| Landscape Architecture/ Horticulture/Botany | Elective | 1000-level or higher | 3 |  |
| GenEd | 08xx or 09xx | Global/World Society*** | 3 | GG |
| Elective |  |  | 3 |  |
| Semester Total |  |  | 15 |  |
| *** Students who satisfy an approved overseas option may substitute an elective. |  |  |  |  |
| OR |  |  |  |  |
| Japan or Rome Option |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Landscape Architecture | 4147 (F) | Landscape Architecture Design Studio V: Fall Senior Studio | 6 |  |
| Electives |  |  | 9 |  |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Year 4-Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Landscape Architecture | 3644 (S) | Professional Practice | 3 |  |
| Landscape Architecture | 4198**** (S) | Landscape Architecture Design Studio VI: Spring Senior Studio | 6 | WI |
| Horticulture | 3514 (S) | Landscape Restoration | 3 |  |
| Elective |  | (Note: Students who attend a semester in Japan or Rome must take a Landscape Architecture, Horticulture, or Botany elective at 1000 -level or higher.) | 3 |  |
| Semester Total |  |  | 15 |  |


| $* * * *$ Writing-intensive capstone for the major. |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
| Degree Total |  |  | $\mathbf{1 2 4}$ |  |  |  |  |  |

## Minor in Landscape Studies

Students in the School of Environmental Design as well as students in other colleges, schools, and departments may choose a Minor in Landscape Studies. Through this minor, students complete courses that deepen their understanding of the relationship between the natural landscape and the human made environment, but without the professional focus of the bachelor's degree in Landscape Architecture. The minor prepares students for lifelong contributions as informed, civically-engaged, and environmentally-conscious citizens. Also it allows students the opportunity to consider pursuing a graduate level degree in Landscape Architecture.

The curriculum for the Minor in Landscape Studies involves 18 credits, with two required courses and four elective courses. The required courses ensure that all students have a solid understanding of the fundamentals of Landscape Studies, including history, theory, and the relationship between the natural and built environments. The four electives allow students to explore their own interests in different facets of Landscape Studies.

A student may not double count any course for the Minor in Landscape Studies toward any other major, minor, or certificate. At least half of the courses for the minor must be taken at Temple University. Students must complete successfully each of the courses for the minor with a grade of C - or better and all of the minor courses with a cumulative average of 2.0 or higher.

Note: The symbol after the course number indicates that the class is offered ONLY in the semester indicated: $\mathrm{F}=$ offered fall only; $\mathrm{FE} / \mathrm{FO}=$ offered fall of even/odd numbered years; $\mathrm{S}=$ offered spring only; $\mathrm{SE} / \mathrm{SO}=$ offered spring of even/odd numbered years; $\mathrm{O}=$ offered occasionally

| Subject | Course \# | Course Title | Hours |
| :--- | :--- | :--- | :---: |
| Required |  |  |  |
| Landscape Architecture | 1013 (F) | Natural and the Built Environment ^ | 3 |
|  |  | May not be taken by students who have successfully <br> completed GenEd Landscape Architecture 0841, Sustainable Design. <br> These students may substitute an elective from below. |  |
| Landscape Architecture | 2496 | Landscape Traditions | 3 |
| Electives | Select four (4) courses with a minimum of 12 hours from the following: |  |  |
| Botany | 1112 (S) | Plant Ecology | 3 |
| Community \& Regional <br> Planning | 2524 (F) | Fundamentals of Geographic Information Systems | 3 |
| Horticulture | 1211 (F) | Woody Plants I | 3 |
| Horticulture | $1212(\mathrm{~S})$ | Woody Plants II | 3 |
| Horticulture | 2552 (S) | Trees in the Urban Landscape | 2 |
| Landscape Architecture | 1142 | Design Communications | 3 |
| Landscape Architecture | 1244 (S) | Surveying | 3 |


| Landscape Architecture | 1544 (S) | Introduction to CAD | 3 |
| :--- | :--- | :--- | :---: |
| Landscape Architecture | 2457 (O) | American Traditions of Landscape Architecture | 3 |
| Landscape Architecture | $2758^{*}$ | Summer Field Ecology | 3 |
| Total |  |  | $\mathbf{1 8}$ |

* This course has a prerequisite(s). Visit the Course Catalog at https://www.temple.edu/apply/common/catcheck.asp.


## COLLEGE OF HEALTH PROFESSIONS \& SOCIAL WORK

Founded 1966

Catherine V. Coyle, Ph.D., Interim Dean<br>College of Health Professions and Social Work<br>Health Sciences Campus<br>3307 N. Broad Street<br>215-707-4800<br>http://chpsw.temple.edu

## Vision Statement

The College of Health Professions and Social Work aspires to be a global leader in the discovery, dissemination and integration of health and social welfare related research, practice and teaching. Our diverse population of students and highly recognized faculty seek to enhance the quality of life for all.

## Mission Statement

The College of Health Professions and Social Work prepares future generations of professionals through discovery, ethical practice and lifelong learning.

Since its inception in 1966, the college has prepared well-rounded practitioners who are sensitive to patient/client needs and whose professional competence is built on a solid foundation of theory, laboratory practice, and clinical fieldwork/internships. The college offers undergraduate programs that include Athletic Training, Health Information Management, Kinesiology, Linguistics, Nursing, Public Health, Speech, Language \& Hearing Science, Therapeutic Recreation and Social Work. Students graduating with a B.S. degree from Health Information Management, Kinesiology, Nursing, Public Health, or Therapeutic Recreation meet the entrylevel requirements of their professions and are qualified to take state and/or national examinations leading to certification or licensure in their fields.

## Admissions

Those seeking undergraduate admission to the programs in the College of Health Professions and Social Work must apply through Temple's Undergraduate Admissions office
(www.temple.edu/undergrad/). Prospective students who wish to obtain additional information about our programs are encouraged to visit the College's web site at http://chpsw.temple.edu or send an e-mail to the Office of Enrollment and Student Services at OESS1@temple.edu.

## Admission to Athletic Training, Kinesiology, Linguistics, Public Health, Social Work, Speech, Language \& Hearing, Therapeutic Recreation

Entering undergraduates, whether freshmen or transfers from other institutions, are admitted to these programs by submitting an application to Temple University's Undergraduate Admissions office. Decisions are based on a review of the applicant's academic credentials. Current Temple students may also enter these programs by applying for a change of program within the university. Interested students should direct admission questions to the Office of Enrollment and Student Services by e-mail to OESS1@temple.edu or to the specific department of interest to them. Current Temple students interested in transfer to one of these majors should review the relevant section below, which describes the required change of major sessions.

## Admission to the Nursing Program

Temple's BSN program is a four-year program enabling students to begin fieldwork experience during their first year. The BSN program provides three entry options depending on students' background and education. There is a freshman option for highly-qualified high school graduates. Space permitting, the BSN program accepts a limited number of transfer students from current Temple students or from external applicants enrolled in another college or university. Internal transfer admission decisions are highly competitive and made on a space available basis. This transfer option requires students to begin the nursing program as a first-year nursing student. Students admitted via this option will spend eight semesters in Temple's BSN program entering the program in the fall semester. This option is recommended for Temple students with less than 30 college credits. For more information about admission to Temple's BSN program visit http://chpsw.temple.edu/nursing/academic-programs/bs-nursingprogram/admissions.

## Admission to the Health Information Management Program

Prospective first-year students can apply directly to Pre-Health Information Management within the College of Health Professions and Social Work. Students following this path should pay careful attention to the requirements and meet with their academic advisor.

During the fall of the sophomore year, students interested in admission to Health Information Management must apply to the program. Applications may be made prior to completing all of the prerequisites and General Education courses and should be received one year prior to admission into the professional program. However, prior to starting the professional program in Health Information Management, a student must complete all pre-professional college work, which includes the University General Education (GenEd) Curriculum and all program prerequisites at Temple University or another university or college. The student must achieve transferable grades in all prerequisites and have a competitive grade point average (GPA) for initial
consideration. For more information, prospective students should visit http://chpsw.temple.edu/him/degrees-offered.

Current Students transferring to Athletic Training, Kinesiology, Linguistics, Public Health, Speech, Language \& Hearing Science, Social Work, or Therapeutic Recreation

Current Temple students interested in transferring into Athletic Training, Kinesiology, Linguistics, Public Health, Social Work, Speech, Language \& Hearing Science, or Therapeutic Recreation must attend a Change of Program session. These are listed on the College of Health Professions and Social Work web site under Student Advising (http://chpsw.temple.edu/chpsw/students/student-advising). Applications will not be processed until the student attends the required Change of Program session. A minimum GPA of 2.0 is required for admission to any of these programs.

## Current Temple University Students Applying to Health Information Management

Temple students who want to learn more about the program can contact the Health Information Management Advisor at 215-204-2037. Those ready to apply to the program should contact the Health Information Management Department at 215-707-4811 or via e-mail at hlthinfo@temple.edu. Students must send the application and a $\$ 15.00$ application fee to the Health Information Management Department and must comply with all admission requirements of the program. Applicants are notified of a final decision in a letter from the College of Health Professions and Social Work. An acceptance letter will include the departmental required courses to be taken when applicable and the semester in which study is to begin. Students will be requested to confirm their acceptance of admission with a $\$ 100.00$ tuition deposit.

## Academic Advising

The College of Health Professions and Social Work has an extensive system of academic advising provided by professional and faculty advisors. Professional Advisors, coordinated by the Associate Director for Advisement, are located in each department, where they provide assistance with such topics as: registration, course scheduling, and transfer credits, as well as referral to other resources. For a complete listing of our professional advising staff, visit the Student Advising web site at http://chpsw.temple.edu/chpsw/students/student-advising.

In most departments, when students reach junior or senior standing, they are assigned to faculty advisors who assist with mentoring as students progress in their professional training.

Academic advisors strive to avoid errors when advising students about program requirements; however, the College cannot assume liability for errors in advising. Students must, therefore, assume primary responsibility for knowing the requirements for their degree and for acquiring current information about their academic status.

## Academic Policies \& Regulations

Students are responsible for complying with all university-wide academic policies that apply to their individual academic status (Please see the Undergraduate Academic Policies). Additional and unique policies, or exceptions for the College of Health Professions and Social Work, appear below.

## Attendance

The College of Health Professions and Social Work desires to promote professional responsibility among its students. It is therefore the policy of the college to place the responsibility for class attendance upon the students. Students are accountable for all work missed due to absence. Instructors are not required to make special arrangements or examinations for students who are absent. There are certain courses that require a minimum number of hours of student participation in laboratory or clinical experiences, as established by the professional accrediting agency and/or the academic department concerned. At the beginning of each such course, the department shall make the attendance requirement clearly known to the enrolled students. Excessive absences may, at the option of the department, jeopardize the student's grade and/or continuance in the course. If, in the opinion of the department, a student is absent to the point of endangering his or her successful completion of a course, an official warning shall be issued through the department. If the absences continue, the student may receive a failing grade.

## Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List policy for specific GPA and credit-hour requirements.

## Ethics

Since students of the College of Health Professions and Social Work are enrolled in professional programs, they are expected to abide by standards of professional conduct and behavior at all times.

## Program Performance

The grading system is in accordance with the system adopted by Temple University. For students enrolled in this college, a grade of C is the lowest acceptable final grade in major courses. Students not achieving a grade of C or better are required to repeat those courses in which they have failed to demonstrate acceptable performance.

## Student Code of Professional Conduct

The College of Health Professions and Social Work prepares practitioners to fulfill their ideals of service in health or social service settings. In attaining these goals, practitioners must demonstrate exemplary professional behavior, as this is the keystone of the professional associations of the disciplines within this college. The Code of Conduct of Temple University's College of Health Professions and Social Work is intended to contribute to an environment in which excellence in learning and conduct may be fostered.

All terms of the Students' Rights, Code of Conduct, and Disciplinary Procedures for Temple University apply to students within the College of Health Professions and Social Work. In addition to the major violations noted by the University code, another action has been identified by the faculty of the college as constituting a major infraction of the code: "Unethical conduct or intentional neglect of duty on clinical practice."

## College Graduation Requirements

For the College of Health Professions and Social Work, see the individual programs of study for graduation requirements.

## Military Science Courses

Undergraduate students in the College of Health Professions and Social Work whose degree programs allow for free electives may apply up to 12 credits of military science courses at the 3000 and 4000 levels in Aerospace Studies (Air Force ROTC), Military Science (Army ROTC), and Naval Science (Navy ROTC).

## Student Contact Information

Undergraduate students with general questions are asked to contact the College's Office of Enrollment and Student Services (OESS) at 215-707-4800 or via e-mail to OESS1@temple.edu. For questions about academic requirements, students should contact the departmental academic advisor. For a list of advisors visit http://chpsw.temple.edu/chpsw/students/student-advising. For contact information for specific departments, visit the College web site at http://chpsw.temple.edu/. Please select the links on the left of that page for additional department and program information.

## Faculty and Student-Related Administration

## Administration

Catherine V. Coyle, Ph.D., Interim Dean
Catherine V. Coyle, Ph.D., Associate Dean for Faculty and Academic Affairs
Gail G. Glicksman, Ph.D., Assistant Dean for Enrollment and Student Services

Link Martin, M.S.W., Assistant Dean for Entrepreneurship and Innovation Emily A. Keshner, Ed.D., Director of Research Strategy

## Administration: Office of Enrollment and Student Services

Gail G. Glicksman, Ph.D., Assistant Dean for Enrollment and Student Services Shelley Osagie, M.Ed., Associate Director of Student Services and Operations Gradette Willis, M.S.W., Associate Director for Advisement
Mark Rohland, Ph.D., Assistant Director for Student Records

## Communication Sciences \& Disorders

## Professor

Carol Scheffner Hammer, Ph.D., Chair, The University of Iowa
Aquiles Iglesias, Ph.D., The University of Iowa
Nadine Martin, Ph.D., Temple University

## Associate Professor

Camillia Keach, Ph.D., University of Massachusetts
Rena Krakow, Ph.D., Yale University
Brian McHugh, Ph.D., University of California at Los Angeles
Gerry Stefanatos, D.Phil., Oxford University

## Assistant Professor (Teaching/Instructional)

Sarah Key-DeLyria, Ph.D., University of Florida
Assistant Professor (Teaching/Instructional)
Paula O'Day, Ph.D., Temple University
Doris Fallon Snyder, M.A., Temple University
Instructor (Teaching/Instructional)
Ann Addis, M.A., Northwestern University
Robin Aronow, M.A., University of Delaware
Beth Levine, M.A., Boston University
Bridget Mancano, M.A., Temple University
Kim Banson Sabourin, M.A., University of Maryland
Jamie Schissel, M.A.T., Georgetown University
Health Information Management
Associate Professor (Teaching/Instructional)
Margaret M. Foley, Ph.D., MBA, RHIA, CCS, Temple University

## Assistant Professor (Teaching/Instructional)

Kesa Bond, M.S., RHIA, St. Joseph University
Cathy A. Flite, M.Ed., RHIA, Widener University
Michael Kevin Harrington, M.S., CHP, California College for Health Sciences
Cindy Joy Marselis, M.S., MBA, RHIA, Interim Chair, Temple University
Karen McBride, M.S., RHIA, Philadelphia University

## Kinesiology

## Professor

John Jeka, Ph.D., Chair, Florida Atlantic University
Zebulon Kendrick, Ph.D., Temple University
Michael Sachs, Ph.D., Florida State University
Michael Sitler, Ed.D., New York University

## Associate Professor

Mayra Santiago, Ph.D., University of Minnesota
Ricky Swalm, Ph.D., Temple University

## Assistant Professor

Joon Park, Ph.D., University of Maryland, College Park
Vanessa Yingling, Ph.D., University of Waterloo
Assistant Professor (Teaching/Instructional)
Casey Breslin, Ph.D., Auburn University
Lois Butcher-Poffley, Ph.D, Temple University
Jeffrey Gehris, Ph.D., Temple University
Margo Greicar, Ed.D.., Bowling Green State University
Jamie Mansell, Ph.D., Temple University
John Raffin, Ph.D., Temple University
Thomas Rooney, Ph.D., Temple University
Anne Russ, Ph.D., Temple University
Ryan Tierney, Ph.D., Temple University
Instructor (Teaching/Instructional)
John Susko, B.S., Temple University

Nursing

## Professor

Nancy Rothman, R.N., Ed.D., Independence Foundation Professor, Temple University

## Associate Professor

Susan B. Dickey, R.N., Ph.D., University of Pennsylvania
Jane Kurz, R.N., Ph.D., Interim Chair, University of Delaware

Professor (Teaching/Instructional)
Elayne DeSimone, PhD, RN, CRNP, Adelphi University
Associate Professor (Teaching/Instructional)
Elizabeth Elkind, Ph.D., MSN, MBA, RN, Capella University
Rhonda Maneval, M.S.N., D.Ed., RN, Pennsylvania State University
Dolores Zygmont, R.N., Ph.D., Temple University

## Assistant Professor (Teaching/Instructional)

Michael Clark, Dr.NP, RN, CRNP, Drexel University

Patricia DiGiacomo, MSN, RN, Temple University
Elizabeth Elkind, Ph.D., M.S.N., M.B.A., Capella University
Susan Gresco, MSN, RN, CRNP, University of Pennsylvania
Monika Jelic, M.S.N., M.P.H., RN, CRNP, Boston University
Anne-Marie Kiehne, R.N., M.S.N., Ph.D. Temple University
Norma Mann, MSN, RN, CRNP, University of Medicine and Dentistry of New Jersey
Carlene McAleer, MSN, MS, RN, CRNP, Hahnemann University
Michael McIntosh, Ph.D., R.N., Temple University
Lori Prol, MSN, RN,, CRNP Rutgers University
Eleana Shipman, MSN, RN, Villanova University
Barbara Stephens, M.S.N., RN, Temple University
Instructor (Teaching/Instructional)
Rita Ann Laske, M.S.N., The Catholic University of America
Arlene Solnick, M.S.N., Drexel University

## Public Health

## Professor

Ian A. Greaves, B.Med.Sc., M.B., B.S.
Thomas F. Gordon, Ph.D., Michigan State University
Alice Hausman, Ph.D., Chair, SUNY-Binghamton; MPH, Harvard University
Stephen Lepore, Ph.D., University Of California at Irvine
Grace Ma, Ph.D., University of Oklahoma
Jay Segal, Ph.D., Ohio State University
Robert Whitaker, MD, Johns Hopkins University

## Associate Professor

Bradley N. Collins, Ph.D., Binghamton University
Adam Davey, Ph.D., Pennsylvania State University
Jennifer Fisher, Ph.D., Pennsylvania State University
Nikki Franke, Ed.D., Temple University
Clara Haignere, Ph.D., University of Denver; M.P.H., Columbia University; CHES
Jennifer K. Ibrahim, Ph.D., University of California-Berkeley
Deborah Brooks Nelson, Ph.D., University of Pittsburgh

## Associate Professor (Teaching/Instructional or Research)

Sarah Bass, Ph.D., Temple University
Eugene Komaroff, Ph.D., University of Miami

## Assistant Professor

Katherine Bauer, Ph.D., University of Minnesota
Mark H. Weir, Ph.D., Drexel University
Assistant Professor (Teaching/Instructional)
Jessica Boyer, MPH, Temple University
Freda Patterson, Ph.D., Temple University
Sheldon Watts, Ph.D., New York University
Mike F. Weaver, Dr. PH., University of South Carolina

Natasha Williams, Ed.D., Columbia University

Instructor (Teaching/Instructional or Clinical)<br>Moriah Hall, MPH, Temple University<br>Cindy Liao, MPH, Drexel University<br>Sylvia Twersky-Bumgardner, MPH, Tulane University<br>Caitlin Wolak, MPH, Temple University

Rehabilitation Sciences: Therapeutic Recreation and Occupational Therapy

## Professor

Mark Salzer, Ph.D., LP, Chair, University of Illinois
Catherine Coyle, Ph.D., CTRS, Temple University

## Associate Professor

Ruth Farber, MSW, Ph.D., OTR/L, Temple University

## Assistant Professor

Gretchen Snethen, PhD, LRT/CTRS, Indiana University

## Associate Professor (Teaching/Instructional)

Judith Parker-Kent, OTD, EdS, OTR/L, FAOTA, Creighton University
Elizabeth Pfeiffer, Ph.D., OTR/L, BCP, Nova Southeastern University
Assistant Professor (Teaching/Instructional)
Elaine Hatala, Ph.D., CTRS, Temple University
Pei-Chun Hsieh, PhD, CTRS, Indiana University
Ivelisse Lazzarini, OTD, OTR/L, Creighton University
Susanne Lesnik-Emas, Ed.D., CTRS, Temple University
Rhonda Nelson, Ed.M., CTRS, Temple University
Heather Porter, PhD, CTRS, Temple University
Fern Silverman, BSOT, EdD, OTR/L, Arcadia University
Gena Vargas, Ph.D., CTRS, Clemson University

## Instructor (Teaching/Instructional)

Anne Doloff, M.S.Ed., CTRS, Temple University
Carlos Moreno, MS, OTR/L, Temple University
Nannette Vliet, Ed.M., CTRS, Temple University

## School of Social Work

Refer to the School of Social Work's Faculty page in this Bulletin for a complete listing: www.temple.edu/bulletin/Academic_programs/schools_colleges/ssa/intro/faculty/ssa_faculty.sht m

## Emeritus Faculty

## Professor

Nellie M. Bering
Hyman L. Dervitz
Jill B. Derstine
Catherine Dietz
Laurinda Harman
Amy Blatchford Hecht
Reinhardt Heuer
Helen L. Hopkins
Joan B. Liebler
Roberta Newton
Elaine O. Patrikas
Olive J. Rich
Sheryl Burt Ruzek
John Shank
Katherine Shephard
Ann Van Sant
Frances Ward
Wanda C. Wilkes
Jean H. Woods

## Associate Professor

Dana G. Close
Moya Kinnealy
Linda Levy
Gary Milsark
C. Thomas North

Elizabeth G. Tiffany
Donna Weiss

## Assistant Professor

Fredra H. Gaines
Charles C. Hampton
Lewis O. Ingersoll
Ruth M. Ingersoll
Dolores S. Patrinos
Carole J. Simon

## Communication Sciences \& Disorders

Rena Krakow, Ph.D.
Weiss Hall 217
Telephone: 215-204-8407
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http://chpsw.temple.edu/commsci/home

The Department of Communication Sciences and Disorders offers two majors: one in Speech, Language \& Hearing Science and one in Linguistics.

1. The total number of credit hours at graduation may be greater for some students based on initial placement exams, transfer evaluations, individual curricular choices, and academic progress.
2. Certain courses fulfill multiple requirements. In consultation with your advisor, you will be able to plan your curriculum more effectively.
3. Students must fulfill the necessary prerequisites for any given course or course sequence. See the Prerequisite and Co-requisite Policy in the Academic Policies section of this Bulletin.

Bachelor of Arts degrees in the Department of Communication Sciences and Disorders (CSCD) may be conferred upon a student by recommendation of the faculty upon the satisfactory completion of 122 semester hours of credit. A grade of $\mathbf{C}$ is the lowest acceptable final grade for courses required in the majors. A grade of C- (C Minus) is the lowest acceptable grade in GenEd courses. The Department of Communication Sciences and Disorders requires that students show a basic level of proficiency in a language other than English. This requirement may be met by taking college-level courses up to or beyond the equivalent of the 1002-level or by showing similar knowledge through a placement examination. Students may take two semesters of American Sign Language to satisfy this requirement. Students in the department must elect one of two majors: Speech, Language \& Hearing Science; or Linguistics. Students who complete either of these majors may graduate with distinction in the department if they meet the requirements outlined below. In addition to the majors in Speech, Language \& Hearing Science and Linguistics, the department also offers a minor. Enrollment of minors in departmental courses is subject to availability.

## University Requirements

All students are required to complete the university's General Education (GenEd) curriculum.
All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific writing-intensive courses required for this major are listed below and are identified by "WI" in the Attribute column.

## Summary of Requirements for Graduation with Distinction in the Major

1. GPA of 3.5 or better
2. No grade below $B$ in the major
3. Completion of an honors paper at the end of a 3-credit independent study (Communication Sciences \& Disorders 4979) during which the student will engage in an empirical study or library research in the field of Communication Sciences and Disorders under the supervision of an honors advisor.
4. Completion of 20 hours of volunteer work, internship, or fieldwork in consultation with the honors advisor.

## B.A. in Speech, Language \& Hearing Science

## Speech, Language, \& Hearing Science Major: Summary of Requirements

## 1. University requirements

- All Temple students must take a minimum of two writing-intensive courses as part of the major. See below for a list of the specific courses that are required for Speech-LanguageHearing majors.
- Students must complete the requirements of the General Education (GenEd) program.


## 2. Major Requirements

- Communication Sciences \& Disorders 1108, 2197, 2201, 2209, 2219, 3233, 3234, 3235, 3301, 4301, 4396
- Courses in Related Discipline (Psychology 1001, Psychology 2301)
- Course in Biological Science (Biology 1001 or 1012 required)
- 2 semesters of a foreign language at the introductory level or one at the intermediate level


## 3. Recommended Elective

- Physics 0872 (Science of Sound) is not required for the major, but is recommended to fulfill an ASHA physical science requirement for post-graduate work, and will also fulfill one of the two GenEd Science \& Technology requirements.
- Statistics is part of the content of Communication Sciences \& Disorders 2201
(Introduction to Communication Research). An additional statistics course is not required for the major, but is recommended to fulfill an ASHA statistics requirement for postgraduate work. Recommended statistics courses are: Psychology 1003 (Statistics for Psychology), Psychology 1004 (Critical Thinking in Psychology), or Public Health 2219 (Biostatistics and Public Health).

Speech, Language \& Hearing Science Major: Required Courses in the Major

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
|  <br> Disorders | 1108 | Introduction to Linguistics (Fall [F], Spring [S], <br> Summer [SS] | 3 |  |
|  <br> Disorders | 2197 | Communication Deviations \& Disorders (F, S) | 3 | WI |
|  <br> Disorders | 2201 | Introduction to Communication Research (F, S) | 3 |  |
|  <br> Disorders | 2209 | Phonetics \& Phonology (F, S) (Prerequisite: <br> Communication Sciences \& Disorders 1108) | 4 |  |
|  <br> Disorders | 2219 | Psycholinguistics (F) (Prerequisite: Communication <br> Sciences \& Disorders 1108) | 4 |  |
|  <br> Disorders | 3233 | Basic Speech Science (F, S) (Prerequisite: <br> Communication Sciences \& Disorders 2209) | 4 |  |


|  <br> Disorders | 3234 | Basic Hearing Science (F, SS) | 4 |  |
| :--- | :--- | :--- | :---: | :---: |
|  <br> Disorders | 3235 | Human Neuroscience (F, S) | 4 |  |
|  <br> Disorders | 3301 | Speech \& Language Development (F, S) <br> (Prerequisites: Communication Sciences \& Disorders <br> 1108, 2209, 2219) | 3 |  |
|  <br> Disorders | 4301 | Principles of Audiology (F, S) (Prerequisite: <br> Communication Sciences \& Disorders 3234) | 3 |  |
|  <br> Disorders | 4396 | Orientation to Clinical Management (F, S) <br> (Prerequisites: Senior Status; Communication <br> Sciences \& Disorders 2209, 2219, 3301) | 3 | WI* $^{*}$ |
| Total |  |  | $\mathbf{3 8}$ |  |

*Indicates writing capstone for major
Speech, Language \& Hearing Science Major: Required Courses, Related Areas

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Psychology | 1001 | Introduction to Psychology (F, S, SS) | 3 |  |
| Psychology | 2301 | Foundations of Developmental Psychology (F, S, SS) | 3 |  |
| Biology* | 1001 <br> or <br> 1012 | Human Biology (F, S, SS) | 4 |  |
| Total |  | General Biology II (F, S, SS) | 4 |  |

*Another course in biological science may be substituted with advisor approval.
Suggested Semester-by-Semester Plan for the B.A. in Speech, Language \& Hearing Science Requirements for Students Starting in Academic Year 2013-2014

| Year 1- Fall (Term 1) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Communication Sciences \& Disorders | 1108 | Introduction to Linguistics (F, S, SS) | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Elective |  | Free Elective | 3 |  |
| Semester Total |  |  | 17 |  |
|  |  |  |  |  |
| Year 1- Spring (Term 2) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Elective |  | Elective | 3 |  |
| Communication Sciences \& Disorders | 2209 | Phonetics \& Phonology (F, S) | 4 |  |
| Elective |  | American Sign Language/Foreign Language | 3-4 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Semester Total |  |  | 13-14 |  |
|  |  |  |  |  |
| Year 2 - Fall (Term 3) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |


| Communication Sciences \& Disorders | 2201 | Introduction to Communication Research (F, S) | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Communication Sciences \& Disorders | 2219 | Psycholinguistics (F) | 4 |  |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Elective |  | American Sign Language/Foreign Language | 3-4 |  |
| Semester Total |  |  | 16-17 |  |
|  |  |  |  |  |
| Year 2- Spring (Term 4) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Communication Sciences \& Disorders | 2197 | Communication Deviations \& Disorders (F, S) | 3 | WI |
| Communication Sciences \& Disorders | 3235 | Human Neuroscience (F, S) | 4 |  |
| Biology | $\begin{gathered} 1001 \\ \text { or } \\ 1012 \end{gathered}$ | $\begin{aligned} & \text { Human Biology } \\ & \text { or } \\ & \text { General Biology II } \end{aligned}$ | 4 |  |
| Psychology | 1001 | Introduction to Psychology | 3 |  |
| Semester Total |  |  | 17 |  |

Year 3 - Fall (Term 5)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Elective |  | Free Elective | 3 |  |
| Communication Sciences <br> \& Disorders | 3234 | Basic Hearing Science (F, S) | 4 |  |
| Psychology |  |  |  |  |
| GenEd | Foundations of Developmental Psychology | 3 |  |  |
| Elective | Science \& Technology I * | 3 | GS |  |
| Semester Total | Free Elective | 3 |  |  |

Year 3 - Spring (Term 6)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Communication Sciences <br> \& Disorders | 3233 | Basic Speech Science (F, S) | 4 |  |
| Communication Sciences <br> \& Disorders | 3301 | Speech \& Language Development (F, S) | 3 |  |
| GenEd | 08 xx or 09xx | Arts | $3-4$ | GA |
| GenEd | 08 xx or 09xx | Global/World Society | 3 | GG |
| GenEd | Science \& Technology II | 3 | GS |  |
| Semester Total |  | $\mathbf{1 6 - 1 7}$ |  |  |

Year 4 - Fall (Term 7)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Communication Sciences <br> \& Disorders | 4301 | Principles of Audiology (F, S) | 3 |  |
| Elective |  | Free Elective | 3 |  |
| Elective |  | Free Elective | 3 |  |
| Elective |  | Free Elective | 3 |  |


| Elective |  | Free Elective | 3 |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
| Semester Total |  | 15 |  |  |  |
|  |  |  |  |  |  |
| Year 4 - Spring (Term 8) | Course \# | Course Title | Hours | Attribute |  |
| Subject | Orientation to Clinical Management (F, S) | 3 | WI |  |  |
| Communication Sciences <br> \& Disorders | 4396 |  |  |  |  |
| Elective |  | Free Elective | 3 |  |  |
| Elective | Free Elective | 3 |  |  |  |
| Elective |  | 3 |  |  |  |
| Semester Total |  | $\mathbf{1 2}$ |  |  |  |
|  |  |  |  |  |  |
| Total Credits Required for B.A. in Speech-Language-Hearing: | $\mathbf{1 2 2}$ |  |  |  |  |

* Physics 0872 (Science of Sound) is not required for the major, but is recommended to fulfill an ASHA physical science requirement for post-graduate work, and will also fulfill one of the two GenEd Science \& Technology requirements.


## B.A. in Linguistics

## Linguistics Major: Summary of Requirements

## 1. University requirements

- All Temple students must take a minimum of two writing-intensive courses as part of the major. See below for a list of the specific courses that are required for Linguistics majors.
- Students must complete the requirements of the General Education (GenEd) program.


## 2. Major Requirements

- Communication Sciences \& Disorders 1108, 2049, 2201, 2209, 2219, 3233, 3297, 3301, 4397
- At least three elective courses chosen from the Electives list below. These are referred to as "required electives." Other courses may be substituted with advisor approval.
- 2 semesters of a foreign language (including American Sign Language) beyond those numbered "1002."


## 3. Recommended Electives

- A variety of excellent electives is available through the Departments of Philosophy and Psychology (College of Liberal Arts), and the TESOL (Teaching English to Speakers of Other Languages) program (College of Education). Students should consult their advisors for specific course recommendations.


## Linguistics Major: Required Courses in the Major

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Communication Sciences <br> \& Disorders | 1108 | Introduction to Linguistics (F, S, SS) | 3 |  |
| Communication Sciences <br> \& Disorders | 2049 | Language \& the Brain (S) | 3 |  |
| Communication Sciences <br> \& Disorders | 2201 | Introduction to Communication Research (F, S) | 3 |  |
| Communication Sciences <br> \& Disorders | 2209 | Phonetics \& Phonology (F, S) <br> (Prerequisite: Communication Sciences \& Disorders 1108) | 4 |  |
| Communication Sciences <br> \& Disorders | 2219 | Psycholinguistics (F) <br> (Prerequisite: Communication Sciences \& Disorders 1108) | 4 |  |
| Communication Sciences <br> \& Disorders | 3233 | Basic Speech Science (S) <br> (Prerequisite: Communication Sciences \& Disorders 2209) | 4 |  |
| Communication Sciences <br> \& Disorders | 3297 | Syntax (S) | 3 | WI |
| Communication Sciences <br> \& Disorders | 3301 | Speech \& Language Development (F, S) <br> (Prerequisites: Communication Sciences \& Disorders <br> $1108, ~ 2209, ~ 2219) ~$ | 3 |  |
| Communication Sciences <br> \& Disorders | 4397 | Fieldwork in Linguistics (F, S) <br> (Prerequisites: Communication Sciences \& Disorders <br> 2209, 3297) | 3 | WI* |
| Total |  | 30 |  |  |

*Indicates writing capstone for major

## Linguistics Major, electives - must take at least Three (3)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Communication Sciences <br> \& Disorders | 2111 | Language and Race (F) | 3 |  |
| Communication Sciences <br> \& Disorders | 2197 | Communication Deviations \& Disorders (F, S) | 3 | WI |
| Communication Sciences <br> \& Disorders | 2202 | Sociolinguistics (S) | 3 |  |
| Communication Sciences <br> \& Disorders | 3235 | Human Neuroscience (F, S) | 4 |  |
| Communication Sciences <br> \& Disorders | 5729 | Language \& Deafness (SS) | 3 |  |
| English | 3822 | Semantics (S) | 3 |  |
| English | 3823 | History of the English Language (SS) | 3 |  |
| Anthropology | 2507 | Fundamentals of Linguistic Anthropology (F, S, SS) | 3 |  |
| Philosophy | 3211 | Intermediate Logic (F) | 3 |  |
| Psychology | 2101 | Foundations of Cognitive Psychology (F, S, SS) | 3 |  |
| Other courses may be taken as electives with approval of advisor. |  |  |  |  |

## Suggested Semester-by-Semester Plan for the B.A. in Linguistics

Requirements for Students Starting in Academic Year 2013-2014

| Year 1-Fall (Term 1) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Communication Sciences \& Disorders | 1108 | Introduction to Linguistics (F, S, SS) | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Elective |  | Foreign Language | 3-4 |  |
| Semester Total |  |  | 14-15 |  |
|  |  |  |  |  |
| Year 1-Spring (Term 2) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| $\begin{aligned} & \text { Communication Sciences } \\ & \text { \& Disorders } \end{aligned}$ | 2209 | Phonetics \& Phonology (F, S) | 4 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| Elective |  | Foreign Language | 3-4 |  |
| Semester Total |  |  | 13-15 |  |
|  |  |  |  |  |
| Year 2-Fall (Term 3) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| $\begin{aligned} & \text { Communication Sciences } \\ & \text { \& Disorders } \end{aligned}$ | 2219 | Psycholinguistics | 4 |  |
| GenEd | 08xx or 09xx | U.S. Society |  | GU |
| GenEd | 088x or 09xx | Human Behavior | 3 | GB |
| Elective |  | Free Elective | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Year 2-Spring (Term 4) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Science \& Technology I * | 3 | GS |
| $\begin{aligned} & \text { Communication Sciences } \\ & \text { \& Disorders } \end{aligned}$ | 2201 | Introduction to Communication Research (F, S) | 3 |  |
| Elective |  | Required Elective | 3-4 |  |
| Elective |  | Free Elective | 4 |  |
| Semester Total |  |  | 16-17 |  |
|  |  |  |  |  |
| Year 3-Fall (Term 5) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Communication Sciences \& Disorders | 3301 | Speech \& Language Development (F, S) | 3 |  |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| Elective |  | Required Elective | 3 |  |


| Elective |  | Free Elective | 4 |  |
| :---: | :---: | :---: | :---: | :---: |
| Semester Total |  |  | 16 |  |
| Year 3 - Spring (Term 6) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Communication Sciences \& Disorders | 2049 | Language \& the Brain (S) | 3 |  |
| Communication Sciences <br> \& Disorders | 3233 | Basic Speech Science (F, S) | 4 |  |
| Communication Sciences \& Disorders | 3297 | Syntax (S) | 3 | WI |
| Elective |  | Required Elective | 3 |  |
| Elective |  | Free Elective | 3 |  |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Year 4 - Fall (Term 7) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Elective |  | Free Elective | 4 |  |
| Elective |  | Free Elective | 3 |  |
| Elective |  | Free Elective | 3 |  |
| Elective |  | Free Elective | 3 |  |
| Elective |  | Free Elective | 3 |  |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Year 4 - Spring (Term 8) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Communication Sciences \& Disorders | 4397 | Fieldwork in Linguistics (F, S) | 3 | WI |
| Elective |  | Free Elective | 3 |  |
| Elective |  | Free Elective | 3 |  |
| Elective |  | Free Elective | 3 |  |
| Elective |  | Free Elective | 3 |  |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Total Credits Required for B.A. in Linguistics: |  |  | 122 |  |

## Communication Sciences \& Disorders Minor Requirements

Five courses are required in the department.

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Communication Sciences \& Disorders | 2111 | Language \& Race (S) | 3 |  |
| Communication Sciences \& Disorders 2197 | Communication Deviations \& Disorders (F, S) | 3 | WI |  |
| Communication Sciences \& Disorders | 2209 | Phonetics \& Phonology (F, S) | 4 |  |
|  |  |  |  |  |
| Select one of the following: |  |  |  |  |
| Communication Sciences \& Disorders | 1108 | Introduction to Linguistics (F, S, SS) | 3 |  |
| Communication Sciences \& Disorders | 2219 | Psycholinguistics (F) | 4 |  |


|  |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
| Plus, select one of the following: |  |  |  |  |
| Communication Sciences \& Disorders 3297 | Syntax (S) | 3 | WI |  |
| Communication Sciences \& Disorders 3301 | Speech \& Language Development (F, S) | 3 |  |  |

## Health Information Management

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Health Information Management (HIM) is focused on the development, implementation, management and maintenance of patient health information systems in accordance with legal, regulatory and accrediting agencies' requirements for health care data collection and dissemination. HIM professionals have a special role in making sure that patient information remains confidential and maintained in a manner that ensures the patient's privacy and that health care information is secure. A career in HIM combines interests in medicine, management, information technology, electronic health record systems, and finance. HIM professionals design and management health information systems, with special attention to quality and privacy of health information, in a wide range of settings such as hospitals, managed and ambulatory care, insurance and pharmaceutical companies, consulting firms, and public health organizations.

The Bachelor of Science in Health Information Management (BSHIM) includes classes covering six main areas:

- Core HIM: Health Record Documentation, Legal Aspects of HIM, Internships, Healthcare Delivery Systems, and Professional Development
- Data Analytics: HIM IT Fundamentals, Electronic Health Record Systems, Informatics, and Database Development and Design
- Management: Leadership and Strategy, Human Resource, Operations, and Project Management
- Classification and Reimbursement: ICD-10, CPT4, Intermediate Coding, and Reimbursement
- Clinical Medicine: Pathophysiology, Medical Terminology, Clinical Procedures, and Pharmacology
- Internships: Professional Practice Internship (one full day per week for five weeks at a facility in the Delaware Valley) and Management Internship (four weeks at a facility outside of the area where you will be participating in solving a management project at that organization. Examples of internship sites include: University of Pennsylvania Health System, Thomas Jefferson University Hospital, NYU Medical Center, Johns Hopkins Hospital, and the Philadelphia Eagles.)


## Certification

Students enrolled in the HIM program and in the last term of study are eligible to apply for and sit for the examination of the American Health Information Management Association for the nationally recognized certification as a Registered Health Information Administrator (RHIA).

Following satisfactory completion of all course requirements, the graduate is awarded the degree of Bachelor of Science in Health Information Management.

## Accreditation

The baccalaureate program in Health Information Management at Temple University is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM).

## Requirements

This is an upper-level program. Students are admitted in the fall of the junior year and must have 55 credits completed by the fall semester of admission to the program. Transfer students must have their transfer credits evaluated by the Admissions Office and must meet general and prerequisite requirements of the program.

## 1. University requirements

- All students are required to complete the university's General Education (GenEd) curriculum (Analytical Reading \& Writing, Mosaic I and II, Arts, Human Behavior, Global/World Society, U.S. Society, Race \& Diversity, Science \& Technology, Quantitative Literacy).
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of the major. The specific writing-intensive courses required for this major are listed below and are identified by "WI" in the Attribute column.


## 2. Program requirements

Students in the HIM program are required to satisfy the following prerequisite and professional courses. A grade of C or better is required for all prerequisite and professional courses. (A grade of C- is not acceptable.)

- Health Information Management prerequisites:
o Mathematics 1013 or Sociology 1167.
o Kinesiology 1223 \& 1224.
o Computer \& Information Science 1055 or successfully pass a computer competency exam.
o Health Information Management 1101 (Medical Terminology).
o Health Information Management 2203 (U.S. Health Care System).
o Health Information Management 2215 (Health Information Management IT Fundamentals).
- Health Information Management Professional Courses:
o Health Information Management 3101, 3106, 3107, 3111, 3113, 3203, 3208, 3212, 3214, 3271, 3297, 4101, 4102, 4104, 4105, 4113, 4121, 4185, 4202, 4206, 4207, 4286, 4298.

3. Electives: 9 credits. Strongly recommended electives include business writing electives.

## Suggested Semester-by-Semester Plan

## Requirements for New Students starting in the 2013-2014 Academic Year

| Year 1, Fall (Term 1) | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Subject | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| English | $08 x x$ or 09xx | Quantitative Literacy* | 4 | GQ |
| GenEd | 08xx or 09xx | Arts | 3 | GA |
| GenEd | Medical Terminology | 3 |  |  |
| Health Information | 1101 |  | $\mathbf{1 4}$ |  |
| Management |  |  |  |  |
| Total |  |  |  |  |

* Mathematics 0823: Math for a Digital World or Mathematics 0824: Mathematical Patterns is strongly recommended.


## Year 1, Spring (Term 2)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Kinesiology | 1223 | Human Anatomy \& Physiology I | 4 | (GS) |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | $08 x x$ or 09xx | U.S. Society | 3 | GU |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | Huxx or 09xx | Human Behavior | 3 | GB |
| Total |  |  | $\mathbf{1 6}$ |  |

Year 2, Fall (Term 3)

| Subject | Course \# | Course Title | Hours | Attribute |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |  |
| Varies |  | Elective ** | 3 |  |  |
| GenEd | $08 x x$ or 09xx | Global/World Society | 3 | GG |  |
| Kinesiology | 1224 | Human Anatomy \& Physiology II | 4 | (GS) |  |
| Mathematics <br> or <br> Sociology | 1013 | Elements of Statistics <br> or <br> Social Statistics | 3 |  |  |
| Total | 1167 | ** English 2007: Writing for Business \& Industry is recommended. |  | $\mathbf{1 6}$ |  |
|  |  |  |  |  |  |
| Year 2, Spring (Term 4) |  |  |  |  |  |
| Subject | Course \# |  |  |  |  |


|  <br> Information Science | 1055 | Computers \& Applications | 4 |  |
| :--- | :--- | :--- | :---: | :---: |
| Health Information | 2215 | Health Information Management IT Fundamentals | 3 |  |
| Management |  | General Elective | 3 |  |
| Varies | U.S. Health Care System | 3 |  |  |
| Health Information | 2203 |  | General Elective | 3 |
| Management |  |  | $\mathbf{1 6}$ |  |
| Varies |  |  |  |  |
| Total |  |  |  |  |

## Professional Curriculum

NOTE: A grade of " C " or better is required to satisfy ALL prerequisite course requirements. Grades below a "C" will not be accepted.

## Year 3, Fall (Term 5)

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Health Information Management | 3101 | Health Record Documentation | 3 |  |
| Health Information Management | 3106 | Pathophysiology | 3 |  |
| Health Information Management | 3107 | Health Information Management Leadership \& Strategic Management | 3 |  |
| Health Information Management | 3111 | Statistics and Research in Health Care | 3 |  |
| Health Information Management | 3113 | Healthcare Database Design and Development | 3 |  |
| Total |  |  | 15 |  |

## Year 3, Spring (Term 6)

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Health Information Management | 3297 | Health Information Management Human Resource Management | 3 | WI^ |
| Health Information Management | 3212 | Clinical Procedures | 2 |  |
| Health Information Management | 3208 | International Classification of Diseases | 3 |  |
| Health Information Management | 3203 | Electronic Health Record Systems | 3 |  |
| Health Information Management | 3214 | Pharmacology | 1 |  |
| Health Information Management | 3271 | Professional Development | 1 |  |
| Total |  |  | 13 |  |

^Indicates writing capstone for major.

Year 4, Fall (Term 7)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Health Information | 4101 | Health Informatics: Infrastructure \& Standards | 3 |  |
| Management |  | Legal Aspects of Health Information Management | 3 |  |
| Health Information | 4102 |  |  |  |
| Management |  |  |  |  |


| Health Information Management | 4105 | Current Procedural Terminology Coding | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Health Information Management | 4113 | Healthcare Reimbursement Systems | 3 |  |
| Health Information Management | 4207 | Healthcare Quality Improvement | 3 |  |
| Health Information Management | 4185 | Professional Practice Internship | 1 |  |
| Health Information Management | 4121 | Healthcare Data Analytics | 1 |  |
| Total |  |  | 17 |  |
| Year 4, Spring (Term 8) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Health Information Management | 4202 | Health Information Management Project Management | 3 |  |
| Health Information Management | 4104 | Health Information Management Operations Management | 3 |  |
| Health Information Management | 4206 | Intermediate Coding | 3 |  |
| Health Information Management | 4286 | Management Internship | 4 |  |
| Health Information Management | 4298 | Health Information Management Senior Seminar | 3 | WI^ |
| Total |  |  | 16 |  |
| AIndicates writing capstone for major. |  |  |  |  |
|  |  |  |  |  |
| Total Credits Required for Graduation: |  |  | 123 |  |
| Note: All professional courses are offered only once a year. |  |  |  |  |

## Kinesiology

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The undergraduate programs in Kinesiology leading to the Bachelor of Science degree or the Bachelor of Science in Athletic Training degree require students to complete coursework in three broad areas: the General Education (GenEd) Curriculum, the Kinesiology Core, and a professional application of the discipline of Kinesiology.

The university General Education Curriculum is divided into nine categories (i.e., Analytical Reading \& Writing, Mosaic I \& II, Arts, Human Behavior, Global/World Society, U.S. Society, Race \& Diversity, Science \& Technology, and Quantitative Literacy). Even though there are numerous courses which can be taken to meet these requirements, the department requires Human Anatomy and Physiology I and II (Kinesiology 1223 and 1224) in place of the Science \&

Technology requirement. All University GenEd courses must be completed with a minimum Cgrade in order to count toward graduation.

Kinesiology is the study of physical activity. The Kinesiology Core includes a group of foundation courses (Kinesiology 1201, 1223, 1224, 2203, 2204, 3202, 3296, 4296) that deal with the intellectual, physical, social, psychological, and philosophical factors which influence and are influenced by human beings as they move. In addition to taking the foundation courses, students are required to satisfy the forms of movement requirement, which consists of developing knowledge and skills in a broad spectrum of movement activities (i.e., aquatics, fitness, survival, and lifestyle). All Kinesiology Core courses must be completed with a minimum grade of C in order to count toward graduation.

The Kinesiology Department offers four professional application options to allow students to concentrate their studies (i.e., the athletic training major, the exercise and sport science concentration, the physical and health education teacher education (PHETE) concentration, and the pre-health professions concentration). Students select the professional application option that satisfies their short term educational and professional objectives. All required professional application courses must be completed with a minimum grade of C in order to count toward graduation (PHETE requires a minimum grade of B-).

The Athletic Training Education Major prepares students to work with physically-active populations (e.g. athletic teams, dance, circus, NASCAR, Disney, rodeo, PT clinics, etc.). The certified athletic trainer functions as an integral member of the athletic health care team in secondary schools, colleges, universities, professional teams, and sports medicine clinics, providing leadership in the prevention, evaluation, immediate care, and rehabilitation of sportrelated injuries. The athletic training major requires fulfillment of both academic coursework and clinical fieldwork experiences. This program of study is approved by the Commission on the Accreditation of Athletic Training Education (CAATE) and is designed to prepare students for certification as athletic trainers by the Board of Certification (BOC) and for Class "A" certification in the Commonwealth of Pennsylvania.

Admission into the athletic training program occurs upon students identifying athletic training as their intended course of study. This admission may take place either during the freshmen year or any time afterward.

The Exercise and Sport Science Concentration provides students with knowledge and competencies required for professional service in a variety of sport, fitness, wellness and rehabilitation settings. The Exercise and Sport Science Concentration also prepares students for graduate study in exercise physiology or in a variety of related health professions. Program competencies include health screening, fitness assessment, exercise program development, health-fitness counseling, and therapeutic exercise supervision of patients with special needs. Concentration courses include, but are not limited to: advanced exercise physiology, exercise in health and disease, exercise testing and programming, electrocardiography, exercise and aging, and applied technologies. The exercise and sport scientist understands the complexity of the human body and the interaction among physical activity, exercise, and good health. The
improved function, health, and well-being of the total person - Body, Mind, and Spirit - are the ultimate goals of professionals in this field.

Exercise scientists apply their knowledge, skills, and beliefs to all people regardless of gender, age, social status, and current health-related fitness level or disease state. Wherever there is a need to improve functionality, health-fitness, medical prognosis, optimal aging, or wellness, one will find an exercise scientist providing leadership in programs that help individuals optimize their lives and health. In summary, exercise science is a stimulating area of study and a rewarding professional application with a very bright future.

Teacher education is the focus of the Physical and Health Education Teacher Education
(PHETE) Concentration. This concentration prepares students to teach physical and health education in public and private schools (grades K through 12). The PHETE concentration integrates academic preparation with fieldwork experiences each semester, culminating in a duallevel (secondary and elementary) full semester, student-teaching experience. Coursework in discipline specific content, methods of teaching, assessment and evaluation, educational psychology, educational foundations, cultural diversity and adapted activities, and administration all help teacher education students assume their roles as competent teachers in today's society. Admission into the PHETE program takes place after the sophomore year upon completing the pre-admission coursework; two in-school teaching experiences; the PECT PAPA tests in reading, mathematics, and writing; and the Praxis II test in fundamental content knowledge, as well as an interview with the PHETE faculty. All PHETE and Public Health courses must be completed with a minimum grade of B- in order to count toward admission and graduation. All PHETE and Health courses are valid toward certification for a maximum of five (5) years. If one does not get certified within this time period, those courses that have expired must be retaken. A cumulative GPA of 3.0 or greater is required for admission into the junior year and certification. After admission, one additional Praxis II test is required for certification: Health and Physical Education Content Knowledge. Upon completion of the PHETE concentration, passing the appropriate standardized tests, and applying to the Pennsylvania Department of Education for an Instructional I Certificate in Health and Physical Education, graduates will be licensed to teach K-12 Health and Physical Education by the Commonwealth of Pennsylvania.

The Pre-Health Professions Concentration prepares students for admission into Graduate Programs in a multitude of the Health Professions such as Physical Therapy, Occupational Therapy, Medicine, Dentistry, Physician's Assistant, etc. The Department of Kinesiology's Core is a perfect complement to the standard prerequisite courses and expanded elective courses available through this concentration. This combination of coursework and practical experience will position students well for continued study at the graduate level. While the Pre-Health Professions concentration includes the standard prerequisite courses and the option for elective courses for admission into Graduate Programs for a multitude of Health Professions, students are advised to check the prerequisites for their intended graduate programs and work these into their programs where elective coursework is afforded. Students are also advised to maintain a minimum grade point average of 3.0 (B) since entry into graduate programs in the health professions is highly competitive. A "B" or better in the specific prerequisites is required for most graduate programs. In addition to the Pre-Health Professions concentration, the Department of Kinesiology has a memorandum of understanding with Temple University's Doctor of

Physical Therapy (DPT) program providing academically-gifted students the opportunity to enter into a $3+3$ program, thus allowing students who are accepted into Temple's DPT program at the conclusion of their junior year to count the first year of their DPT program as the fourth year of their undergraduate studies, thus eliminating one year of academic work. Students can only start the $\mathbf{3 + 3}$ program the first semester of their freshmen year.

## University Requirements

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

All students must take a minimum of two writing-intensive courses. The specific writingintensive courses required for this major are listed below and identified with the code "WI" in the Attribute column.

## Curriculum and Degree Requirements

All students must complete 1-4 below:

1. GenEd Curriculum (35-38 s.h.) - Selected Courses
2. Kinesiology Core Courses - Kinesiology 1201, 1223, 1224, 2203, 2204, 3202, 3296, 4296 (28 s.h.)
3. Forms of Movement Courses - Kinesiology 1001-1099 (4-9 s.h.)
4. Program specific requirements and elective courses (60-70 s.h.)

Note: All courses in the Department of Kinesiology and required courses in the selected professional application options must be completed with a minimum grade of C. The PHETE program has a more stringent requirement of a minimum grade of B- in all PHETE courses and required health and education courses. The Kinesiology Core and program requirements must be satisfactorily completed prior to enrolling in any internship/externship or student teaching experience.

## Professional Application Option Requirements

Students must select a professional application option and electives to complete their requirements for graduation. There are four professional application options available: (a) the athletic training major, (b) the exercise and sport science concentration, (c) the physical and health education teacher education (PHETE) concentration, and (d) the pre-health professions concentration. They are more fully described below.

## Kinesiology Foundation Requirements

Kinesiology 1223 (4 s.h.) - Human Anatomy \& Physiology I
Kinesiology 1224 (4 s.h.) - Human Anatomy \& Physiology II

## Kinesiology Departmental Requirements

Kinesiology 1201 (3 s.h.) - Introduction to Kinesiology
Kinesiology 2203 (4 s.h.) - Physiology of Physical Activity
Kinesiology 2204 (3 s.h.) - Motor Behavior
Kinesiology 3202 (4 s.h.) - Biomechanics of Physical Activity
Kinesiology 3296 (3 s.h.) - The Social-Psychology of Physical Activity (WI)
Kinesiology 4296 (3 s.h.) - History \& Philosophy of Kinesiology (WI)

## Forms of Movement Requirement

Physical Fitness Activity
Lifestyle Activity
Survival Activity
Aquatics Activity
In Fall 2008, the Department of Kinesiology established the Bachelor of Science in Athletic Training. This degree may be conferred upon a student by recommendation of the faculty upon the satisfactory completion of 124 semester hours of credit. The other three professional application concentrations require 128 semester hours of credit to satisfy their respective graduation requirements.

## Suggested Semester-by-Semester Plans

## Bachelor of Science in Athletic Training

| Year 1, Fall (Term 1) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Kinesiology | 1201 | Introduction to Kinesiology | 3 |  |
| Kinesiology | 1223 | Human Anatomy \& Physiology I | 4 | (GS) |
| Kinesiology | 1001-1099 | Forms of Movement | 1 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Year 1, Spring (Term 2) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Kinesiology | 1224 | Human Anatomy \& Physiology II | 4 | (GS) |
| Kinesiology | 1442 | Basic Techniques in Athletic Training | 2 |  |
| Kinesiology | 1444 | Movement Injuries: Prevention \& Care | 3 |  |
| Kinesiology | 1001-1099 | Forms of Movement | 1 |  |
| Public Health | 1104 | Nutrition \& Health | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Year 2, Fall (Term 3) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |


| Kinesiology | 2421 | Emergency Medical Care for Health Professionals | 3 |  |
| :--- | :--- | :--- | :---: | :---: |
| Kinesiology | 2431 | Pharmacology \& Medical Documentation in Athletic <br> Training | 3 |  |
| Kinesiology | 2441 | Lower Extremity: Assessment \& Treatment of Injuries | 3 |  |
| Kinesiology | 3441 | Therapeutic Modalities in Athletic Training | 4 |  |
| Kinesiology | $1001-1099$ | Forms of Movement | 2 |  |
| Semester Total |  | $\mathbf{1 5}$ |  |  |

Year 2, Spring (Term 4)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :---: |
| Kinesiology | 2204 | Motor Behavior | 3 |  |
| Kinesiology | 2442 | Upper Extremity: Assessment \& Treatment of Injuries | 3 |  |
| Kinesiology | 4443 | Organization \& Administration in Athletic Training | 3 |  |
| GenEd | 08 xx or 09xx | U.S. Society | 3 | GU |
| GenEd | 08 xx or 09xx | Race \& Diversity | 3 | GD |
| Semester Total |  | $\mathbf{1 5}$ |  |  |

## Year 3, Fall (Term 5)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Kinesiology | 3202 | Biomechanics of Physical Activity | 4 |  |
| Kinesiology | 3443 | Head, Neck, \& Spine: Assessment \& Treatment of <br> Injuries | 3 |  |
| Kinesiology | 3487 | Practicum in Athletic Training I | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | $08 \times x$ or 09xx | Human Behavior | 3 | GB |
| Semester Total |  | $\mathbf{1 6}$ |  |  |

Year 3, Spring (Term 6)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Kinesiology | 2203 | Physiology of Physical Activity | 4 |  |
| Kinesiology | 3442 | Therapeutic Exercises in Athletic Training | 4 |  |
| Kinesiology | 3444 | General Medical Conditions in Athletic Training | 3 |  |
| Kinesiology | 3687 | Practicum in Athletic Training II | 3 |  |
| Kinesiology | $1001-1099$ | Forms of Movement | 1 |  |
| Semester Total |  |  | $\mathbf{1 5}$ |  |

Year 4, Fall (Term 7)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Kinesiology | 3296 | The Social-Psychology of Physical Activity | 3 | WI |
| Kinesiology | 4311 | Advanced Physiology of Exercise | 3 |  |
| Kinesiology | 4450 | Special Topics in Athletic Training | 3 |  |
| Kinesiology | 4487 | Practicum in Athletic Training III | 3 |  |
| GenEd | Arts | $3-4$ | GA |  |
| Semester Total |  | 15 |  |  |
|  |  |  |  |  |
| Year 4, Spring (Term 8) | Course \# 09xx | Course Title | Hours | Attribute |
| Subject | History \& Philosophy of Kinesiology | 3 | WI |  |
| Kinesiology | 4296 |  |  |  |


| Kinesiology | 4314 | Neuromuscular Principles of Strength \& Conditioning <br> with Application to Special Populations | 4 |  |
| :--- | :--- | :--- | :---: | :---: |
| Kinesiology | 4687 | Practicum in Athletic Training IV | 3 |  |
| GenEd | 08 xx or 09xx | Global/World Society | 3 | GG |
| Elective | Elective | Elective | 3 |  |
| Semester Total | $\mathbf{1 6}$ |  |  |  |
|  |  |  |  |  |
| Total Credits Required for B.S. in Athletic Training: | $\mathbf{1 2 4}$ |  |  |  |

## Exercise \& Sport Science Concentration

| Year 1, Fall (Term 1) | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Introduction to Kinesiology | 3 |  |  |
| Kinesiology | 1201 | Human Anatomy \& Physiology I | 4 | (GS) |
| Kinesiology | 1223 | Forms of Movement | 2 |  |
| Kinesiology | $1001-1099$ | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 |
| English | Quantitative Literacy | 4 | GW |  |
| GenEd |  | $\mathbf{1 7}$ |  |  |
| Semester Total | $08 x x$ or 09xx |  |  |  |
|  |  |  |  |  |
| Year 1, Spring (Term 2) |  |  |  |  |


| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Kinesiology | 1224 | Human Anatomy \& Physiology II | 4 | (GS) |
| Kinesiology | $1001-1099$ | Forms of Movement | 1 |  |
| Psychology | 1001 | Introduction to Psychology | 3 |  |
| GenEd | $08 x x$ or 09xx | U.S. Society | 3 | GU |
| GenEd | $08 x x$ or 09xx | Global/World Society | 3 | GG |
| Elective | Elective | Elective | 3 |  |
| Semester Total |  | $\mathbf{1 7}$ |  |  |

Year 2, Fall (Term 3)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Kinesiology | 2203 | Physiology of Physical Activity | 4 |  |
| Kinesiology | $1001-1099$ | Forms of Movement | 1 |  |
| Public Health | 1104 | Nutrition \& Health | 3 |  |
| GenEd | $08 x x$ or 09xx | Human Behavior | 3 | GB |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Elective | Elective | Elective | 3 |  |
| Semester Total |  |  | $\mathbf{1 7}$ |  |

Year 2, Spring (Term 4)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :---: |
| Kinesiology | 1444 | Movement Injuries: Prevention \& Care | 3 |  |
| Kinesiology | 2204 | Motor Behavior | 3 |  |
| Kinesiology | 2362 | Introduction to Exercise \& Sport Science | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Elective | Elective | 3 |  |  |
| Semester Total | Elective |  | $\mathbf{1 5}$ |  |

Year 3, Fall (Term 5)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Kinesiology | 2364 | Applied Technologies in Kinesiology | 3 |  |
| Kinesiology | 3202 | Biomechanics of Physical Activity | 4 |  |
| Kinesiology | 3296 | The Social-Psychology of Physical Activity | 3 | WI |
| Kinesiology | 3363 | Basic Electrocardiography | 3 |  |
| Kinesiology | 4311 | Advanced Physiology of Exercise | 3 |  |
| Semester Total |  | $\mathbf{1 6}$ |  |  |

Year 3, Spring (Term 6)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :---: |
| Kinesiology | 4312 | Exercise \& Nutrient Metabolism | 3 |  |
| Kinesiology | 4313 | Exercise \& Aging | 3 |  |
| Kinesiology | 4314 | Neuromuscular Principles of Strength \& Conditioning <br> with Application to Special Populations | 4 |  |
| Kinesiology | $1001-1099$ | Forms of Movement | 2 |  |
| GenEd | Race \& Diversity | 3 | GD |  |
| Semester Total |  |  | $\mathbf{1 5}$ |  |

Year 4, Fall (Term 7)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Kinesiology | 3368 | Principles of Health Fitness Program Management | 3 |  |
| Kinesiology | 4296 | History \& Philosophy of Kinesiology | 3 | WI |
| Kinesiology | 4334 |  <br> Program Development | 4 |  |
| Public Health | 3103 | Counseling Techniques for Health Professionals | 3 |  |
| GenEd | Arts | 3 | GA |  |
| Semester Total | $08 x x$ or 09xx | $\mathbf{1 6}$ |  |  |
|  |  |  |  |  |
| Year 4, Spring (Term 8) | Course \# | Course Title |  |  |
| Subject | Internship in Exercise \& Sport Science | 12 |  |  |
| Kinesiology | 4385 | Elective | 3 |  |
| Elective |  | $\mathbf{1 5}$ |  |  |
| Semester Total |  |  | $\mathbf{1 2 8}$ |  |
| Total Credits Required for B.S. in Kinesiology (Exercise \& Sport Science): |  |  |  |  |

Physical \& Health Education Teacher Education (PHETE) Concentration

| Year 1, Fall (Term 1) | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Subject | 1201 | Introduction to Kinesiology | 3 |  |
| Kinesiology | $1001-1099$ | Forms of Movement | $1-2$ |  |
| Kinesiology | Forms of Movement | $1-2$ |  |  |
| Kinesiology | Elective | Public Health Elective | 3 |  |
| Public Health | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| English | Quxx or 09xx | Quantitative Literacy | 4 | GQ |
| GenEd |  | $\mathbf{1 6 - 1 8}$ |  |  |
| Semester Total |  |  |  |  |

## Year 1, Spring (Term 2)

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Kinesiology | 1001-1099 | Forms of Movement | 2 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| GenEd | 08xx or 09xx | Arts | 3 | GA |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Mathematics | Elective | Math Elective | 3 |  |
| Semester Total |  |  | 17 |  |
|  |  |  |  |  |
| Year 2, Fall (Term 3) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Kinesiology | 1223 | Human Anatomy \& Physiology I | 4 | (GS) |
| Kinesiology | 2204 | Motor Behavior | 3 |  |
| PHETE | 2541 | Introduction to Teaching Health Education I | 1 |  |
| PHETE | 2543 | Basic Movement I | 1 |  |
| PHETE | 2555 | Micro-teaching in PHETE | 1 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Special Education | 2231 | Introduction to Inclusive Education | 3 |  |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Year 2, Spring (Term 4) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Kinesiology | 1224 | Human Anatomy \& Physiology II | 4 | (GS) |
| PHETE | 2542 | Introduction to Teaching Health Education II | 1 |  |
| PHETE | 2544 | Basic Movement II | 1 |  |
| PHETE | 2556 | Tutorial in PHETE | 1 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Special Education | 3211 | Effective Instructional Strategies for Young Children with Disabilities | 3 |  |
| Semester Total |  |  | 16 |  |

Year 3, Fall (Term 5)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Kinesiology | 3296 | The Social-Psychology of Physical Activity | 3 | WI |
| PHETE | 3541 | Advanced Movement I | 3 |  |
| PHETE | 3553 | PHETE I | 4 |  |
| PHETE | 3587 <br> or <br> $3787 *$ | Health Science I <br> PHETE <br> or <br> Parkway High School Practicum | 3 |  |
| Early Childhood <br> Education | Teaching English Language Learners in the Early <br> Grades | 3 | 1 |  |
| Semester Total |  |  | $\mathbf{1 7}$ |  |

*Note: PHETE 3787 can only satisfy Practicum I OR Practicum II requirements. This course cannot be used to satisfy both requirements.

Year 3, Spring (Term 6)
Course \#
Course Title
Hours Attribute

| Kinesiology | 2203 | Physiology of Physical Activity | 4 |
| :---: | :---: | :---: | :---: |
| Kinesiology | 1001-1099 | Forms of Movement | 2 |
| PHETE | 3542 | Advanced Movement II | 3 |
| PHETE | 3554 | PHETE II | 4 |
| PHETE | 3562 | Health Science II | 3 |
| PHETE | $\begin{aligned} & 3687 \\ & \text { or } \\ & 3787 * \end{aligned}$ | $\begin{aligned} & \hline \text { PHETE Practicum II } \\ & \text { or } \\ & \text { Parkway High School Practicum } \end{aligned}$ | 1 |
| Semester Total |  |  | 17 |

*Note: PHETE 3787 can only satisfy Practicum I OR Practicum II requirements. This course cannot be used to satisfy both requirements.

## Year 4, Fall (Term 7)

| Subject | Course \# | Course Title | Hours | Attribute |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
| Kinesiology | 3202 | Biomechanics of Physical Activity | 4 |  |  |
| Kinesiology | 4296 | History \& Philosophy of Kinesiology | 3 | WI |  |
| PHETE | 4554 | The School Environment | 2 |  |  |
| PHETE | Developmental \& Adapted PHETE | 3 |  |  |  |
| PHETE | Health Science III | 3 |  |  |  |
| PHETE | PHETE Practicum III | 1 |  |  |  |
| Semester Total |  | $\mathbf{1 6}$ |  |  |  |
|  |  |  |  |  |  |
| Year 4, Spring (Term 8) |  |  |  |  |  |

Year 4, Spring (Term 8)

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| PHETE | 4588 | Student Teaching in Health \& Physical Education | 12 |  |
| PHETE | 4589 | Field Study in PHETE | 1 |  |
| Semester Total |  |  | 13 |  |
|  |  |  |  |  |
| Total Credits Required for B.S. in Kinesiology (PHETE): |  |  | 128 |  |

## Kinesiology Pre-Health Professions Concentration

| Year 1, Fall (Term 1) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Kinesiology | 1201 | Introduction to Kinesiology | 3 |  |
| Kinesiology | 1001-1099 | Forms of Movement | 2 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Biology | 1011 | General Biology I | 4 |  |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Semester Total |  |  | 17 |  |
|  |  |  |  |  |
| Year 1, Spring (Term 2) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 1021 | College Algebra | 4 |  |
| Biology | 1012 | General Biology II | 4 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Psychology | 1001 | Introduction to Psychology | 3 |  |
| Elective | Elective | Elective | 3 |  |
| Semester Total |  |  | 17 |  |

Year 2, Fall (Term 3)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Kinesiology | 1223 | Human Anatomy \& Physiology I | 4 | (GS) |
| Kinesiology | $1001-1099$ | Forms of Movement | 2 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Chemistry | $1031 / 1033$ | General Chemistry I and Lab | 4 |  |
| Elective | Elective | Elective | 3 |  |
| Semester Total |  | $\mathbf{1 6}$ |  |  |
|  |  |  |  |  |
| Year 2, Spring (Term 4) | Course \# | Course Title |  |  |
| Subject | Human Anatomy \& Physiology II | 4 | (GS) |  |
| Kinesiology | 1224 | General Chemistry II and Lab | 4 |  |
| Chemistry | $1032 / 1034$ | Arts | $3-4$ | GA |
| GenEd | 08xx or 09xx | 3 | GU |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 |  |
| Elective | Elective | Elective | $\mathbf{1 7}$ |  |
| Semester Total |  |  |  |  |

Year 3, Fall (Term 5)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Kinesiology | 2204 | Motor Behavior | 3 |  |
| Kinesiology | $1001-1099$ | Forms of Movement | 2 |  |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Physics | 1021 | Introduction to General Physics I | 4 |  |
| Elective | Elective | Elective | 3 |  |
| Semester Total |  | $\mathbf{1 5}$ |  |  |

## Year 3, Spring (Term 6)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Kinesiology | 3296 | The Social-Psychology of Physical Activity | 3 | WI |
| Elective | Elective | Elective | 2 |  |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Physics | 1022 | Introduction to General Physics II | 4 |  |
| Elective | Elective | Statistics | 3 |  |
| Semester Total |  | $\mathbf{1 5}$ |  |  |

Year 4, Fall (Term 7)

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Kinesiology | 3202 | Biomechanics of Physical Activity | 4 |  |
| Kinesiology | 1001-1099 | Forms of Movement | 2 |  |
| Psychology | 2000+ level | Advanced Psychology | 3 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Elective | Elective | Elective | 3 |  |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Year 4, Spring (Term 8) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Kinesiology | 2203 | Physiology of Physical Activity | 4 |  |


| Kinesiology | 4282 | Independent Study in Kinesiology | 3 |  |
| :--- | :--- | :--- | :---: | :---: |
| Kinesiology | 4296 | History \& Philosophy of Kinesiology | 3 | WI |
| Sociology | $2000+$ level | Advanced Sociology | 3 |  |
| Elective | Elective | 3 |  |  |
| Semester Total |  | $\mathbf{1 6}$ |  |  |
|  |  |  |  |  |
| Total Credits Required for B.S. in Kinesiology (Pre-Health Profession): | $\mathbf{1 2 8}$ |  |  |  |

## Kinesiology Pre-Health Professions Concentration, 3+3 Program

Students must meet the admissions requirements for early admission to Temple University's College of Health Professions Doctor of Physical Therapy program. If you are applying to other physical therapy programs, please use the web to find admissions requirements.

## Guidelines for the Completion of the Bachelor of Science Degree from the Department of Kinesiology

- Bachelor of Science candidates in the Department of Kinesiology must complete all requirements for their major before entering the Doctor of Physical Therapy (DPT) Program in the College of Health Professions and Social Work (CHPSW) with the following exception: Pre-Health Profession 3+3 students may count up to 27 equivalent credit hours from the first year in the DPT Program in the College of Health Professions and Social Work to fulfill their general credit hour requirements for the B.S. degree in the Department of Kinesiology. This is only possible by following the planned program of study as outlined below.
- Admission into the Department of Kinesiology's Pre-Health Professions Concentration's $3+3$ program is highly competitive and challenging. If you are interested in pursuing this accelerated program, you must declare it immediately upon admission and talk to an advisor within the department prior to registering for your first semester classes. Your SAT scores and high school transcript must support your capacity to handle successfully a rigorous academic workload. Students in this program must be able to achieve and maintain cumulative and prerequisite GPAs of 3.5 or better.
- If students fail to get admitted into the College of Health Professions and Social Work's DPT program after their junior year, they are required to finish their programs within the Department of Kinesiology as defined in the latter 4th-year grid listed below.

| Year 1, Fall (Term 1) | Course Title | Hours | Attribute |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course \# | Introduction to Kinesiology | 3 |  |
| Kinesiology | 1201 | Physical Activity Workshop I | 1 |  |
| Kinesiology | 1037 | Physical Activity Workshop II | 1 |  |
| Kinesiology | 1038 | 4 | GW |  |
| English | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 |  |


| Biology | 1011 | General Biology I | 4 |  |
| :--- | :--- | :--- | :---: | :---: |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Semester Total |  | $\mathbf{1 7}$ |  |  |
|  |  |  |  |  |
| Year 1, Spring (Term 2) | Course \# | Course Title |  |  |
| Subject | College Algebra | Hours | Attribute |  |
| Mathematics | 1021 | General Biology II | 4 |  |
| Biology | 1012 | Mosaic: Humanities Seminar I | 4 |  |
| Intellectual Heritage | 0851 or 0951 | Introduction to Psychology | GY |  |
| Psychology | 1001 | U.S. Society | 3 |  |
| GenEd | $08 x x$ or 09xx |  | 3 | GU |
| Semester Total |  | $\mathbf{1 7}$ |  |  |

## Year 2, Fall (Term 3)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Kinesiology | 1223 | Human Anatomy \& Physiology I | 4 | (GS) |
| Kinesiology | 3296 | The Social-Psychology of Physical Activity | 3 | WI |
| Intellectual Heritage 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |  |
| Chemistry | $1031 / 1033$ | General Chemistry I and Lab | 4 |  |
| Elective | Elective | Statistics | 3 |  |
| Semester Total |  | $\mathbf{1 7}$ |  |  |
|  |  |  |  |  |
| Year 2, Spring (Term 4) | Course \# | Course Title | Hours Attribute |  |
| Subject | Human Anatomy \& Physiology II | 4 | (GS) |  |
| Kinesiology | 1224 | Physical Activity Workshop I | 1 |  |
| Kinesiology | 1037 | Physical Activity Workshop II | 1 |  |
| Kinesiology | 1038 | General Chemistry II | 4 |  |
| Chemistry | $1032 / 1034$ | Arts | 3 | GA |
| GenEd | Advanced Psychology | 3 |  |  |
| Psychology | $2000+$ level |  | $\mathbf{1 6}$ |  |
| Semester Total |  |  |  |  |

Year 3, Fall (Term 5)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Kinesiology | 2203 | Physiology of Physical Activity | 4 |  |
| Kinesiology | 2204 | Motor Behavior | 3 |  |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Physics | 1021 | Introduction to General Physics I | 4 |  |
| Sociology | $2000+$ level | Advanced Sociology | 3 |  |
| Semester Total |  |  | $\mathbf{1 7}$ |  |

Year 3, Spring (Term 6)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Kinesiology | 3202 | Biomechanics of Physical Activity | 4 |  |
| Kinesiology | 4296 | History \& Philosophy of Kinesiology | 3 | WI |
| GenEd | 08 xx or 09xx | Human Behavior | 3 | GB |
| Physics | 1022 | Introduction to General Physics II | 4 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Semester Total |  | $\mathbf{1 7}$ |  |  |

Requirements For Students Accepted Into Temple's DPT Program:

| Year 4, Fall (Term 7) | Course \# | Course Title | Hours | Attribute |  |
| :--- | :--- | :--- | :--- | :--- | :---: |
| Subject | Human Anatomy II | 3 |  |  |  |
| Physical Therapy | 8503 | Human Physiology | 3 |  |  |
| Physical Therapy | 8512 | Movement Science I | 3 |  |  |
| Physical Therapy | 8513 | Introduction to Physical Therapy | 1 |  |  |
| Physical Therapy | 8516 | Clinical Examination \& Intervention Skills I | 3 |  |  |
| Physical Therapy | 8517 | Critical Inquiry I | 3 |  |  |
| Physical Therapy | 8528 |  | $\mathbf{1 6}$ |  |  |
| Semester Total |  |  |  |  |  |
|  |  |  |  |  |  |
| Year 4, Spring (Term 8) | Course \# | Course Title |  |  |  |
| Subject | Clinical Decision Making | Hours | Attribute |  |  |
| Physical Therapy | 8514 | Neuroscience | 2 |  |  |
| Physical Therapy | 8521 | Rehabilitative Pathophysiology | 3 |  |  |
| Physical Therapy | 8522 | Movement Science II | 3 |  |  |
| Physical Therapy | 8523 | Clinical Electroneurophysiology | 4 |  |  |
| Physical Therapy | 8525 | Critical Inquiry II | 3 |  |  |
| Physical Therapy | 8548 |  | 1 |  |  |
| Semester Total |  |  | $\mathbf{1 6}$ |  |  |

## Requirements For Students Not Accepted Into Temple's DPT Program:

| Year 4, Fall (Term 7) | Hours | Attribute |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Subject | Course \# | Course Title | 3 |  |
| Elective | Elective | Elective | 3 |  |
| Elective | Elective | Elective | 3 |  |
| Elective | Elective | Elective | 3 |  |
| Elective | Elective | Elective | 2 |  |
| Elective | Elective | Elective | $\mathbf{1 4}$ |  |
| Semester Total |  |  |  |  |
|  |  |  |  |  |
| Year 4, Spring (Term 8) | Hours | Attribute |  |  |
| Subject | Course \# | Course Title | 3 |  |
| Kinesiology | 4282 | Independent Study in Kinesiology | 3 |  |
| Elective | Elective | Elective | 3 |  |
| Elective | Elective | Elective | 3 |  |
| Elective | Elective | Elective | 1 |  |
| Elective | Elective | Elective | $\mathbf{1 3}$ |  |
| Semester Total |  |  |  |  |

## Nursing

# Bachelor of Science in Nursing (B.S.N.) 

Jane Kurz, PhD., R.N., Interim Chair

Nursing Main Office Number: 215-707-4687
Nursing Fax: 215-707-1599
http://chpsw.temple.edu/nursing

## Accreditation

The program is approved by the State Board of Nursing, Commonwealth of Pennsylvania, and accredited by the Commission on Collegiate Nursing Education (CCNE). CCNE can be reached at One Dupont Circle, NW, Suite 503, Washington, D.C. 20036, 202-887-6791. Graduates are eligible to sit for the National Council Licensure Examination (NCLEX) leading to licensure as a Registered Nurse.

The degree of Bachelor of Science in Nursing may be conferred upon a student by recommendation of the faculty and upon the satisfactory completion of a minimum of 122 semester hours of credit with a minimum cumulative GPA of 2.0 overall and in the major. The minimum passing grade in all required nursing major courses is 73\% (C); this includes all courses listed under item 2 - Department of Nursing Requirements, and item 3 - Nursing Major Requirements.

## Summary of Requirements

## 1. University Requirements

- All students are required to complete the university's General Education (GenEd) curriculum.
- All students must take a minimum of two writing-intensive courses as part of the major. The specific writing-intensive courses required for this major are listed below and are identified by "WI" in the Attribute column.


## 2. Department of Nursing Requirements

- Science Course: Chemistry 1021 \& 1023. (1 course)
- Statistics: Sociology 1167 or Sociology 3201. (1 course)
- Sociology and Psychology: Sociology 1176, Psychology 1001 and Psychology 2301. (3 courses)
- Courses by Department: Biology 1012, Biology 2001, Kinesiology 1223, Kinesiology 1224. (4 courses)


## 3. Nursing Major Requirements

- Nursing 1001, 1089, 2144, 2189, 2261, 2289, 2589, 3204, 3289, 3305, 3389, 3489, 3689, 3789, 4198, 4296, 4489, 4589, 4689, 4885, 4889. (21 courses)

Suggested Term-by-Term Plan

| Year 1, Fall (Term 1) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 1021 | Introduction to Chemistry I | 3 |  |
| Chemistry | 1023 | Introduction to Chemistry Laboratory I | 1 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| Kinesiology | 1223 | Human Anatomy \& Physiology I ^ | 4 |  |
| Nursing | 1001 | Introduction to Professional Nursing | 3 |  |
| Total |  |  | 15 |  |
|  |  |  |  |  |
| Year 1, Spring (Term 2) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Kinesiology | 1224 | Human Anatomy \& Physiology II ^ | 4 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Nursing | 1089 | Nursing and Healthy Lifestyles Management | 3 |  |
| Biology | 1012 | General Biology II | 4 |  |
| Psychology | 1001 | Introduction to Psychology | 3 |  |
| Total |  |  | 17 |  |
|  |  |  |  |  |
| Year 2, Fall (Term 3) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | 2001 | Clinical Microbiology | 4 |  |
| Sociology | 1176 | Introduction to Sociology | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Nursing | 2261 | Pharmacology for Generalist Nursing Practice | 3 |  |
| Nursing | 2144 | Health Assessment | 3 |  |
| Nursing | 2189 | Community Home I | 1 |  |
| Total |  |  | 17 |  |
|  |  |  |  |  |
| Year 2, Spring (Term 4) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Psychology | 2301 | Foundations of Developmental Psychology | 3 |  |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Nursing | 2589 | Generalist Nursing Practice I: Principles of Care \& Clinical Decision Making | 5 |  |
| Nursing | 2289 | Community Home II | 1 |  |
| Total |  |  | 16 |  |
|  |  |  |  |  |
| Year 3, Fall (Term 5) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Sociology** | 1167 | Social Statistics | 3 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Nursing | 3689 | Generalist Nursing Practice II: Primary \& Secondary Care of the Family | 6 |  |


| Nursing | 4296 | Genetics and Genomics | 3 | WI |
| :---: | :---: | :---: | :---: | :---: |
| Nursing | 3289 | Community Home III | 1 |  |
| Total |  |  | 16 |  |
|  |  |  |  |  |
| Year 3, Spring (Term 6) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Nursing | 3789 | Generalist Nursing Practice III: Secondary Health Care across the Lifespan | 6 |  |
| Nursing | 3204 | Perspectives on Health I: Thinking Globally | 3 |  |
| Nursing | 3489 | Community Home IV | 1 |  |
| Nursing | 3305 | Evidence Based Practice \& Nursing Research: Analysis \& Critical Appraisal | 3 |  |
| Total |  |  | 16 |  |
|  |  |  |  |  |
| Year 4, Fall (Term 7) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Nursing | 3389 | Perspectives on Health II: Acting Locally | 3 |  |
| Nursing | 4889 | Generalist Nursing Practice IV: Tertiary Care across the Lifespan | 6 |  |
| Nursing | 4589 | Community Home V | 1 |  |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| Total |  |  | 13-14 |  |
|  |  |  |  |  |
| Year 4, Spring (Term 8) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Nursing | 4198 | Health Policy and Economics* | 3 | WI |
| Nursing | 4885 | Generalist Nursing Practice Internship | 2 |  |
| Nursing | 4489 | Senior Seminar: Evidence Based Practice \& Fieldwork Experience | 3 |  |
| Nursing | 4689 | Community Home VI | 1 |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Total |  |  | 12 |  |
|  |  |  |  |  |
| Minimum Total Credits Required for Degree: |  |  | 122 |  |
|  |  |  |  |  |
| *Indicates writing intensive capstone for the major. |  |  |  |  |
| **Acceptable option includes Sociology 3201. |  |  |  |  |
| "The GS requirements will be satisfied upon the successful completion of Kinesiology 1223 and 1224. |  |  |  |  |

## Clinical/Fieldwork Agency Compliance

To ensure contractual compliance with fieldwork and clinical agencies, students are required to obtain background screenings such as the Pennsylvania Criminal Check and the FBI Criminal Check, along with a history and physical examination, immunization record, drug screening, and annual influenza vaccines. Students who do not comply with the required health and immunization requirements will not be permitted to attend clinical and will be dismissed from the nursing program.

Students who have a positive child abuse record or criminal background check for any offense found on the lists of Prohibitive Offenses Contained in Act 169 of 1996 as Amended by Act 13 of 1997 Criminal Offense will not be permitted to remain in the major and referred to student advising for assistance in exploring alternative options. Practice of deceit in the submission of any of the above documentation is cause for immediate dismissal from the nursing program.

## Bachelor of Science in Nursing (BSN): Registered Nurse Option

RN students follow the same curricular path as pre-licensure BSN students. Registered nurses apply directly to the BSN Program. RN applicants must meet the following admission criteria: (1) successful completion of an NLN-AC accredited nursing program with a cumulative GPA of 3.5 or higher; (2) submission of a completed Undergraduate Application for Transfer Students: (3) submission of application fee; (4) submission of all college transcripts and school of nursing transcript; and (5) current unencumbered license as a Registered Nurse. Once accepted into the BSN program, RN students are awarded thirty-one (31) nursing credits based on completion of their original nursing program and any additional transfer credits as determined by the Office of Undergraduate Admissions. Registered nurses accepted into the program are required to complete thirty (30) nursing credits within the BSN curriculum, the University's general Education courses, and all required Nursing prerequisite courses.

## Required Nursing Courses for the RN Option

| Term 1 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Nursing | 2144 | Health Assessment | 3 |  |
| Nursing | 4296 | Genetics and Genomics * | 3 | WI |
| Total |  |  | 6 |  |
|  |  |  |  |  |
| Term 2 |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Nursing | 1089 | Nursing and Healthy Lifestyles Management | 3 |  |
| Nursing | 3284 | Perspectives on Health I: Thinking Globally | 3 |  |
| Total |  |  | 6 |  |
|  |  |  |  |  |
| Term 3 <br> (Course based on student preference with Faculty Advisement) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Nursing | 3689 <br> or <br> 3789 <br> or <br> 4889 | ```Generalist Nursing Practice II: Primary & Secondary Care of the Family or Generalist Nursing Practice III: Secondary Health Care across the Lifespan or Generalist Nursing Practice IV: Tertiary Care across the Lifespan``` | 6 |  |
| Total |  |  | 6 |  |
|  |  |  |  |  |
| Term 4 |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Nursing | 3389 | Perspectives on Health II: Acting Locally | 3 |  |
| Nursing | 3305 | Evidence Based Practice \& Nursing Research: Analysis \& Critical Appraisal ** | 3 |  |


| Total |  |  | 6 |  |
| :---: | :---: | :---: | :---: | :---: |
| Term 5 |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Nursing | 4198 | Health Policy and Economics * | 3 | WI |
| Nursing | 4489 | Senior Seminar: Evidence Based Practice Fieldwork Experience*** | 3 |  |
| Total |  |  | 6 |  |
|  |  |  |  |  |
| Grand Total |  |  | 30 |  |
|  |  |  |  |  |
| *Writing Intensive |  |  |  |  |
| **Statistics is a prerequisite |  |  |  |  |
| ***Capstone Course. Must Be taken in the last semester of study |  |  |  |  |

## Public Health

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The Department of Public Health's undergraduate curriculum prepares students for diverse careers in the public health field that focus on creating, implementing, and evaluating interventions and programs designed to improve health status and quality of life for all individuals. The department has a national reputation and all levels of study are accredited by CEPH (Council on Education in Public Health), including the Bachelor of Science (BS), Master of Public Health (MPH), Master of Science in Epidemiology (MS-Epi), and Ph.D. programs. As one of the few accredited undergraduate public health programs in the country, the department offers a Bachelor of Science degree in public health that serves as a national model in which students study the broad range of public health concerns, including individual disease prevention and injury/harm reduction behaviors, distribution and development of disease through epidemiological assessment and community program development, implementation, and evaluation. Students learn to use educational interventions to provide health information, gain experience in assessing the needs of target populations, clarify program goals and objectives, and develop strategies to motivate and involve their clients/patients in educational interventions. All Public Health majors take a set of common theoretical courses designed to promote an understanding of health, wellness and disease prevention. After completing University-required General Education courses, Public Health students complete courses in the core disciplines of public health within the Department of Public Health as well as courses in other important areas outside the Department of Public Health. Students also participate in over 600 hours of fieldwork
experience in public health agencies, organizations or other entities to gain invaluable real-world experience in the field.

The Public Health major trains entry-level public health workers to provide frontline preventive health information, services, and health behavior interventions at the community level, particularly in communities with high-risk populations. Graduates typically work in: voluntary health agencies, public health departments, hospitals, rehabilitation centers, corporate work sites, community health organizations, family planning clinics, and managed-care facilities. They can also apply for graduate public health programs (Master of Public Health or Master of Science in Epidemiology) or other health professions.

## Mission of the Department

The Department of Public Health is well-known as a regional and national leader, fostering collaboration among researchers, educators, community practitioners, and private sector leaders. We are dedicated to addressing health needs in the global community to eliminate health disparities and to increase the quality and years of healthy life. The mission of the department emphasizes the principles and practices of all core areas of public health (social-behavioral, biostatistics, epidemiology, environmental health, health policy) by creating and evaluating applied interventions, programs, curricula, and policies designed to improve the health status and quality of life of individuals and communities. The department strives to contribute to the rapidly-changing knowledge base in the public health field. The department's strong service mission ensures that faculty and students are available to the communities served by Temple University; thus the department emphasizes scholarly service to regional, state, and national institutions and organizations, including schools, hospitals, and voluntary and government health agencies. Because of the pressing needs for health services in the region, coupled with our urban location, the program emphasizes public health and health education for diverse populations.

The Department of Public Health follows the requirements set forth by Temple University regarding General Education. The department has also established additional core and cognate requirements for all Public Health majors.

## Summary of Requirements

## 1. University Requirements

All students are required to complete the university's General Education (GenEd) curriculum.
All Temple students must take a minimum of two writing-intensive courses as part of the major. The specific writing-intensive courses required for this major are listed below and are identified by "WI" in the Attribute column.

## 2. Public Health Program Requirements

Students must complete a set of specific courses in the major, including a Health Related Professions Core course, Cognate Core courses and Public Health Major courses, including two
credit-earning internships (Public Health 3185 and Public Health 4185). Also required are two public health electives, one cognate elective and three general electives. The major requires a minimum of 122 total credits.

- Health Related Professions Core (3 s.h.). One (1) course is required:

Health Related Professions 2103.

- Cognate Core (18 s.h.). Five (5) courses are required:

Computer \& Information Science 1055, Kinesiology 1223, Kinesiology 1224, Strategic Communication 1111, Healthcare Management 3501.

- General Electives (9 s.h.). Three (3) courses are required. These may be the choice of the student.

Students must successfully pass all Health Related Professions and Cognate Core courses, and general electives, with a minimum grade of $C$ - or higher. Students not demonstrating the ability to meet this academic requirement will not be permitted to progress to the Upper-Division Public Health and related electives in the curriculum until the minimum grade of $C$ - is achieved.

- Lower-Division Public Health Coursework (24 s.h.). Eight (8) courses are required: Public Health 1101, 1104, 1105, 1106, 2101, 2102, 2216, 2219
- Upper-Division Public Health Coursework (30 s.h.). Eight (8) courses are required: a. Public Health 3101, 3102, 3104, 3105, 3496, 3596 (18 s.h.) b. Two Internship experiences: Public Health 3185, 4185 (12 s.h.)
- Public Health Electives (6 s.h.). Two (2) courses are required:

Students can choose from Public Health 1103, 1201, 1903, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2211, 2212, 2213, 2214, 2215, 2304, 3103. Additional listings may be obtained from the academic advisor and approved for elective credit.

- Cognate Elective (3 s.h.). One (1) course is required. Choices for this elective must be approved by the academic advisor.

All Public Health course work (those courses with a PBHL designation and courses approved as a cognate elective) must be completed with a grade of $C$ or higher.

Public Health Requirements for New Freshmen

| Year 1, Fall (Term 1) | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Subject | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| English | $08 x x$ or 09xx | Human Behavior | 3 | GB |
| GenEd | $08 x x$ or 09xx | Global/World Society | 3 | GG |
| GenEd | $08 x x$ or 09xx | Race \& Diversity | 3 | GD |
| GenEd |  | General Elective | 3 |  |
| Elective |  | $\mathbf{1 6}$ |  |  |
| Total |  |  |  |  |

## Year 1, Spring (Term 2)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Arts | 3 or 4 | GA |
| GenEd | $08 x x$ or 09xx | U.S. Society | 3 | GU |
| Public Health | 1101 | Introduction to Public Health | 3 |  |
| Total |  | $\mathbf{1 6}$ |  |  |

## Year 2, Fall (Term 3)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Kinesiology | 1223 | Anatomy \& Physiology I | 4 | (GS) |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Public Health | 1104 | Nutrition and Health | 3 |  |
| Public Health | 1105 | Society, Drug, and Alcohol Perspectives | 3 |  |
| Public Health | 1106 | Human Sexuality | 3 |  |
| Total |  | $\mathbf{1 6}$ |  |  |

Year 2, Spring (Term 4)

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Kinesiology | 1224 | Anatomy \& Physiology II | 4 | (GS) |
| Public Health | 2101 | Disease Prevention and Control | 3 |  |
| Public Health | 2102 | Environmental Health | 3 |  |
| Public Health | 2216 | Ethnicity, Culture and Health | 3 |  |
| Public Health | 2219 | Biostatistics and Public Health | 3 |  |
| Total |  |  | 16 |  |
|  |  |  |  |  |
| Year 3, Fall (Term 5) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Strategic Communication | 1111 | Public Speaking | 3 |  |
| Health Related Professions | 2103 | Health Psychology and Human Behavior | 3 |  |
| Public Health | 3101 | Epidemiology (Prerequisites: All 1000-level Public Health courses; Public Health 2219; Kinesiology 1223, 1224) | 3 |  |
| Public Health | 3496 | Introduction to Public Health Programs (Prerequisites: All 1000-level Public Health courses; Public Health 2219; Kinesiology 1223, 1224) | 3 | WI |
| Elective |  | General Elective | 3 |  |
| Total |  |  | 15 |  |
|  |  |  |  |  |
| Year 3, Spring (Term 6) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Public Health | 3104 | Professional Seminar in Public Health I (Prerequisites: All 1000-level Public Health courses; Public Health 2101, 2102, 2219; Public Health 3101, 3496; Kinesiology 1223, 1224; Health Related Professions 2103. Co-requisite: Public Health 3105) | 3 |  |


| Public Health | The Teaching-Learning Process <br> (Prerequisites: All 1000-level Public Health courses; <br> Public Health 2101, 2102, 2219; Public Health 3101; <br> Kinesiology 1223, 1224; Health Related Professions <br> 2103. Co-requisite: Public Health 3104) |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |

Public Health Requirements for New Transfer Students

| Fall, Term 1 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Public Health | 1101 | Introduction to Public Health | 3 |  |
| Public Health | 1104 | Nutrition and Health | 3 |  |
| Public Health | 1105 | Society, Drug and Alcohol Perspectives | 3 |  |
| Public Health | 1106 | Human Sexuality | 3 |  |
| Kinesiology | 1223 | Anatomy and Physiology I | 4 |  |
| Total |  |  | 16 |  |
|  |  |  |  |  |
| Spring, Term 2 |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |


| Public Health | 2101 | Disease Prevention and Control | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Public Health | 2102 | Environmental Health | 3 |  |
| Public Health | 2216 | Ethnicity, Culture and Health | 3 |  |
| Public Health | 2219 | Biostatistics and Public Health | 3 |  |
| Kinesiology | 1224 | Anatomy and Physiology II | 4 |  |
| Total |  |  | 16 |  |
|  |  |  |  |  |
| Fall, Term 3 |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Strategic <br> Communication | 1111 | Public Speaking | 3 |  |
| Health Related Professions | 2103 | Health Psychology and Human Behavior | 3 |  |
| Public Health | 3101 | Epidemiology (Prerequisites: All 1000-level Public Health courses; Public Health 2219; Kinesiology 1223, 1224) | 3 |  |
| Public Health | 3496 | Introduction to Public Health Programs (Prerequisites: All 1000-level Public Health courses; Public Health 2219; Kinesiology 1223, 1224) | 3 | WI |
| Elective |  | General Elective | 3 |  |
| Total |  |  | 15 |  |
|  |  |  |  |  |
| Spring, Term 4 |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Computer \& Information Science | 1055 | Computers \& Applications | 4 |  |
| Public Health | 3104 | Professional Seminar in Public Health I (Prerequisites: All 1000-level Public Health courses; Public Health 2101, 2102, 2219; Public Health 3101, 3496; Kinesiology 1223, 1224; Health Related Professions 2103. Co-requisite: Public Health 3105) | 3 |  |
| Public Health | 3105 | The Teaching-Learning Process <br> (Prerequisites: All 1000-level Public Health courses; Public Health 2101, 2102, 2219; Public Health 3101; Kinesiology 1223, 1224; Health Related Professions 2103. Co-requisite: Public Health 3104) | 3 |  |
| Public Health | 3596 | Public Health Program Administration (Prerequisites: Public Health 3496; All 1000-level Public Health courses; Kinesiology 1223, 1224) | 3 |  |
| Public Health |  | Public Health Elective | 3 |  |
| Total |  |  | 16 |  |
|  |  |  |  |  |
| Fall, Term 5 |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Public Health | 3102 | Research Methods (Prerequisites: All 1000-level Public Health courses; Public Health 2219; Kinesiology 1223, 1224) | 3 |  |
| Public Health | 3185 | Internship I (Prerequisites: All 1000-level Public Health courses; All 2000-level Public Health courses; Kinesiology 1223, 1224; Public Health 3101, 3496; Computer \& Information Science 1055) | 4 |  |


| Healthcare | 3501 | Introduction to Health Services Systems | 3 |  |
| :--- | :--- | :--- | :---: | :---: |
| Management |  |  |  |  |
| Elective |  | Cognate Elective | 3 |  |
| Total |  |  | $\mathbf{1 3}$ |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Spring, Term 6 | Course \# | Course Title | Hours | Attribute |
| Subject | Internship II (Prerequisite: Public Health 3185, 3596) | 8 |  |  |
| Public Health | 4185 | Public Health Elective | 3 |  |
| Public Health |  | General Elective | 3 |  |
| Elective |  |  | $\mathbf{1 4}$ |  |
| Total |  |  |  |  |

## Minor in Public Health

## Foundation Requirements

| Subject | Course $\#$ | Course Title | Hours | Semester |
| :--- | :--- | :--- | :---: | :---: |
| Public Health | 1101 | Introduction to Public Health | 3 | F/S |
| Public Health | 1201 | Contemporary Health Issues | 3 | F/S |
| Public Health | 2102 | Environmental Health | 3 | F/S |
| Public Health | 3101 | Epidemiology (Please see public health advisor to register for this course) | 3 | F/S |
| Health Related | 2103 | Health Psychology and Human Behavior | 3 | F/S |
| Professions |  |  |  |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

Public Health and Society Electives

| Choose one of the following: |  |  |  |
| :--- | :--- | :--- | :---: |
| Subject | Course \# | Course Title | Hours |
| Semester |  |  |  |
| Public Health | 1104 | Nutrition and Health | 3 |
|  | F/S |  |  |
| Public Health | 1105 | Society, Drug, and Alcohol Perspectives | 3 |
| Public Health | 1106 | Human Sexuality | 3 |
| Public Health | 2101 | Disease Prevention and Control | 3 |
| Subtotal |  |  | F/S |


| General Public Health Electives |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Choose one of the following: | Course \# | Course Title |  |  |  |
| Subject | Cours | Hours | Semester | Attribute |  |
| Public Health | 1103 | International Health | 3 | F/S | IS |
| Public Health | 2201 | Health Communication | 3 | F |  |
| Public Health | 2203 | AIDS and Society | 3 | Inter-session/ <br> Summer |  |
| Public Health | 2204 | Diet and Weight Management | 3 | Summer |  |
| Public Health | 2202 | Man-Made Disasters: Radiological, Chemical and <br> Biological Terrorism | 3 | F (online) |  |
| Public Health | 3103 | Counseling Techniques for Health Professionals | 3 | F/S |  |
| Subtotal |  |  | $\mathbf{3}$ |  |  |
|  |  |  | $\mathbf{2 1}$ |  |  |
| Total Credits for the Minor: |  |  |  |  |  |

## Certificate in Emergency Management with Special Populations

Temple University's Department of Public Health, in collaboration with Temple’s Center for Research Preparedness Education and Practice (C-PREP), is offering classes for preparing the public health workforce and emergency managers to address the needs of special populations in a competency-based and practice-oriented framework. In emergency management a special population is any group of people that needs extra support to be prepared for an emergency, as well as those needing community support to respond successfully and recover in disasters or emergency situations. These classes are for practitioners in emergency preparedness and response, public health professionals, undergraduate students, and recent graduates with an interest in emergency preparedness and response. This program consists of a four- or five-course sequence, depending on previous coursework. For current public health majors and minors at Temple University, two of these courses can be used to fulfill elective requirements. The certificate program can be finished in either one or two years part time, and the courses are all offered online so that students from all over the globe and at different stages in their career can take advantage of the program. This certificate will be listed on your transcript upon completion. FEMA Higher Ed calls this program a national first in their April 11, 2008 program report.

PRE-REQUISITE (1): This course may be waived if the student can demonstrate either NIMS certification or similar coursework taken at a college or university with a grade of B or better. Public Health 2207: Principals of Emergency Management: A Public Health Perspective

CORE (3): The core courses will address the basic competencies in emergency preparedness, response, and mitigation. Within these core competencies the needs of special populations will be addressed.

Public Health 2202: Man-Made Disasters: Radiological, Chemical and Biological Terrorism
Public Health 2208: Natural Disasters: Response and Recovery Public Health 2215: Special Populations: Strategic Community Outreach

ELECTIVE (1): The electives will allow the student to customize the certificate program to meet their educational objectives and professional needs within the rubric of emergency preparedness and special populations. This includes the option to take graduate-level electives as appropriate. Recommended electives include:

Public Health 2201 or Public Health 5105: Health Communication; graduate or undergraduate credits; in-person
Public Health 2205 or Public Health 5004: Stress and Change; graduate or undergraduate credits; online
Public Health 5009: Risk Communication; graduate credits; in-person

## For more information, contact:

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## Certificate in Construction Safety Management

Temple University's Department of Public Health is offering a certificate program in Construction Safety Management. This program is designed for those who intend to seek employment as a safety management professional in the construction industry in order to reduce accidents, injuries and illnesses.

This program will enable the student to:

- Identify and evaluate construction worksite hazards;
- Design and employ successful safety and health measures;
- Plan risk management activities for construction operations, and successfully integrate construction safety into all aspects of a construction project.

The Construction Safety Management Certificate is geared toward recent high school graduates, undergraduate students, the construction professional (e.g., electrician, carpenter, etc.) seeking to increase his or her knowledge of construction safety and health, and the industrial safety professional seeking to expand his or her knowledge of safety in the construction field.

ADMISSION REQUIREMENTS: High school diploma or GED, OSHA 30-hour Construction Safety and Health course.

REQUIRED COURSES are in the Departments of Public Health and Civil and Environmental Engineering:

1. Safety Hazards in the Construction Industry
2. Health Hazards in the Construction Industry
3. Construction Management for the Safety Professional
4. Prediction and Prevention of Construction Related Accidents
5. Construction Methods and Materials
6. Construction Safety Management Internship

## For further information, contact:

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# Therapeutic Recreation 

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Main Office Phone: 215-204-2703
Fax: 215-204-1386
http://chpsw.temple.edu/rs/therapeutic-recreation
The Therapeutic Recreation Program is composed of three degrees: a B.S. in Therapeutic Recreation, an M.S. in Recreation Therapy, and an interdisciplinary Ph.D. in Health Ecology. Additionally, the Therapeutic Recreation Program offers an accelerated M.S. degree program (5 year B.S. to M.S. degree program), which provides the opportunity for qualifying students studying recreation therapy as an undergraduate to begin taking graduate level courses within their undergraduate curriculum and therefore complete an M.S. in Recreation Therapy in a total of 5 years ( 4 year B.S. +1 year M.S.). Recreation therapists use recreation and leisure activities to facilitate recovery, health, and wellness in individuals with disabilities. The primary goal of the undergraduate program is to prepare entry-level recreation therapists to use play and recreation generally, and recreation therapy specifically as a means of psychosocial adaptation, health promotion, rehabilitation, and life quality for children, adults, and the elderly who have illness and disability. The curriculum is focused on assuring that graduates have proficiency in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains to function as recreation therapists in traditional and emerging service delivery settings. Alumni of Temple's therapeutic recreation degree programs can be found in a wide range of health and human services agencies. They are employed in diverse settings, including hospitals, rehabilitation centers, nursing homes, assisted-living facilities, schools, and community recreation agencies. According to the U.S. Department of Labor, employment opportunities are expected to increase approximately $17 \%$, as fast as the average for all other occupations. A growth in employment opportunities will be most prevalent in the areas of aging/nursing care facilities, as well as with students with disabilities in schools and in outpatient medical facilities vs. inpatient care.

## Mission of the Program

The Therapeutic Recreation Program strives to be a world class academic and research unit committed to advancing the role of play, recreation, and leisure opportunities in health promotion, rehabilitation and disease prevention for diverse individuals with chronic illnesses and disabilities across the life span. The program provides exceptional educational experiences, conducts discipline-expanding research, and contributes to society via programs that explore and test evidenced-based innovations in practice and policy. The program's mission includes:

- Instilling knowledge, values, ethics and skills that will guide students in their future academic pursuits and their professional practice in therapeutic recreation at the local, national and international levels;
- Being a leading contributor to the ever-changing knowledge base in health, leisure, and disability studies through research and other scholarly activities;
- Providing innovative and responsive educational opportunities, research and service in collaboration with local, regional, and national agencies and organizations; and,
- Fostering interdisciplinary collaborations to promote a better understanding of the importance of physically and socially active lifestyles to health, well-being and quality of life.

Central to the overall mission of the Therapeutic Recreation Program is a commitment to access and diversity. This is realized through a commitment to ensuring equal access to all qualified applicants (students and faculty) and a commitment to promoting equal access to recreation and leisure opportunities for all people regardless of age, economics, race, gender, culture, sexual orientation, religion or abilities.

## Certification

Following satisfactory completion of all coursework and internship requirements, graduates with the Bachelor of Science degree in Therapeutic Recreation are eligible to sit for the national certifying examination in therapeutic recreation administered by Educational Testing Services and the National Council on Therapeutic Recreation Certification.

## Therapeutic Recreation - Bachelor of Science

A Bachelor of Science (B.S.) degree in Therapeutic Recreation is awarded to students upon satisfactory completion of a minimum of 121 semester hours of credit with a minimum GPA of 2.0 overall and 2.5 in the major. Students completing this degree are eligible to sit for the national credentialing examination for recreation therapists.

## Summary of Requirements

## 1. University Requirements.

- All students are required to complete the General Education (GenEd) curriculum. Please note that the University GenEd curriculum has specific rules regarding the completion of this university requirement (for example, the number of classes a student may take in one department to satisfy GenEd Requirements), so careful review of the GenEd web site (http://gened.temple.edu/students/requirements/) is encouraged.
- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. Writing Intensive classes required for Therapeutic Recreation include Therapeutic Recreation 3096: Assessment and Documentation in Therapeutic Recreation, Therapeutic Recreation 3196: Research and Evaluation in Therapeutic Recreation and Therapeutic Recreation 4196: Therapeutic Recreation Clinical Procedures.
- Students are also encouraged to review University requirements for successful progression through the academic careers. Knowledge of course repeat policies, including the withdrawal policy, academic standing, rules on taking courses elsewhere, etc., can be found in the Academic Policies section of the Undergraduate Bulletin.

2. Therapeutic Recreation Program Requirements. Students must complete a set of specific courses in the major, including Health Related Professions Core, Cognate Core, Therapeutic Recreation major courses, and two credit-earning field-based clinical internships (Therapeutic Recreation 3185 and Therapeutic Recreation 4185). Students may choose from a list of approved external related electives, which are courses related to the major, and required for certification, but offered outside of the department. Students must also complete other non-credit earning requirements as part of the major, including 70 hours of professional development/volunteer experiences relevant to the major, criminal and child abuse clearances, health immunization and physical documentation, and certification in First-Aid/CPR.

- Health Related Professions Core (6 s.h.). Two (2) courses are required:
a. Select one from Health Related Professions 1101, Health Related Professions 1201, or Therapeutic Recreation 0813; and
b. Health Related Professions 2103
- Cognate Core (16 s.h.). Five (5) courses are required:

Kinesiology 1223, Psychology 1001, Psychology 1003/Sociology 1167, Psychology 2301 and Psychology 2201

Students must successfully pass all Health Related Professions courses and Cognate Core courses with a minimum grade of C. Students not demonstrating the ability to meet this academic requirement will not be permitted to progress to the Upper-Division Therapeutic Recreation Core and related electives in the curriculum until the minimum grade of $C$ is achieved.

- External Related Electives (3 s.h.)

Students will seek advisement from the Undergraduate Program Coordinator/Academic Advisor in the Therapeutic Recreation Program for approved external related electives.

- Lower-Division Therapeutic Recreation Coursework (6 s.h.). Two (2) courses are required:

Therapeutic Recreation 1102, 2103

- Upper-Division Therapeutic Recreation Coursework (48 s.h.). Thirteen (13) courses are required:
a. Therapeutic Recreation 2104, 3096, 3103, 3111, 3196, 4111, 4196
b. Two Internship Experiences: Therapeutic Recreation 3185 (3 s.h.), Therapeutic Recreation 4185 (12 s.h.)
c. Therapeutic Recreation Electives: Choose Four (4) from the following: Therapeutic Recreation 2201, 2203, 2205, 3203, 4205, 4211, 4213

All Therapeutic Recreation courses must be completed with a grade of C or higher.

## Suggested Semester by Semester Plan

The following grid displays required courses. Please note that, unless specified otherwise, students may select from a number of university-approved courses in the various areas of the GenEd curriculum.

## GenEd Requirements for Newly Admitted Freshman Students

| Year 1-Fall (Term 1) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | $\begin{aligned} & 0802,0812 \text { or } \\ & 0902 \end{aligned}$ | Analytical Reading \& Writing | 4 | GW |
| Health Related Professions | 2103 | Health Psychology \& Human Behavior | 3 |  |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 1-Spring (Term 2) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Quantitative Literacy* | 4 | GQ |
| Psychology | 1001 | Introduction to Psychology | 3 |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| ```Health Related Professions or Therapeutic Recreation or Health Related Professions``` | 1101 or 0813 or 1201 |  | 3 |  |
| Subtotal |  |  | 16 |  |
| *Mathematics 0824 is the suggested QA to meet pre-requisite requirements for Psychology 1003/Sociology 1167 |  |  |  |  |
|  |  |  |  |  |
| Year 2 - Fall (Term 3) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Kinesiology | 1223 | Human Anatomy \& Physiology I* | 4 | (GS) |
| Therapeutic Recreation | 2103 | Foundations of Therapeutic Recreation Practice | 3 |  |
| Therapeutic Recreation | 1102 | Adapted Sport, Recreation \& Inclusive Leisure Services | 3 |  |
| Psychology | 2301 | Foundations of Developmental Psychology | 3 |  |
| Subtotal |  |  | 16 |  |


| * Satisfactory completion of Kinesiology 1223 along with Kinesiology 1224 or any GS will meet the two-course GenEd Science \& Technology requirement. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Year 2 - Spring (Term 4) |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Elective | Elective | Elective | 2-3 |  |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| GenEd | 08xx or 09xx | Science \& Technology or Kinesiology 1224* | 3-4 | GS |
| Psychology | 2201 | Foundations of Psychopathology | 3 |  |
| Select one of the following Sociology/Psychology courses: |  |  | 3 |  |
|  | $\begin{array}{\|c} \hline 1167 \\ \text { or } \\ 1003 \end{array}$ | $\begin{array}{\|l} \hline \text { Social Statistics } \\ \text { or } \\ \text { Statistics for Psychology } \end{array}$ |  |  |
| Subtotal |  |  | 14-17 |  |

* Satisfactory completion of Kinesiology 1223 along with Kinesiology 1224 or any GS will meet the two-course GenEd Science \& Technology requirement.
Please note: Therapeutic Recreation 2205 will also satisfy a Therapeutic Recreation Elective. This course is also offered in the summer semesters.

Year 3 - Fall (Term 5)

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Therapeutic Recreation | 3096 | Assessment \& Documentation in Therapeutic Recreation^^ | 3 | WI |
| Therapeutic Recreation | 2104 | Therapeutic Recreation Modalities | 3 |  |
| Elective |  | Elective | 3 |  |
| Elective |  | Elective | 3 |  |
| Select one from the following Therapeutic Recreation Electives:* |  |  | 3 |  |
| Therapeutic Recreation | $\begin{gathered} 2201 \\ \text { or } \\ 2203 \end{gathered}$ | ```Therapeutic Recreation & Developmental Disabilities** or Assistive Technology in Recreation**``` |  |  |
| Subtotal |  |  | 15 |  |

* Four Therapeutic Recreation Elective courses (12 s.h.) required for graduation.
**These courses are offered in the fall semester only.
$\wedge \wedge$ Indicates writing intensive course for the major.

Year 3 - Spring (Term 6)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Therapeutic Recreation | 3103 | Professional Seminar II | 3 |  |
| Therapeutic Recreation | 3111 | Health Promotion through Leisure Education | 3 |  |
| Therapeutic Recreation | 3185 | Internship I | 3 |  |
| Select 2 from the following Therapeutic Recreation Electives:* | 6 |  |  |  |
| Therapeutic Recreation | 4205 | Therapeutic Recreation in Geriatric Service <br> Settings** <br> or <br> or <br> 4211 <br> or <br> 4213 <br> or <br> 2205 | Therapeutic Recreation \& Physical Disabilities** <br> or <br> Therapeutic Recreation \& Pediatric Healthcare** <br> or |  |
| Adventure Challenge/Programming |  |  |  |  |

* Four Therapeutic Recreation Elective courses (12 s.h.) required for graduation.
**These courses are offered in the spring semester only.
Please note: Therapeutic Recreation 2205 will also satisfy a Therapeutic Recreation Elective. This course is also offered in the summer semesters.

Year 4 - Fall (Term 7)

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Therapeutic Recreation | 3196 | Research \& Evaluation in Therapeutic Recreation^ | 3 | WI |
| Therapeutic Recreation | 4196 | Therapeutic Recreation Clinical Procedures $\wedge \wedge$ | 3 | WI |
| Select one from the following Therapeutic Recreation Electives:* |  |  | 3 |  |
| Therapeutic Recreation | 3203 or 2201 or 2203 | ```Therapeutic Recreation & Mental Health** or Therapeutic Recreation & Developmental Disabilities** or Assistive Technology in Recreation**``` |  |  |
| Related Elective |  | See advisor for course selection. *** | 3 |  |
| Elective |  |  | 2-3 |  |
| Subtotal |  |  | 14-15 |  |

A Indicates writing intensive capstone for the major.
$\wedge \wedge$ Indicates writing intensive course for the major.

* Four Therapeutic Recreation Elective courses (12 s.h.) required for graduation.
**These courses are offered in the fall semester only.
*** Related Elective: The related elective course selected must qualify as supportive coursework in the area of human services for the National Council for Therapeutic Recreation Certification. See advisor for additional clarification.

Year 4 - Spring (Term 8)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Therapeutic Recreation | 4111 | Administration of Therapeutic Recreation | 3 |  |
| Therapeutic Recreation | 4185 | Internship II | 12 |  |
| Subtotal |  | $\mathbf{1 5}$ |  |  |

Note: Students may lighten their academic load in the fall and spring semesters by taking classes during the summer sessions. Please see your advisor to explore summer course offerings and suitable options.

## GenEd-to-GenEd Transfer Curriculum

The following course sequencing for Fall and Spring transfers is based on meeting Temple University's GenEd-to-GenEd Transfer requirements for students with an approved associate degree from a community college with an approved GenEd-to-GenEd agreement. (See GenEd Transfer programs at www.temple.edu/bulletin/Academic_programs/general_education/transfer.shtm). If your transfer courses do not include coursework in anatomy and physiology, human growth and development, and abnormal psychology, you will be required to take these courses as part of your B.S. degree. In some instances, the general elective requirements identified may be used to meet this
requirement. Students should check with their academic advisor or the Undergraduate Curriculum Coordinator regularly to make certain they are meeting all requirements to be eligible for graduation.

## FALL TRANSFER

| 1st Semester - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
|  | $\begin{array}{\|c} \hline 1101 \\ \text { or } \\ 0813 \\ \text { or } \\ 1201 \\ \hline \end{array}$ | Contemporary Aspects of Disability <br> or <br> Disability Identity <br> or <br> Introduction to Health Professions | 3 |  |
| Therapeutic Recreation | 1102 | Adapted Sport, Recreation \& Inclusive Leisure Services | 3 |  |
| Therapeutic Recreation | 2103 | Foundations of Therapeutic Recreation Practice | 3 |  |
| Health Related Professions | 2103 | Health Psychology \& Human Behavior | 3 |  |
| Related Elective |  | See advisor for course selection* | 3 |  |
| Subtotal |  |  | 15 |  |
| * Related Elective: The related elective course selected must qualify as supportive coursework in the area of human services for the National Council for Therapeutic Recreation Certification. See advisor for additional clarification. |  |  |  |  |
|  |  |  |  |  |
| 2nd Semester - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Therapeutic Recreation | 3096 | Assessment \& Documentation in Therapeutic Recreation^^ | 3 | WI |
| Therapeutic Recreation | 3103 | Professional Seminar II | 3 |  |
| Therapeutic Recreation | 3111 | Health Promotion through Leisure Education | 3 |  |
| Therapeutic Recreation | 2104 | Therapeutic Recreation Modalities | 3 |  |
| Select two of the following Therapeutic Recreation courses: |  |  | 6 |  |
| Therapeutic Recreation | 4205 <br> or <br> 4211 <br> or <br> 4213 <br> or <br> 2205 | Therapeutic Recreation in Geriatric Service Settings* or <br> Therapeutic Recreation \& Physical Disabilities*** <br> or <br> Therapeutic Recreation \& Pediatric Health Care*** <br> or <br> Adventure Challenge/Programming ** |  |  |
| Subtotal |  |  | 18 |  |
| $\wedge \wedge$ Indicates writing intensive course for the major. |  |  |  |  |
| * These courses are offered in the spring semester only. |  |  |  |  |
| **This course is also offered in the summer for students wishing to lighten their course load during the academic year. |  |  |  |  |
| *** These courses are offered in the spring semester only and would require special instructor permission to take concurrently with Therapeutic Recreation 3096: Assessment and Documentation |  |  |  |  |
| 3rd Semester - Summer |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Therapeutic Recreation | 3185 | Internship I | 3 |  |
| Subtotal |  |  | 3 |  |
|  |  |  |  |  |
| 4th Semester - Fall |  |  |  |  |
| Subject | Course \#\|Course Title |  | Hours Attribute |  |


| Therapeutic Recreation | 3196 | Research \& Evaluation in Therapeutic Recreation^ | 3 | WI |
| :---: | :---: | :---: | :---: | :---: |
| Therapeutic Recreation | 4196 | Therapeutic Recreation Clinical Procedures $\wedge \wedge$ | 3 | WI |
| Related Elective |  | See advisor for course selection* | 3 |  |
| Elective |  |  | 3 |  |
| Select two of the following Therapeutic Recreation courses: |  |  | 6 |  |
| Therapeutic Recreation | 2201 <br> or <br> 2203 <br> or <br> 3203 | ```Therapeutic Recreation & Developmental Disabilities** or Assistive Technology in Recreation** or Therapeutic Recreation & Mental Health**``` |  |  |
| Subtotal |  |  | 18 |  |
| ¢ Indicates writing-intensive capstone for the major. |  |  |  |  |
| $\wedge \wedge$ Indicates writing-intensive course for the major. |  |  |  |  |
| * Related Elective: The related elective course selected must qualify as supportive coursework in the area of human services for the National Council for Therapeutic Recreation Certification. See advisor for additional clarification. |  |  |  |  |
| ** These courses are offered in the fall semester only. |  |  |  |  |
|  |  |  |  |  |
| 5th Semester - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Therapeutic Recreation | 4111 | Administration of Therapeutic Recreation | 3 |  |
| Therapeutic Recreation | 4185 | Internship II | 12 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Total Credits Required for Degree |  |  | 121 (minimum) |  |

## SPRING TRANSFER

| 1st Semester - Spring |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Health Related Professions <br> or <br> Therapeutic Recreation <br> or <br> Health Related Professions | $\begin{gathered} 1101 \\ \text { or } \\ 0813 \\ \text { or } \\ 1201 \end{gathered}$ | ```Contemporary Aspects of Disability or Disability Identity or Introduction to Health Professions``` | 3 | GB |
| Therapeutic Recreation | 1102 | Adapted Sport, Recreation \& Inclusive Leisure Services | 3 |  |
| Therapeutic Recreation | 2103 | Foundations of Therapeutic Recreation Practice | 3 |  |
| Therapeutic Recreation | 2104 | Therapeutic Recreation Modalities | 3 |  |
| Health Related Professions | 2103 | Health Psychology \& Human Behavior | 3 |  |
| Therapeutic Recreation | 3096 | Assessment \& Documentation in Therapeutic Recreation^^ | 3 | WI |
| Subtotal |  |  | 18 |  |
| $\wedge \wedge$ Indicates writing intensive course for the major. |  |  |  |  |
|  |  |  |  |  |
| 2nd Semester - Summer |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Therapeutic Recreation | 3185 | Internship I | 3 |  |
| Subtotal |  |  | 3 |  |
| Please note: Therapeutic Recreation 2205 will also satisfy a Therapeutic Recreation elective. This course is also offered in the summer semesters. |  |  |  |  |


| 3rd Semester - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Therapeutic Recreation | 3103 | Professional Seminar II | 3 |  |
| Therapeutic Recreation | 3196 | Research \& Evaluation in Therapeutic Recreation^ | 3 | WI |
| Select two of the following Therapeutic Recreation courses: |  |  |  |  |
| Therapeutic Recreation | 2201 or 2203 or 3203 | ```Therapeutic Recreation & Developmental Disabilities** or Assistive Technology in Recreation** or Therapeutic Recreation & Mental Health**``` | 6 |  |
| Elective |  |  | 3 |  |
| Subtotal |  |  | 15 |  |
| ** These courses are offered in the fall semester only. |  |  |  |  |
| / Indicates writing-intensive capstone for the major. |  |  |  |  |
|  |  |  |  |  |
| 4th Semester - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Therapeutic Recreation | 3111 | Health Promotion through Leisure Education | 3 |  |
| Therapeutic Recreation | 4196 | Therapeutic Recreation Clinical Procedures^ | 3 | WI |
| Related Elective |  | See advisor for course selection* | 3 |  |
| Related Elective |  | See advisor for course selection* | 3 |  |
| Select two of the following Therapeutic Recreation courses: |  |  | 6 |  |
| Therapeutic Recreation | 2205 or 4211 or 4213 or 4205 | ```Adventure Challenge/Programming or Therapeutic Recreation \& Physical Disabilities** or Therapeutic Recreation \& Pediatric Health Care** or Therapeutic Recreation in Geriatric Service Settings**``` |  |  |
| Subtotal |  |  | 18 |  |
| \ Indicates writing-intensive course for the major. |  |  |  |  |
| * Related Elective: The related elective course selected must qualify as supportive coursework in the area of human services for the National Council for Therapeutic Recreation Certification. See advisor for additional clarification. |  |  |  |  |
| ** These courses are offered in the spring semester only. |  |  |  |  |
|  |  |  |  |  |
| 5th Semester - Summer |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Therapeutic Recreation | 4111 | Administration of Therapeutic Recreation | 3 |  |
| Therapeutic Recreation | 4185 | Internship II | 12 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Total Credits Required for Degree |  |  | 121 (minimum) |  |

# SCHOOL OF SOCIAL WORK 

in

# The College of Health Professions \& Social Work 

Michael R. Sitler, EdD, Interim Dean<br>553 Ritter Hall Annex<br>1301 W. Cecil B. Moore Avenue<br>215-204-8623<br>http://chpsw.temple.edu/ssa/home

## Mission and Goals

The School of Social Work was established in 1969 to prepare individuals for professional practice and for positions of leadership in social work and in the broader human services arena. The distinctive mission of the school, rooted in humanistic and democratic values, is reflected in a broad and vigorous commitment to the elimination of human suffering and social injustice and to the promotion of human rights and social equality. Its educational programs are therefore centered on intervention strategies on behalf of those populations and persons who are underserved, victimized, or denied full access to social opportunities and resources. Poverty, racism, sexism, homophobia and other forms of discrimination and disenfranchisement are priority concerns of the school, as are those social problems associated with life in the inner city.

The School of Social Work (SSW) is dedicated to societal transformations to eliminate social, political, and economic injustices for poor and oppressed populations, and advance the quality of life for all through:

- Education emphasizing the discovery of knowledge and the use of critical inquiry and professional ethics to guide solution-seeking and action-taking to effect social change among professional social workers in front-line, supervisory, managerial, and leadership positions.
- Research and scholarship to advance applied knowledge and generate evidence-based strategies to resolve problems occurring between people and their social environments at local, state, national, and global levels.
- Public service to aid the dissemination of knowledge and evidence-based strategies, and the responsiveness of the school to the needs of constituents through collaborations and partnerships with communities, agencies, and organizations.


## B.S.W. Program Objectives

At the completion of the B.S.W. curriculum, students will demonstrate the ability to:

1. Apply strategies of social change and advocacy that help advance social, political, and economic justice.
2. Use critical inquiry and scientific research methods, both qualitative and quantitative, to evaluate and advance one's own social work practice and that of the profession.
3. Understand and work to eliminate the forms and mechanisms of oppression and discrimination at all system levels.
4. Practice with knowledge, skills, and respect with regard to age, class, color, culture, ethnicity, family structure, gender, language, marital status, national origin, physical and/or mental disabilities, race, religion, sex, and sexual orientation.
5. Understand and adhere to the values, ethical standards and principles of the social work profession.
6. Use knowledge of the social work profession's history, concerns, and societal contributions to inform contemporary issues in practice.
7. Practice with the skills and knowledge base of a culturally competent generalist social work practitioner at all system levels.
8. Demonstrate professional use of self in their practice with effective communication skills, self-awareness, inclusion of supervision and consultation, and the creation of positive change within organizations and service delivery systems.
9. Understand, analyze, influence, and formulate social policies.
10. Critically apply theoretical frameworks, supported by empirical evidence, that offer insight into the development and behavior of individuals over the life span and the interactions among individuals, families, groups, organizations, and communities.

## Accreditation

The Bachelor of Social Work and the Master of Social Work programs are accredited by the Council on Social Work Education. This attests to the educational quality of the curricula and to the qualifications of graduates to assume professional positions that legally require applicants to have these degrees.

## Honors/Honor Society

Dean's List - Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List policy for specific GPA and credit-hour requirements.

Alpha Delta Mu National Social Work Honor Society - Students with a cumulative GPA of 3.50 or above may apply for nomination to Alpha Delta Mu. Juniors and seniors are eligible for membership. Students should discuss this with their advisors.

## Student Groups

Students at Temple University's School of Social Work are part of a diverse community. The school offers an opportunity to be in class with diverse students who have had different life experiences and who represent varied points of view. In addition to classroom learning, SSW offers a number of ways in which students can come together as a community. The main student organization at SSW is the SSW Student Collective.

The Student Collective is the organization of both undergraduate and graduate students matriculated in the SSW Program. The Student Collective sponsors activities each academic year of a social, educational, and professional nature. Student representatives, selected by the Collective, sit on various school committees as voting members. The Collective was formed to represent a unified student voice that incorporates all the diversity of the student body. For additional information, contact the Director of Admissions and Student Services or see the bulletin board in the lobby on the fifth floor of Ritter Hall Annex.

In addition to the Student Collective, students can choose to participate in the following social work organizations at SSW. The activity level of many groups varies from year to year since their existence is dependent on students stepping forward and organizing meetings and events.

## National Social Work Honor Society (Beta Rho Chapter, Alpha Delta Mu)

The purpose of this organization is to advance excellence in social work practice and to encourage, stimulate and maintain scholarship of the individual members in all fields, particularly in social work. For current activities, see the bulletin board in the lobby on the fifth floor of Ritter Hall Annex.

## Alumni Association

For more information about SSW's alumni association, contact the General Alumni Association for names and numbers of current officers at 215-204-7524.

## National Association of Social Workers-Philadelphia Division (NASW)

NASW is a professional organization that works on behalf of its members and the consumers they serve. Applications are available on the NASW bulletin board in the lobby on the fifth floor of Ritter Hall Annex.

If you are interested in contributing your time, energy and ideas to any of the following groups that have added, over the years, to the rich diversity of activities at SSW, please contact the Director of Admissions and Student Services.

## Latino Social Work Organization (LSWO)

LSWO was founded in 1992 by a group of young social workers in Chicago. Temple students involved in LSWO have advocated for quality bilingual/bicultural services to Latinos and other oppressed communities.

## Student Association of Black Social Workers (SABSW)

SABSW is a non-profit organization created to serve African-American students and the community. The SABSW works towards unifying black Social Work students in the School of Social Work. The SABSW will also work with any student organization on campus or the immediate community to further the educational, political, academic, communal, and social plight of students at large.

## Pride in Social Work (PSW)

PSW provides support, education, and advocacy for gay, lesbian, bi-sexual and transgendered students and their supporters. For additional information on Pride in Social Work at Temple University, contact Professor Bernie Newman at 215-204-1205.

## Underground Railroad - Temple Depot (URR)

The URR works together with the Poor People's Economic Human Rights Campaign focusing on direct actions, such as lobbying, advocacy, demonstrations, and support of grass-roots movements for social justice.

## Academic Advising

The College of Health Professions and Social Work has an extensive system of academic advising provided by professional and faculty advisors. In the School of Social Work (SSW), when students reach junior or senior standing, they are assigned to faculty advisors who assist with mentoring as students progress in their professional training. Early and regular contact with the advisor can be extremely helpful. The advisor is a knowledgeable person with whom students may discuss issues of concern in relation to university regulations as well as course selection.

Academic advisors are particularly important for social work majors. The Bachelor of Social Work (B.S.W.) curriculum is organized so that courses scheduled to be taken later in the program build on the knowledge and skill foundation provided in the liberal arts and social work courses taken earlier. For this reason, most social work courses designate successful completion (with a C- or better) of earlier courses as prerequisite to taking later courses. Additionally, SSW requires that three of the social work courses required in each semester of the senior year -research, the seminar in social work practice, and the field practicum -- be taken concurrently. This program of study for B.S.W. students has been carefully designed and approved by faculty. It is intended to provide students with a coherent, integrated, and high quality learning experience.

Although students must assume primary responsibility for knowing the requirements for their degree and for acquiring information about their academic status, student advisors can help
students if they have any questions. Academic advisors strive to avoid errors when advising students about their program requirements; however, schools and colleges cannot assume liability for errors in advising.

## Transfer Students from Schools Outside of Temple

The Offices of the Provost and the Senior Vice Provost for Undergraduate Studies are responsible for the University's relations with community colleges and for oversight of curricular policies related to student transfer into Temple. The Senior Vice Provost's Office assists in the evaluation and re-evaluation of transfer courses for GenEd Curriculum credit at Temple, and interprets University transfer policies for students, faculty members, and academic advisors. (See Undergraduate Admissions regarding transfer admissions.)

Once accepted into the University, students should contact and set up an appointment with SSW's academic advisor.

Students are expected to be majors in the program a minimum of two years and a summer.

## Academic Policies \& Regulations

Please see the Undergraduate Academic Policies. Students are responsible for complying with all university-wide academic policies that apply to their individual academic status. Additional and unique policies, or exceptions for the School of Social Work, appear below.

## Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List policy for specific GPA and credit-hour requirements.

## Program Performance

Social work majors are expected to maintain a cumulative GPA of 2.00 or above. Students are expected to maintain grades of C - or above in each of the professional and professionally-related courses. Students who obtain a D+ or below in any of the courses in the social work major must repeat the course.

Collegial Warning will be issued to students whose GPA falls below 2.00 for one semester. Students should not register for more than 12 s.h. until they improve their average.

Collegial Probation: Students who fall below a 2.00 either for the semester or for their cumulative average will be placed on probation. They may register for no more than 12 s.h. for the next term in order to improve their average. If their average is still below a 2.00 after two semesters of academic probation, students are subject to being dropped from the Social Work Program in the School of Social Work.

Dropped from the Program: If the student does not achieve a cumulative average of 2.00 or show evidence of substantive scholastic improvement after two semesters on collegial probation and a 12 s.h. roster, the student is subject to being dropped from the School of Social Work.

## Readmission Application

To re-enter the School of Social Work, students must complete a Re-Enrollment Application found at www.temple.edu/undergrad/applying/documents/request_to_reenroll.pdf and send it to the fax number designated on the last page of the application. Applications of students seeking re-enrollment after an absence of one or more semesters, not including summers, will be reviewed by the Director of the B.S.W. Program. If the student is accepted for readmission, his or her program for completion of degree requirements will be planned in accordance with those currently operative in the program. If courses were taken elsewhere, applicants are responsible for having official transcripts available when submitting the re-enrollment application.

## Transfer from Schools within the University

Students who are in good standing at Temple University may transfer to the School of Social Work at any point during their academic career. Before applying to transfer to Social Work, Temple students must attend a Change of Program session. These are listed on the College of Health Professions and Social Work web site under Student Advising (http://chpsw.temple.edu/). Transfer applications will not be processed until the student attends the Change of Program session. Intra-university transfer students will be notified of the decision in a letter from the Dean's Office. A minimum GPA of 2.0 is required for admission to any of the CHPSW programs.

Prior to transferring, students are encouraged to arrange to meet with both the original school advisor and the SSW advisor or BSW Program Director. Because of the professional requirements and the sequential nature of the curriculum, students are encouraged to enter the program as early as possible. Students must be majors in the social work program for a minimum of two years.

## General Graduation Requirements

In order to receive a Bachelor of Social Work degree, a student must complete a minimum of 120 semester hours, which includes the University General Education (GenEd) curriculum and the School of Social Work curriculum. A potential graduate must also hold a cumulative GPA of 2.00 or better (having received a C- or better in all social work courses), and meet any additional requirements, such as the Exit Interview.

## Military Science Courses

Undergraduate students in the College of Health Professions and Social Work whose degree programs allow for free electives may apply up to 12 credits of military science courses at the

3000 and 4000 levels in Aerospace Studies (Air Force ROTC), Military Science (Army ROTC), and Naval Science (Navy ROTC).

## Student Contact Information

Students are asked to call the Office of Enrollment and Student Services (OESS) of the College of Health Professions and Social Work at 215-707-4800 or the department with questions regarding the college or specific departments. For contact information in a specific department, visit the web site at http://chpsw.temple.edu/. Also, you may click the links on the left of this page for additional department and program information.

## Academic Program and Academic Advising

Cheri Carter, PhD, MSW

BSW Program Director
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Julie Krystopa Skrocki, MS Ed.
Academic Advisor II, SSW Undergraduate Program
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## Office of Enrollment and Student Services Contacts

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# Administrators and Faculty 

## Administrative Officers

Michael R. Sitler, Interim Dean, Ed.D., New York University
Jeffrey Draine, Department Chair, Ph.D., University of Pennsylvania
Scott Edward Rutledge, Assistant Chair, Ph.D., University of Washington
Link Martin, Assistant Dean and Director, Temple Harrisburg, M.S.W., University of Hawaii
Cheryl Hyde, Director, M.S.W. Program, Ph.D., University of Michigan
Claudia Dewane, Assistant Chair, Temple Harrisburg, D.Ed., Pennsylvania State University
Cheri Carter, Director, B.S.W. Program, Ph.D., University of Delaware
Social Work Faculty and Professional Staff

## Professor

Ron Costen, Ph.D., University of Pittsburgh (T/I)
Jeffrey Draine, Ph.D., University of Pennsylvania
Jay S. Fagan, D.S.W., Columbia University
Larry Icard, Ph.D., Columbia University
Linda M. Mauro, D.S.W., University of Pennsylvania
Edward Newman, Ph.D., Brandeis University

## Associate Professor

Israel Colon, Ph.D., Brandeis University
Marsha Z. Crawford, D.S.W., Howard University
Claudia Dewane, D.Ed., Pennsylvania State University (T/I)
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Cheryl Hyde, Ph.D., University of Michigan
Lois Millner, Ph.D., Bryn Mawr College
Miguel Munoz-Laboy, Dr. P.H., Columbia University
Bernie S. Newman, Ph.D., University of Pittsburgh
Emeka Nwadiora, D.S.W., Howard University, Ph.D. and J.D., Temple University
Scott Edward Rutledge, Ph.D., University of Washington
Rosalie Schofield, Ph.D., Brandeis University (T/I)
Mark Schmitz, Ph.D., University of Iowa (T/I)

## Assistant Professor

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Scott Edward Rutledge, Ph.D., University of Washington
Yookyong Lee, Ph.D., Columbia University
Jonathan Singer, Ph.D., University of Pittsburgh

## Instructor

James Corbin, M.S.W., Temple University
Christopher Dubble, M.S.W., Temple University (T/I)
Shiloh Erdley, MSW, University of Pennsylvania (T/I)
Laurie Friedman, LSW, MSW and MGA, University of Pennsylvania (T/I)
Joseph Kumi, M.S.W., Florida State University (T/I)
Susan McDonald, Ph.D., Fordham University (T/I)
Alan Pfeffer, M.S.W., Temple University (T/I)

## Field Education Office

Shirley Moy, M.S.W., Temple University
Tammy Carson, M.S.W., University of Pittsburgh
Valarie Clemmons, M.S.W., Temple University
Craig Cohen, Ph.D., Yeshiva University
Michelle Lear, M.S.W., Temple University
Virgina Teter, M.S.W., Temple University

## Office of Student Services

Erin Brosious, B.A., Student Services Coordinator
Gail Glicksman, Ph.D., Assistant Dean for Enrollment and Student Services
Shelley Osagie, M.Ed., Associate Director for Student Services and Operations
Julie Krystopa Skrocki, MS. Ed., Academic Advisor II
Gradette Willis, M.S.W., Associate Director for Advisement

## Bachelor of Social Work (B.S.W.)

## Ritter Annex Fifth Floor

215-204-8623

## Mission Statement

The School of Social Work, which is part of the College of Health Professions and Social Work, is dedicated to societal transformations to eliminate social, political, and economic injustices for poor and oppressed populations, and advance the quality of life for all through:

- Education emphasizing the discovery of knowledge, use of critical inquiry and professional ethics to guide solution-seeking and action-taking to effect social change among professional social workers in front-line, supervisory, managerial, and other leadership positions.
- Research and scholarship to advance applied knowledge and generate evidence-based strategies to resolve problems occurring between people and their social environments at local, state, national, and global levels.
- Public service that aids the dissemination of knowledge and evidence-based strategies through collaborations and partnerships with communities, agencies, and organizations.


## Goals

The goals of the School of Social Work are:

- preparation of ethical and competent social work practitioners and leaders who are committed to social and economic justice and to the eradication of barriers to the fullest development of human potential;
- provision of educational opportunities to a diverse population of students representative of the constituencies served;
- production of scholarship and research that contributes to the social work knowledge base;
- engagement in service-related activities with relevant constituencies.


## B.S.W. Curricular Objectives

By completion of their undergraduate studies, students will be able to:

- apply skills and knowledge of generalist social work practice with systems of all sizes;
- understand human behavior from holistic and developmental perspectives that encompass dynamic interaction among social, political, cultural, economic, psychological, spiritual, and biological factors;
- critically select and apply theories and research findings to social work practice;
- understand and adhere to professional social work values and ethics;
- assess situations using knowledge about the effects of structural injustices based on race, class, gender, culture, sexual orientation, ability, age, and other forms of oppression;
- exercise self-awareness and reflection as part of the development of their professional and personal selves;
- engage in practice that enhances the capabilities of people to transform their lives and communities;
- communicate effectively verbally, non-verbally and in writing with agencies, advocates, legislatures, policy makers and people in client status;
- practice social work with a commitment to social and economic justice and the empowerment of individuals, families, groups, organizations, and communities;
- evaluate the effectiveness of their own practice;
- understand the relationship of historic social patterns, values and institutional arrangement, recognizing their impact on social welfare policy and services and the social work profession;
- use supervision and consultation to enhance their professional development and the delivery of services;
- understand the dynamics of human service organizations and know how to engage in productive organizational change;
- understand how global issues affect local practice.


## The B.S.W. Curriculum

The B.S.W. curriculum is organized so that courses scheduled to be taken later in the program assume, and build on, the knowledge and skill foundation provided in the liberal arts and social work courses taken earlier. For this reason, most social work courses designate successful completion (with a C- or better) of earlier courses as prerequisite to taking later courses. Additionally, the School of Social Work requires that three of the social work courses required in each semester of the senior year -- research, the seminar in social work practice, and the field practicum -- be taken concurrently. This program of study for B.S.W. students has been carefully designed and approved by faculty. It is intended to provide students with a coherent, integrated, and high-quality learning experience.

## Requirements for the Degree of Bachelor of Social Work (B.S.W.)

## School of Social Work Requirements

- Satisfactory completion of a minimum of 120 semester hours of credit.
- A minimum cumulative GPA of 2.00 overall and in the major.
- A grade of "C-" or higher is required in all courses satisfying GenEd and the Social Work major.


## University Requirements

All students are required to complete the university General Education (GenEd) curriculum.
(Students who entered prior to fall 2011 should check the online archived Undergraduate Bulletin for the appropriate year and program requirements.)

All Temple students must take a minimum of two writing-intensive courses at Temple as part of the major. The specific writing-intensive courses required for this major are identified by "WI" in the Attribute column in the tables below.

## A grade of "C-" or higher is required in all courses satisfying GenEd and the Social Work major.

## B.S.W. Program Requirements

- Six university courses (18-19 s.h.) required by the School of Social Work: Psychology 1001 (Introduction to Psychology); Sociology 1176 (Introduction to Sociology); Kinesiology 1223 (Human Anatomy \& Physiology I) or Biology 1001 (Human Biology);

Economics 1001 (Introduction to the Economy) or Economics 1101 (Macroeconomic Principles) or Economics 1102 (Microeconomic Principles) or Economics 1103 (Global Economics Issues) or Economics 0858 (The American Economy); Political Science 1101 (The American Political System) or 1911 (Honors Introduction to American Politics); Sociology 1167 (Social Statistics) or Sociology 1967 (Honors Social Statistics) or Mathematics 1013 (Elements of Statistics).

- Electives (15 s.h.): 3 s.h. Social Work specific elective course and 12 s.h. of general electives
- Professional courses in Social Work (54 s.h.)
- Field Work Practice: A minimum of 400 hours in supervised field settings is required. Students are overseen by an M.S.W. (or B.S.W. with at least two years of experience). They are directly involved in professional tasks in the agency and in the community. This component of the educational program of study facilitates the integration of classroom learning particularly in the social work subject areas of human behavior, policy, practice, and research. Students apply what they are learning and receive feedback from both classroom and field instructors on their work. (10 s.h. included in the 54 s.h. of professional social work courses specified above.)


## Some of the fields of practice in the five-county area in which majors do their field work are:

- Aging: including adult service centers; assistance in a variety of public and private organizations, treatment and protective functions;
- Children and Youth: child abuse, foster care and adoption agencies, parenting and support services;
- Community Organization/Planning: public issues and policies, neighborhood services at settlements, Y's, community centers;
- Correctional/Justice: probation, parole, prison, community rehabilitation organizations;
- Developmental Disabilities: community-living arrangements, day programs, other public and private functions;
- Education: schools and alternative education programs;
- Family Services: material aid, crisis intervention, ongoing counseling;
- Health/Hospitals: advising, counseling, direct service with and on behalf of patients; a variety of functions in hospitals and community health centers;
- Legal: public agencies assisting low-income population in matters relating to law, housing, discrimination, etc.;
- Mental Health: small and large institutions, community-based units, public and private auspices;
- Substance Abuse: counseling, direct service in a variety of settings, both public and private;
- Violence and Domestic Issues: domestic violence of all kinds, sexual assault, child abuse, in a wide variety of settings.

Note: The symbols (F), (S), (SS1) or (SS2) after the course number indicates that the class is offered ONLY in the semester indicated: (F) = offered only in fall semester; (S) = offered only in spring semester; (SS1) = offered only in first summer session; (SS2) = offered only in second summer session.

Year 1 - Fall (Term 1)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Social Work | 1001 | Introduction to Social Welfare \& Human Services | 3 |  |
| English | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08 xx or 09xx | Arts | $3-4$ | GA |
| GenEd | 08 xx or 09xx | Race \& Diversity | 3 | GD |
| Subtotal |  |  | $\mathbf{1 3 - 1 4}$ |  |

Year 1 - Spring (Term 2)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Social Work | 1002 | Communication in Social Work Practice | 3 |  |
| GenEd | 08 xx or 09xx | Quantitative Literacy | 4 | GQ |
| Sociology | 1176 | Introduction to Sociology | 3 |  |
| GenEd | 08 xx or 09xx | Global/World Society | 3 | GG |
| Subtotal |  |  | $\mathbf{1 3}$ |  |

Year 2 - Fall (Term 3)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Social Work | 2003 (F, SS1) | The History \& Values of Social Welfare | 3 |  |
| Psychology | 1001 | Introduction to Psychology | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | $08 x x$ or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

Year 2 - Spring (Term 4)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Social Work | 2004 (S, SS2) | Social Welfare in the United States | 3 |  |
| GenEd | 08 xx or 09xx | Human Behavior | 3 | GB |
| GenEd | 08 xx or 09xx | Science \& Technology II | 3 | GS |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Kinesiology <br> or <br> Biology | 1223 <br> or <br> 1001 | Human Anatomy \& Physiology I* <br> or <br> Human Biology | 4 |  |
| Subtotal |  |  | 4 |  |

* View the following link for GenEd Science \& Technology Waiver:
www.temple.edu/bulletin/Academic_Programs/general_education/sci_tech.shtm


## Year 3 - Fall (Term 5)

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Social Work | 3005 (F, SSI) | Helping Processes in Social Work I | 3 |  |
| Social Work | 3015 (F, SSI) | Lab for Helping Processes in Social Work I | 1 |  |
| Social Work | 3007 (F, S, SSI) | Human Behavior in the Social Environment | 3 |  |
| Social Work | 3011 | The Social Worker in the Group | 3 |  |
| Political Science | $\begin{aligned} & 1101 \\ & \text { or } \\ & 1911 \end{aligned}$ | The American Political System or <br> Honors Introduction to American Politics | 3 |  |
| Elective |  | General Elective | 3 |  |
| Subtotal |  |  | 16 |  |

Year 3 - Spring (Term 6)

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Social Work | 3006 (S, SSII) | Helping Processes in Social Work II | 3 |  |
| Social Work | 3016 (S, SSII) | Lab for Helping Processes in Social Work II | 1 |  |
| Social Work | 3096 (F, S, SSI) | Institutional Racism | 3 | WI |
| Sociology or Sociology or Mathematics | 1167 or 1967 or 1013 | Social Statistics or Honors Social Statistics or Elements of Statistics | 3 |  |
| Elective |  | General Elective | 3 |  |
| Select one of the following Economics courses: |  |  | 3 |  |
| Economics <br> Economics <br> Economics <br> Economics <br> Economics | $\begin{aligned} & \hline 1001(\mathrm{~F}) \\ & 1101 \\ & 1102 \\ & 1103 \\ & 0858 \\ & \hline \end{aligned}$ | Introduction to the Economy Macroeconomic Principles Microeconomic Principles Global Economics Issues The American Economy** |  |  |
| Subtotal |  |  | 16 |  |

**Economics 0858: The American Economy satisfies the University GenEd GU requirement as well as the SSW's Economics requirement.

Year 4 - Fall (Term 7)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Social Work | 3009 (F) | Human Behavior \& the Social Environment: <br> Communities \& Organizations | 3 |  |
| Social Work | 4001 (F) | Seminar in Social Work Practice | 3 |  |
| Social Work | 4187 (F) | Social Work Field Practicum I (16 hour/week field <br> practicum requirement) | 5 |  |
| Social Work | 4396 (F) | Introduction to Social Research | 3 | WI |
| Elective |  | General Elective | 3 |  |
| Subtotal |  |  | $\mathbf{1 7}$ |  |
|  |  |  |  |  |


| Year 4 - Spring (Term 8) | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Subject | $4002(\mathrm{~S})$ | Seminar in Social Work Practice | 3 |  |
| Social Work | 4287 (S) | Social Work Field Practicum II (16 hour/week field <br> practicum requirement) | 5 |  |
| Social Work | Evaluating Programs \& Practice in Social Work | 3 | WI |  |
| Social Work | 4397 (S) |  | Social Work Elective | 3 |
| Social Work |  | General Elective (if credits are needed to graduate) | 3 |  |
| Elective |  |  | $\mathbf{1 4 - 1 7}$ |  |
| Subtotal |  |  |  |  |
|  |  | $\mathbf{1 2 0}$ (minimum) |  |  |
| Total Hours for B.S.W.: |  |  |  |  |

In order to receive a Bachelor of Social Work degree, a student must complete a minimum of 120 semester hours, which includes the University General Education (GenEd) curriculum and the School of Social Work curriculum. A potential graduate must also hold a cumulative GPA of 2.00 or better (having received a C- or better in all social work courses), and meet any additional requirements, such as the Exit Interview.

## The Social Work Minor

The Social Work Minor is a great complement to majors such as criminal justice, psychology, education, pharmacy, and other allied disciplines.

The Social Work Minor introduces students to the knowledge, values, and skills necessary to:

- Comprehend the structures and functions of the field of social work;
- Develop a more informed position on social policy issues;
- Appreciate the economic, social, political, ethical and epistemological challenges societies, and their citizens, face in responding to basic human needs;
- Grasp the critical importance of social capital to communities and the larger society;
- Become actively involved in helping to address social needs;
- Broaden and further enhance their professional career paths.

The Social Work minor consists of nine courses (23 credit hours), all of which are offered at the main campus:

- Social policy development in historical, political, and economic context (Social Work 2003: The History and Values of Social Welfare);
- Social problems and social policy analysis (Social Work 2004: Social Welfare in the United States);
- Theories of human behavior within the context of the social environment (Social Work 3007: Human Behavior in the Social Environment);
- Helping processes across systems of all sizes; (four courses) (Social Work 3005 \& 3015, 3006 \& 3016: Helping Processes in Social Work I \& II plus labs)
- Verbal, non-verbal and written communication skills (Social Work 1002: Communication in Social Work Practice);
- Institutional racism or group dynamics (Social Work 3008 or 3011: Institutional Racism or The Social Worker in the Group).

Student services advisors in the school or college in which the student is currently majoring are available to help students interested in adding a social work minor to their program of study.

Requirements for the Social Work Minor
(Courses must be taken in the following order)

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Social Work | 1002 | Communication in Social Work Practice | 3 |  |
| Social Work | 2003 | The History \& Values of Social Welfare | 3 |  |
| Social Work | 2004 | Social Welfare in the U.S. | 3 |  |
| Social Work | 3005 | Helping Processes in Social Work I | 3 |  |
| Social Work | 3015 | Lab for Helping Processes in Social Work I | 1 |  |
| Social Work | 3006 | Helping Processes in Social Work II | 3 |  |
| Social Work | 3016 | Lab for Helping Processes in Social Work II | 1 |  |
| Social Work | 3007 | Human Behavior in the Social Environment | 3 |  |
| Social Work | $3008 / 3096$ <br> or <br> 3011 | ```Institutional Racism or Social Worker in the Group``` | 3 |  |
| Total |  |  | 23 |  |

## COLLEGE OF LIBERAL ARTS

Founded 1884
www.cla.temple.edu

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College of Liberal Arts Academic Advising Center
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www.cla.temple.edu/advising/

## Introduction

Given the current pace of social and technological change in the world community, a firm grounding in the liberal arts is essential to one's prospects for success. Although recent trends in higher education highlight the proliferation of job-specific training, a well-rounded, liberal arts education is more relevant now than ever before. While highly specialized training and knowledge may prove helpful in landing one's first job, those who will build successful careers
and lead us into the future will have a much broader, more transferable set of skills. Our graduates will be able to think critically while analyzing complex issues and developing creative solutions to problems that we have not yet imagined. The written and oral communication skills honed by a liberal arts program will allow our graduates to communicate their ideas concisely and effectively to both specialized and lay audiences. Working across disciplines to evaluate ideas and arguments throughout their college career, liberal arts graduates develop the technological and cultural literacy necessary to thrive in the global marketplace. In short, our leaders of the future will possess the skills and attributes that have long defined a liberal arts education.

In the College of Liberal Arts, our students learn how to learn by exploring a rich diversity of rigorous coursework in the humanities and social sciences, including anthropology, English, history, philosophy, sociology, religion, psychology and foreign languages. Many of our courses are taught in intimate, seminar-style settings that encourage students to engage our world-class faculty in meaningful discourse that expands world views and enhances analytical reasoning skills. Equally important is the flexibility afforded students within the liberal arts curriculum, which provides them with myriad opportunities to supplement their classroom education in meaningful ways by participating in study abroad programs, engaging in directed research, pursuing original scholarship through independent studies, and gaining valuable professional experience in internship programs. Taken together, these liberal arts experiences not only prepare students for rewarding careers, but for fulfilling lives as informed and engaged citizens of the world.

## Accreditation

Departments and programs at Temple University are accredited by the Middle States Commission on Higher Education (www.msche.org). Individual departments and programs may carry additional accreditation by the official accreditation body for that discipline.

## Special Programs

## Center for Internships \& Career Development

Dr. Michael Szekely, Coordinator
Third Floor, 1810 Liacouras Walk
215-204-6704
mszekely@temple.edu
www.cla.temple.edu/cicd/
The Center for Internships and Career Development (CICD) links College of Liberal Arts students and faculty to organizations in the greater Philadelphia region in order to provide applied learning and career-oriented opportunities, as well as forums for engaged research. This also includes the development of experiential and career development programs and resources, including: internships (from smaller community-based organizations to larger non-profit organizations, from social services agencies to governmental agencies, from publishing firms to
law firms), externships, volunteering, community service, building résumés, interviewing techniques, and matching the breadth of skills associated with a liberal arts education to concrete career paths and goals. Comprehensive manuals are also available for students, faculty, and departments. Contact the CICD to schedule an appointment.

## First-Year Writing Program

Eli Goldblatt, Director
1046 Anderson Hall
215-204-1820
eligold@temple.edu
Rachael Groner, Associate Director
1046 Anderson Hall
215-204-2212
rgroner@temple.edu
www.temple.edu/english/fywp/
First-Year Writing includes two main 4-credit courses, English 0701 (Introduction to Academic Discourse) and English 0802 (Analytical Reading and Writing). First-Year Writing also includes English 0711 and English 0812, which are sections of English 0701 and English 0802
(respectively) designated especially for English as a Second Language (ESL) students. The ESL sections of all of our courses are equivalent in weight and credit to their direct counterparts.

Entering students are either placed into the 0701-0802 sequence, placed into 0802 only, or exempted from these courses entirely. Placement is based on a formula which takes into account the results of the placement exam, high school rank, and the SAT verbal score.

If a student places into English 0701/0711, he or she may not enroll in English 0802/0812 until English 0701/0711 is completed successfully, with a grade of C- or better. English 0802/0812 may not be taken for credit by students who have successfully completed English 0902 (Honors Literature, Reading and Writing).

English 0802/0812 is a required course in the General Education program. Students are strongly advised to successfully complete English 0802/0812 before taking Intellectual Heritage 0851 and 0852: Mosaic Humanities Seminar I and II, any upper-level course in the College of Liberal Arts (all courses numbered 2000-4999), and all Writing Intensive courses (course numbers ending in 96, -97, and -98).

Students are advised to take the required three-course sequence of Analytical Reading and Writing, Mosaic I, and Mosaic II (Intellectual Heritage 0851 and 0852) in order and in successive semesters.

# Intellectual Heritage Program (Mosaic Humanities Seminars I \& II) 

214 Anderson Hall<br>www.temple.edu/ih/<br>http://gened.temple.edu/students/courses/mosaic/<br>Terry Rey, Director<br>trey@temple.edu<br>Gayle Schooley, Administrator<br>614 Anderson Hall<br>215-204-7210<br>gschooley@temple.edu<br>Linda Tribune, Coordinator<br>214 Anderson Hall<br>215-204-3177<br>victor1@temple.edu

The Intellectual Heritage Program offers a two-course sequence, Mosaic: Humanities Seminar I and II, Intellectual Heritage 0851 and 0852, which is part of the university General Education curriculum. Engaging with some of the rich, complex, and historically-significant texts that have shaped our culture, students build strong communication skills and intellectual curiosity. Students become familiar with some of the key concepts and moments in Western and other intellectual traditions.

Students are required to complete the General Education Curriculum. Transfer students should see their academic advisor for more information regarding their IH placement. Satisfactory completion of English 0802 is strongly advised prior to taking the Mosaic sequence. Honors versions of the Mosaic sequence are offered as Intellectual Heritage 0951 and Intellectual Heritage 0952, respectively.

## Study Abroad

Mark Rohland, Academic Advisor
215-204-7971
mrohland@temple.edu
Undergraduates majoring in any liberal arts discipline may pursue a large variety of study abroad options. Temple University has campuses in Rome, Italy, and Tokyo, Japan. We offer programs in London, England, Oviedo, Spain, and exchange programs with universities in England, Germany, and Puerto Rico. Summer programs are offered in a number of countries, such as France, Ghana, Great Britain, Italy, Japan, and South Africa. In addition, CLA undergraduates can choose to study in non-Temple programs around the world. See Education Abroad in

Tuttleman Learning Center or www.temple.edu/studyabroad for more information about study abroad options.

## University Honors Program

The College of Liberal Arts participates in the university-wide honors program. Go to the University Honors Program section in this Bulletin for more information.

## Departmental Honors Programs

Some departments in the College of Liberal Arts offer an Honors track for their majors. Students should consult the Bulletin information listed under the individual majors (links on the left side of this page) for eligibility, specific program requirements, and contacts.

## Temple Law Scholars Program

Paul Crowe, Director

7th floor Anderson Hall
215-204-8591
pcrowe@temple.edu
The Temple Law Scholars Program provides an opportunity for outstanding students to gain provisional admission to the Temple University Beasley School of Law at the same time they are accepted into the College of Liberal Arts. As Temple Law Scholars, students spend their undergraduate years in Temple's Honors Program, after which they enroll in the Beasley School of Law, leading to the JD degree. Scholars will take advantage of special opportunities, including internships, mock trial competitions, attendance at special events and lectures, and sitting in on law school classes.

The Temple Law Scholars Program is highly selective. To be considered, applicants must be accepted into the Honors Program. High class standing, high SAT scores, and superior letters of recommendation are expected, as is an articulate, thoughtful essay. In addition, other criteria used in the decision-making process include above-average maturity, community service, leadership, and a genuine commitment to the legal profession and service to others.

Application to the Temple Law Scholars Program takes place at the same time students apply to the College of Liberal Arts. The application materials include the Temple undergraduate admission application, the Temple Law Scholars application, a letter of recommendation, and an essay on a topic assigned by the Temple Law Scholars admissions committee. An interview may also be required. The deadline for receipt of all application materials is April 1. Applications received before March 1 will receive priority treatment.

## Honor Societies and Awards for Achievement

## Awards

During the graduation season in May, the Baccalaureate Awards Ceremony is held to honor seniors who have demonstrated outstanding academic performance and/or exceptional service to the college. Junior scholarship recipients are recognized at an annual event in the fall. These prizes are awarded competitively and are a testament to the excellence of the College of Liberal Arts undergraduates. For more information on awards offered for particular majors, see the majors section of the Undergraduate Bulletin, the web site for your department, or ask your faculty advisor about the awards nomination process.

## Phi Beta Kappa

See Opportunities>Honor Societies.

## Student Association Information

## Majors' Associations

Some of the departments within the College of Liberal Arts support student interest groups, clubs, and majors' associations. These organizations provide opportunities for students from the individual disciplines of the liberal arts to meet one another and to extend the learning experience beyond the classroom. Some of these associations invite their alumni back to campus to connect with current undergraduates and talk with them about the wide range of career options open to liberal arts graduates.

Participation in the majors' associations has significant benefits. Active involvement cultivates skills in leadership, team work, cultural sensitivity, and public speaking, all of which are highly valued in the workplace.

## Special Facilities

## College of Liberal Arts - Information Technology (CLA IT)

The College of Liberal Arts offers cutting-edge technology and resources for students, faculty and staff. Our IT staff manages 88 technology-enabled smart classrooms, more than 560 computer stations in both laboratory, kiosk, and classroom settings, in addition to a wireless network with $100 \%$ coverage in all CLA spaces.

Temple University
College of Liberal Arts
Information Technology
Anderson Hall, Room 21
1114 Polett Walk
Philadelphia PA, 19122-6090
Phone: 215-204-3213
www.temple.edu/clait/

## Computer Labs and Computer Classrooms

CLA IT maintains 11 computer classrooms ranging in size from 14 to 70 seats, plus a 100 seat public drop-in lab located in Anderson 21. For complete details, see www.temple.edu/clait/labs/.

## Hours of Operation:

Fall/Spring Semesters and Study/Exam Days: All facilities are open 7:30 AM to 9:30 PM Monday through Thursday and until 7:30 PM on Fridays. The exceptions are Weiss 640 and both Tuttleman labs. Weiss 640 closes at 7:30 PM daily. For the Tuttleman labs hours, please visit the Writing Center's web site. There are no weekend hours.

Summer Sessions, Spring Break, and Winter Break: All facilities are open 8:00 AM to 7:30 PM Monday through Friday with the exception of the Tuttleman labs. For the Tuttleman labs hours, please visit the Writing Center's web site. There are no weekend hours.

## Select Staff:

Marc Getty, Director of Information Technology
Building Manager Anderson \& Gladfelter Halls
Anderson Hall 21
marc.getty@temple.edu
215-962-5603
Vinodh Ganesan, Assistant Director, Web and Database
Anderson Hall 21
vinodh@temple.edu
215-204-5985
Rodney Holloway, Evening Manager, Computer Labs
Anderson Hall 21
R.T.Holloway@temple.edu

215-204-3213

Cyril Ireland, Manager, Classroom Support<br>Anderson Hall 21<br>cireland@temple.edu<br>215-435-1313<br>Jack Knorr, Assistant Director, Psychology<br>jack.knorr@temple.edu<br>215-204-7322<br>Ben Peters, Technical Support Specialist<br>Anderson Hall 21<br>ben.peters@temple.edu<br>215-204-1944<br>Crystal Schulz, Manager, Computer Labs<br>Anderson Hall 21<br>crystal.schulz@temple.edu<br>215-204-3213

## Media Learning Center (MLC)

Frank Palazzo
Manager, Media Learning Center
Anderson Hall 21
frank.palazzo@temple.edu
215-204-5439
www.temple.edu/mlc/
The Media Learning Center (MLC), a service of the College of Liberal Arts, is located within the Educational Technology Center in Anderson 21. The MLC provides audio, video, 16mm, slide, and printed materials for faculty use, both for course content and their own research. The center also provides facilities for students to view course-related media.

## Internships

The College of Liberal Arts IT department has numerous projects in various stages of development created specifically for student intern input. The internships provide invaluable hands-on experience in a wide range of disciplines. Students work directly with CLA IT staff as well as faculty in a professional work environment with the opportunity to tailor projects to their individual strengths and interests, including photography, architecture, and graphic design. The internships are term-based and for course credit if needed.

# Academic Advising 

College of Liberal Arts Academic Advising Center<br>1810 Liacouras Walk, Suite 301<br>215-204-7971<br>claaac@temple.edu

Visit the CLA Academic Advising Center web site at www.cla.temple.edu/advising.

## Academic Advising Center

The Academic Advising Center in the College of Liberal Arts helps students plan curricula, choose majors, make vocational and post-graduate plans, and resolve a variety of academic matters. Services are provided by a staff of full-time professional advisors. The Center informs students about the results of placement testing and assignment into corresponding courses. Monitoring of academic progress and graduation clearance is also the responsibility of the Advising Center. Through individual appointments and group workshops, the center offers the following services:

- New Student Orientation.
- Advising and registration assistance for all students in the College of Liberal Arts. Students enrolled in the University Honors Program also receive advising in the Honors Program Office in Tuttleman Learning Center, Suite 201. Students are strongly encouraged to seek faculty advising in their major department.
- It is recommended, and in some cases required, that students consult with an advisor prior to registration. The advisor will review the proposed coursework and inform students of the requirements for graduation. In addition, the advisor helps students achieve breadth in their curriculum and provides other needed assistance.
- Academic advising provides an opportunity for students to develop a meaningful education plan compatible with their life goals. Students can also meet with advisors to discuss a variety of academic concerns and identify solutions. Students on academic probation or experiencing academic difficulty work with advisors to learn strategies for overcoming the obstacles to success.
- Intra-University Transfer (IUT) Advising for students changing programs and moving into the College of Liberal Arts from other schools and colleges within Temple. During mandatory group advising sessions, students transferring to Liberal Arts learn about collegial degree requirements, policies and procedures, and complete the Change of Program form.
- Approving special requests including: leave of absence; academic forgiveness; course repeats; re-enrollment at the University; permission to take courses elsewhere; registration overload; credit/no-credit option for free electives; and other questions
regarding University or College policies. (Click the links to be directed to more information on specific policies.)

All academic advisors are trained to evaluate information carefully to give students the best possible advice. Primary responsibility for course selection and degree completion rests with the student. Every student must be aware of the requirements of his or her degree and should collaborate with an advisor regularly to ensure timely completion of his or her program.

## Department-Based Advisors

All departments in the College of Liberal Arts have designated faculty advisors, undergraduate chairs, or embedded professional advisors, with whom students can discuss the requirements of their major, minor, and/or certificate programs. For a listing of CLA faculty advisors, consult: www.cla.temple.edu/advising/departmental/.

## Student Grievance Procedures

Title IX of the Educational Amendments Act of 1972 requires that each college or university establish due process for the resolution of academic grievances. This is to protect students from prejudiced and capricious academic evaluation. All undergraduate students enrolled in the College of Liberal Arts have a right to appeal grades which they deem unfair and unreasonable. The student must provide evidence indicating a mistake, fraud, or bad faith on the part of an instructor. Students will not be allowed to grieve a grade unless it is accompanied by such evidence.

Students should first contact their instructor to discuss the grade(s) in question, and if the matter cannot be resolved at that level, students are then urged to talk with the chairperson for the department in which this course was given. Chairperson information is available in this publication. A student must initiate the first stage of an academic grievance by the dates in the College of Liberal Arts Grievance Procedure, available at www.cla.temple.edu/students/undergraduate/grievances/.

For more information, students should contact the college's Grievance Officer, Amanda Gibson, at gibson@temple.edu or 215-204-8504.

## Non Academic Grievances

Students may have grievances that are not academic in nature. Such grievances should be directed to other offices on campus, which may include the Office of the Dean of Students, the Equal Opportunity Compliance office, Office of University Housing and Residential Life, and other units on campus. Students unsure as to where to proceed with a non-academic grievance should consult either with the Office of the Dean of Students or the college’s Academic Advising Center.

Pre-Law Advising

## Pre Law Advisors

Elizabeth Reynard<br>CLA Academic Advising<br>ereynard@temple.edu

Paul Crowe<br>Department of Philosophy<br>pcrowe@temple.edu

## Preparation for the Study of Law

All law schools accept the degree of Bachelor of Arts as fulfillment of their requirements for admission. The Pre-Legal Education Committee of the Association of American Law Schools and the Temple University School of Law stress the importance of a well-rounded education. Liberal arts majors are considered excellent preparation for law school. Although Temple University does not have a specific major in Pre-Law, we do offer specialized advising for students interested in applying to law school, as well as majors in challenging disciplines that will help students hone their critical thinking, analytical and communication skills. Since the legal profession makes extensive use of both the written and spoken English language as professional tools, the law student should have extensive preparation in English in undergraduate courses. Because a large part of a lawyer's work requires problem solving and sound judgment, students should take courses that help develop creative power in thinking. The study of law, furthermore, rests upon a broad knowledge of western civilization, including its political, economic, and social institutions; hence, the student preparing for law should schedule courses which afford this broad background. Some law schools also recommend two semesters of accounting. After selecting a field of concentration, the student schedules courses in consultation with both the advisor in the area of concentration and with the pre-law advisor in the Academic Advising Center of the College of Liberal Arts.

## Courses of Special Interest to Pre-Law Students

While no specific undergraduate courses or majors are required for admission to accredited law schools, pre-law students are advised to select courses and programs of study that are intellectually challenging, while helping to develop necessary skills and knowledge.

To develop the communications skills of reading and comprehension, expository writing, and speaking:

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Communication Sciences \& Disorders | 1108 | Introduction to Linguistics | 3 |  |
| Adult \& Organizational Development | 2214 | Conflict \& Communication | 3 |  |
| English | 2009 | Writing the Research Essay | 3 |  |
| English | 2496 | Introduction to Writing Non-Fiction | 3 | WI |
| English | $2000+$ | Upper-level literature courses | 3 |  |


| Strategic Communication | 1111 | Public Speaking | 3 |  |
| :--- | :--- | :--- | :--- | :--- |
| Strategic Communication | 2112 | Strategies \& Tactics of Persuasion | 3 |  |

To develop analytical reasoning skills:

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Philosophy | 1055 | Critical Thinking | 3 |  |
| Philosophy | 1066 | Introduction to Logic | 3 | QB |
| Philosophy | 1196 | Introduction to Philosophy | 3 | WI |
| Philosophy | 2121 | Introduction to Ethical Theory | 3 |  |
| Strategic Communication | 3336 | Argumentation | 3 |  |
| Computer Science and Mathematics |  |  |  |  |
| Natural Science |  |  |  |  |

Courses that are "law-related" because they either require reading of law cases or concern the study of particular legal issues are listed below for the convenience of interested students. Law school admissions officials prefer that pre-law students take very few such courses, believing that the teaching of law more appropriately belongs in the province of the law school. It may be useful, however, for students who are uncertain about attending law school to test their level of interest by selecting one or more of the following courses in the College of Liberal Arts:

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| American Studies | 3033 | Courtroom in American Society | 3 |  |
| Criminal Justice | 2501 | Introduction to Criminal Law | 3 |  |
| Criminal Justice | 3201 | The American Jury System | 3 |  |
| Criminal Justice | 3502 | Criminal Procedure: Prosecution \& Adjudication | 3 |  |
| History | 2105 | Race \& the U.S. Constitution | 3 |  |
| Philosophy | 1062 | Morality \& the Law | 3 |  |
| Philosophy | 2154 | Political Philosophy | 3 |  |
| Philosophy | 3243 | Philosophy of Law | 3 |  |
| Political Science | 3121 | American Constitutional Principles I | 3 |  |
| Political Science | 3123 | American Constitutional Principles II: Civil Rights in America | 3 |  |
| Political Science | 3411 | Classical Political Philosophy | 3 |  |
| Sociology | 3243 | Social Movements \& Conflict | 3 |  |
| Women's Studies | 4004 | Women and Criminal Justice | 3 |  |

Since most law schools require applicants to submit the score earned on the Law School Aptitude Test, administered periodically by the Law School Admissions Service, students planning to study law should consult the pre-law advisor prior to the senior year to determine whether the school to which they plan to apply will require such a test and to determine the dates when such examinations are given. Prospective law students should consult the pre-law advisor about requirements for admission to law school, law school scholarship assistance, and opportunities in the legal profession. To satisfy statutory requirements, early in their senior year, prospective law students should consult the pre-law advisor concerning the legal requirements for practicing law in the state in which the student desires to study and practice.

## Phi Alpha Delta Law Fraternity, International

Students interested in College of Liberal Arts pre-law studies are encouraged to join Phi Alpha Delta. Its pre-law program assists "undergraduate students to make an 'informed choice' in selecting law as a career, deciding which law school to attend, and in preparing for the rigors of law school."

Phi Alpha Delta was formed "to advance the ideals of liberty and equal justice under law; to stimulate excellence in scholarship; to inspire the virtues of compassion and courage; to foster integrity and professional competence; to promote the welfare of its members; and to encourage their moral, intellectual, and cultural advancement." For more information about Phi Alpha Delta and College of Liberal Arts pre-law society, please contact Dr. Paul Crowe, pre-law advisor, at 215-204-8591 or pcrowe@temple.edu.

## Academic Policies \& Regulations

University policies and regulations generally apply to all undergraduate students and provide a framework within which schools and colleges may specify further conditions or variations appropriate to students in their courses or programs.

## Academic Residency Requirements

Upon transferring into the College of Liberal Arts, all students must complete at least 30 credits of coursework as a degree-seeking student, completing at least half of the courses required for any major, minor, or certificate program at Temple University.

In order to be considered for Latin honors (cum laude, magna cum laude, and summa cum laude), a student must complete a minimum of 60 credits at Temple University and meet the GPA requirements as set out in the University policy.

## Course Levels

All College of Liberal Arts undergraduate courses are open to all students who have successfully completed appropriate course prerequisites and are divided into four categories:

- Preparatory courses numbered 0700-0799.
- General Education courses numbered 0800-0999.
- Lower-level courses numbered 1000-1999.
- Upper-level courses numbered 2000-4999.


## Courses Taken at Other Institutions

Degree-seeking Temple students must always petition for the prior approval of their dean or dean's designee to take courses at another institution. (See Permission to Take Courses at

Another Institution under Academic Policies and Regulations.) Petitions are available in the College of Liberal Arts Academic Advising Center.

## Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List policy for specific GPA and credit-hour requirements.

## Declaration of Major

Students in the College of Liberal Arts must declare their major before completing 60 credits, including credits transferred from other institutions. Undeclared students with 45 or more credits are required to meet with an advisor in the Academic Advising Center before registering.

## Intra-University Transfer

Students who wish to Intra-University Transfer (IUT) into the College of Liberal Arts from other colleges and schools at Temple must have at least a 2.0 GPA in the intended major and overall. Students will not be permitted to IUT as undeclared majors if they have completed, or are in the process of completing, 60 or more credits.

## Applying For Graduation

During the semester immediately prior to the semester in which students will complete their degree requirements, they must apply for graduation by completing the on-line graduation application available through Self Service Banner. Students planning to graduate in August or January must apply by April 1 and students planning to graduate in May must apply by November 1.

All applications received by the deadlines noted above will be reviewed by academic advisors in advance of the next semester and students will be notified of any necessary schedule revisions to fulfill remaining requirements.

Students are responsible for ensuring their intended graduation date is up-to-date by contacting their advisor.

## Placement Tests

All incoming freshmen must take diagnostic English and mathematics placement tests. Transfer students who have not completed English 0802/1002 or a college-level math course are also required to take placement examinations. The results of these tests determine if students are required to enroll in introductory composition and mathematics courses. Students assigned to English 0701/0711 must register each semester for that course until the requirement is completed. Only upon successful completion of English 0701/0711 can such students enroll in

English 0802/0812. Students assigned to courses designed to remedy deficiencies in mathematics are required to complete those courses (Mathematics 0701 or 0702) before enrolling in the mathematics component of the University General Education Program (GenEd). Incoming students must also take a foreign language placement examination if they plan to continue a language previously studied or if they wish to place out of the foreign language requirement.

## Plagiarism \& Academic Cheating

Plagiarism and academic cheating are unacceptable in College of Liberal Arts courses. The development of independent thought and a respect for the thoughts of others is essential to intellectual growth. The penalty for plagiarism or cheating as a first offense is normally an F in the course in which the offense is committed. In such cases, the instructor will write a report to the dean. The CLA Grievance Committee will adjudicate appeals made by students and serious cases, or repeat offenses, referred to the committee by an instructor or the dean. The dean may recommend suspension or expulsion from the university when warranted. Instructors may also refer the offense to the University Disciplinary Committee (UDC) for adjudication.

The prohibition against plagiarism and cheating is intended to foster this independence and respect. For more information, see Academic Honesty under Student Responsibilities.

## Academic Standing, Warning, Probation, Dismissal, \& Reinstatement

To maintain academic good standing in the university, a student enrolled in an associate or baccalaureate degree-seeking program must achieve both a semester grade point average and a cumulative grade point average of at least a 2.0. See the University policy on Academic Standing for details on academic warning, academic probation, academic dismissal and reinstatement. Also see the policy on Academic Forgiveness.

## Withdrawal from Classes

During the first two weeks of the fall or spring semester or summer sessions, students may drop one or more courses with no record of the class appearing on the transcript. In weeks three through nine of the fall or spring semester, or during weeks three and four of the summer sessions, students may withdraw with the assistance of an academic advisor--or by using the withdrawal function in Self-Service Banner (SSB). Instructors' signatures are not required to withdraw. The course will be recorded on the transcript with the notation of "W," indicating that the student withdrew. After week nine of the fall or spring semester, or week four of summer sessions, students may not withdraw from courses.

For the complete policy, please refer to the Academic Policies section of this Bulletin.

## Requirements for the Baccalaureate Degree

## Credit Hour Requirements

Bachelor of Arts and Bachelor of Science degrees in the College of Liberal Arts require a minimum of 123 credits, distributed according to the university and college policy outlined below, with at least a 2.0 cumulative grade point average (GPA). A minimum 2.0 GPA must also be maintained in College of Liberal Arts and College of Science and Technology (hereafter "CLA/CST") coursework and in the major.

To earn a CLA baccalaureate degree, a student must complete a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999). Of that, 6 credits must be outside the student's major division (e.g. Social Sciences or Humanities).

A maximum of 9 credits of Independent Study can be applied to the Bachelor's degree. This does not include internship, externship, or research credits.

## Degree Eligibility

The College of Liberal Arts does not award baccalaureate degrees to students who have already completed an accredited first Bachelor's, Master's, or Ph.D. degree, regardless of when the degree was completed.

## University Requirements

All students entering an undergraduate degree program are required to complete the university General Education (GenEd) curriculum.

All students must take a minimum of two writing-intensive courses at Temple University as designated by their major requirements. The specific writing-intensive courses required for each major are listed on the individual program pages and are identified by "WI" in the Attribute column.

## Foreign Language/Global Studies Requirement for Bachelor of Arts Students

NOTE: This is *not* required for students majoring in the Bachelor of Science in Neuroscience: Systems, Behavior, \& Plasticity program.

1) All B.A. students complete the second level of a foreign language;
2) All B.A. students must complete at least one course from the GenEd Global/World Society category; and
3) All B.A. students must complete one of the following options:

- Third level of a foreign language;
- Demonstrated proficiency in a foreign language;
- A second General Education Global/World Society course;
- Study Abroad at an approved program; or
- Take one Global Studies course from the following list:
o Anthropology 2361: Peoples of Latin America
o Anthropology 2362: Peoples and Cultures of the Caribbean
o Anthropology 2364: People and Culture of the Middle East
o Anthropology 2374: The Anthropology of Modern China
o Asian Studies 2021: Japanese Literature in Film
o Asian Studies 2501: Introduction to East Asia: China
o Asian Studies 2502: Introduction to East Asia: Japan
o Asian Studies 2503: Introduction to Southeast Asia: Insular
o Asian Studies 2504: Introduction to Southeast Asia: Mainland
o Chinese 2011: Pre-Modern Chinese Literature
o English 2601: Introduction to Postcolonial Literatures
o English 2712: International Film
o English 3112: Masterpieces of European Drama
o Geography \& Urban Studies 2032: Urban Systems in a Global Economy
o Geography \& Urban Studies 2073: African Development
o Geography \& Urban Studies 3073: Geography of Travel and Tourism
o Geography \& Urban Studies 3097: Environment and Development
o Greek \& Roman Classics 1004: Ancient City
o Greek \& Roman Classics 2002: Gender in Classical Antiquity
o Greek \& Roman Classics 2101: The Greeks
o Greek \& Roman Classics 2102: The Romans
o Hebrew 3711: Israelis and Palestinians
o History 1501: Third World History
o History 1702: World History Modern
o History 2304: 20th Century Europe
o History 2702: Imperialism, Race and Empire
o Italian 2221: Italian Culture through Film (taught in English)
o Italian 3201: Italian Culture and Civilization (taught in Italian)
o Italian 3240: Topics in Italian Cinema and Literature (taught in English)
o Japanese 2012: Modern and Contemporary Japanese Literature in Translation
o Japanese 2021: Japanese Literature in Film
o Japanese 2096: Japanese Popular Culture and Literature
o Latin American Studies 1001: Perspectives on Latin America
o Latin American Studies 2232: Politics of Development in Latin America
o Political Science 1201: Foreign Governments and Politics
o Political Science 1301: International Politics
o Religion 2002: Religion and Human Sexuality
o Religion 2606: Introduction to Islam
o Religion 3001: Earth Ethics
o Russian 1201: Russian Culture
o Sociology/Geography \& Urban Studies/History/Political Science 0862: Development and Globalization
o Sociology 3219: Globalization: Causes, Promises and Discontents
o Sociology 3221: Global Development
o Sociology 3511: Sociology of the Environment
(Please note: The Foreign Language/Global Studies requirement does not pertain to students pursuing the B.S. in Neuroscience. Neuroscience majors under the GenEd program must complete one Global/World Society course.)


## Major

Students must also complete the requirements of a major. The minimum acceptable grade in a course taken to fulfill major requirements is a "C-," though students need a 2.0 GPA overall in major coursework in order to graduate. At least half of the coursework required for a major must be taken at Temple University.

Students are permitted to double-major (both inside CLA and across schools and colleges) but Temple University does not permit transcription of a third major.

Students are encouraged to declare their major as soon as possible, and university policy requires that a major must be declared by the time a student has earned 60 credits.

Major requirements are determined by the effective semester of their declaration. The Academic Advising Center is responsible for making this assignment and informs the student via e-mail.

Students who wish to declare or change their major or minor should consult the Academic Advising Center at 1810 Liacouras Walk, Suite 301.

## B.A. and B.S. majors are offered in the divisions of the Humanities and the Social Sciences.

- Humanities: English, French, German, Greek and Roman Classics, Italian, Japanese (only available at our Japan campus), Philosophy, Religion, Russian, and Spanish (includes tracks in Language, Literature and Linguistics, Professional Studies, Education )
- Social Sciences: African American Studies, American Studies, Anthropology (includes tracks in Human Biology and Visual Anthropology), Asian Studies, Criminal Justice, Economics, Environmental Studies, Geography and Urban Studies, History, Jewish Studies, Latin American Studies, Mathematical Economics, Neuroscience: Systems, Behavior and Plasticity (B.S.), Political Science, Psychology, Sociology (includes track in Sociology of Health), and Women's Studies


## Upper-level distribution requirements

All B.A. and B.S. students in the College of Liberal Arts must complete upper-level distribution requirements by taking two upper-level (numbered 2000-4999) CLA courses outside the curriculum division of the major (or upper-level College of Science and Technology courses) as stated above. Students who have double majors in two different divisions automatically satisfy the distribution requirement.

Note: The Humanities Division has been expanded to include upper-level courses in Art History.

## Military Science Courses

Undergraduate students in the College of Liberal Arts whose degree programs allow for free electives may apply up to 12 credits of military science courses at the 3000 and 4000 levels in Aerospace Studies (Air Force ROTC), Military Science (Army ROTC), and Naval Science (Navy ROTC).

## Courses Inapplicable to Graduation

Students will not receive credits for lower-level courses after successful completion of higherlevel courses in sequenced courses of study. This only applies to the First Year Writing sequence in English (0701-0802), and all courses in Mathematics and Foreign Languages. For example, after passing a Spanish 1002 course, a student will not receive credits for Spanish 1001.

## Credit/No Credit

During the junior and senior years, any College of Liberal Arts student who is in good standing and taking a minimum of 12 semester hours may elect to take one course each semester on a Credit/No Credit basis, except for courses that count toward major, minor, GenEd, or distributional requirements. Application must be made at the Academic Advising Center during the first two weeks of a fall or spring semester course and during the first three days of a first or second summer session course.

## Special Major \& Minor Requirements

## Interdisciplinary Major

Rather than major in an existing department or program, students may apply for a major in Interdisciplinary Studies. The proposed major should consist of coursework totaling at least 36 semester hours and be justified in terms of some thematic unit of cohesive rationale. The program must not closely resemble any major currently available in the College of Liberal Arts.

The proposed major program may include courses outside of the College of Liberal Arts, but at least 24 semester hours must be in upper-level liberal arts or science courses. The student's proposal must be sponsored by two faculty members from different departments, at least one of whom must be in the College of Liberal Arts. Approval for the program must be obtained from the College of Liberal Arts Academic Advising Center prior to the initiation of the last 60 semester hours of the degree.

## Honors Interdisciplinary Major

Students in the University Honors Program may apply for a College of Liberal Arts Honors Interdisciplinary Major. They must complete the degree requirements of the B.A. in the College of Liberal Arts and the requirements for the Interdisciplinary Major described above as well as the requirements for the University Honors Program. Approval for this program must also be
obtained from the University Honors Committee prior to the initiation of the last 60 semester hours of the degree.

In addition, the proposed major program should include submission of an acceptable honors thesis to the University Honors Oversight Committee.

## Minor

Students may also choose to complete the requirements for a minor. The minimum acceptable grade in a course taken to fulfill minor requirements is "C-," though students need a 2.0 GPA in the minor in order to have it awarded at graduation. At least half of the courses taken by a student to fulfill the minor must be taken at Temple. Students may declare a minor at the Academic Advising Center, 1810 Liacouras Walk, Suite 301. The College of Liberal Arts offers minors in:

African American Studies; American Studies; Ancient Mediterranean Studies (see Classics); Anthropology (General), Anthropology (Visual), Arabic; Asian-American Studies; Asian Studies; Chinese; Classics; Cognitive Neuroscience (see Psychology); Criminal Justice; Economics; English; Environmental Studies; French; Geography and Urban Studies; German; History; Italian; Japanese; Jewish Studies; Latin American Studies; Lesbian, Gay, Bisexual and Transgender Studies (LGBT); Neuroscience Research; Philosophy; Political Science; Portuguese; Psychology; Religion; Russian; Sociology; Sociology of Health; Spanish; and Women's Studies.

## Certificates of Specialization

Students may choose to complete the requirements for an additional certificate of specialization. At least half of the courses taken by a student to fulfill a certificate of specialization must be taken at Temple. Students may declare a certificate in the Academic Advising Center, 1810 Liacouras Walk, Suite 301. Certificates of specialization are available in the following programs:

- Asian Business and Society (see Asian Studies)
- Foreign Languages: Arabic, Chinese, French, German, Italian, Japanese, Russian, Spanish (see departments)
- Geography of Sports, Recreation and Tourism Planning (see Geography and Urban Studies)
- Geography of Tourism (see Geography and Urban Studies)
- Health Research (see Sociology)
- Jewish Secular Studies (see Jewish Studies)
- Latin American Studies Semester (see Spanish)
- Management Career (see Economics)
- Multilingual Business and Government Studies (see Spanish)
- Political Economy (see Economics and Political Science)
- Sociology Health Research (see Sociology)
- Spanish and Latin American Studies for Business (see Spanish)
- Spanish and Latino Studies for the Health and Human Services Professions (see Spanish)
- Travel and Tourism (see Geography and Urban Studies)
- Women's Studies (see Women's Studies)
- Writing (see English)


## Student Contact Information

In the Academic Programs section of this Bulletin, students will find contact information for departmental representatives (department chairs, undergraduate advisors, etc.) Other faculty contact information is available using the Cherry and White directory
https://directory.temple.edu/ or by visiting the departmental web sites, located at the College of Liberal Arts home page: www.cla.temple.edu.

Faculty members keep regular office hours each semester, which are posted on syllabi and in the department offices.

## Faculty

Go to the College of Liberal Arts web site at www.cla.temple.edu and click on the individual department for a list of faculty in that department. See also https://directory.temple.edu/.

## African American Studies

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## Mission

Temple University's Department of African American Studies provides students with a textured intellectual experience through the systematic Afrocentric study of the thought, behavior and
practices of African people globally. Inasmuch as our faculty and students pursue knowledge from the perspective of African people as both agents and subjects of experience, we also remain open to plural understandings emanating from the multicultural society in which we live, and the rapidly shrinking world beyond. Students engage in critical discourse about issues of race, ethnicity, gender, sexuality, class and culture across a great expanse of time and geographical space. Our classes interrogate African frames of reference, from the classical to the contemporary periods, tracing continuities and transformations from Africa to numerous diasporic communities worldwide.

We commit ourselves to the shaping and evolution of our discipline, and to positive change in our communities. Through enhanced mentoring and cooperative pedagogy, we cultivate the academic excellence, social responsibility and political engagement necessary for subsequent generations of scholars to carry this work into the future.

## Curriculum

The curriculum stresses the skills necessary to think critically, write clearly, argue persuasively, and solve problems effectively. Students are exposed to theory and research in a variety of subject areas and are encouraged to engage in active research and service beyond the classroom.

## Career Opportunities

Alumni of the African American Studies program have entered careers in primary and secondary education and administration, social work and administration, research design, law enforcement, city government, and have also worked with museums and other cultural and artistic institutions. Several African American Studies alumni and alumnae are active in local and national entertainment in roles that include music production, filmmaking, acting, and script writing. Many others have earned graduate degrees in a variety of areas, including law, the health-related professions such as medicine and nursing, public administration, and the social sciences, including political science, history, psychology, sociology, and anthropology.

## Awards and Honors

The department offers three internal awards for graduating seniors-two privately-sponsored awards for outstanding academic performance and one departmental award for outstanding service. The Department of African American Studies supervises the Temple in Ghana program, which allows students to study for six weeks during the summer at the University of Ghana in Accra.

## Summary of Degree Requirements

## 1. University Requirements:

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. The African American Studies major requires African American Studies 1296 and 4096.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section of the Undergraduate Bulletin for more details.


## 2. College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999). For Social Science majors, 6 upper level credits must be taken in the Humanities Departments (English, French, German, Greek and Roman Classics, Hebrew, Italian, Japanese (only available at our Japan campus), Philosophy, Religion, Russian, and Spanish), Art History, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in all College of Liberal Arts coursework and in the major
- Students must attain a minimum grade of C- (or better) to complete requirements in the major, minor, certificate, GenEd or Foreign Language/Global Studies areas.


## 3. Foreign Language/Global Studies Requirements:

1) All students must complete the second level of a foreign language;
2) All students must complete at least one course from the GenEd Global/World Society category; and
3) All students must complete one of the following options:
o Third level of a foreign language;
o Demonstrated proficiency in a foreign language;
o A second General Education Global/World Society course;
o Study Abroad at an approved program; or
o Take one Global Studies course from the list on the CLA College Graduation Requirements page.
4. Major Requirements: 33 s.h. in African American Studies
5. Specifically Required Courses: African American Studies 1296, 2201, 2255 (Fall only), 3215, 3268, 4096 (Spring only)
6. One literature course in the Cultural/Aesthetic category (Select from: African American Studies 2134, 2208, 2934, 3176, and 4146)
7. One additional Cultural/Aesthetic course (Select from: African American Studies 1124, $1125,1152,1158,1165,1252,2131,2134,2208,2934,3176,3271,4115$, and 4146)
8. Two courses from the Socio-Behavioral category (Select from: African American Studies 1253, 1271, 2151, 2211, 2218, 2248, 2251, 3257, 3296, 4221, 4248, and 4389)
9. One additional upper level elective in African American Studies, numbered 2000-4999
10. General electives vary according to a student's individual program of study. Consult your academic advisor for more information.

Requirements for the Major

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| African American Studies | 1296 | Introduction to African American Studies | 3 | WI |
| African American Studies | 3215 | Languages \& Cultures of West Africa | 3 |  |
| African American Studies 2201 | African Civilization | 3 |  |  |
| African American Studies | 3268 | Critical Readings in African American History | 3 |  |
| African American Studies | 2255 | Introduction to Research Methods |  |  |
| (offered during fall semester only) | 3 |  |  |  |
| African American Studies | 4096 | Senior Seminar <br> (offered during spring semester only) | 3 | $\mathrm{WI}^{*}$ |
|  |  |  |  |  |
| African American Studies | Electives | Select four (4) additional courses as outlined below ${ }^{1}$. | 12 |  |
| African American Studies | Elective | One additional elective numbered 2000-4999 | 3 |  |
|  |  |  |  |  |
| Total |  |  | 33 |  |
|  |  |  |  |  |
| * Indicates Writing Capstone. |  |  |  |  |

Note 1: The four electives are distributed as follows:

1. One literature course in the Cultural/Aesthetic category (Select from: African American Studies 2134, 2208, 2934, 3176, and 4146)
2. One additional Cultural/Aesthetic course (Select from: African American Studies 1124, $1125,1152,1158,1165,1252,2131,2134,2208,2934,3176,3271,4115$, and 4146)
3. Two courses from the Socio-Behavioral category (Select from: African American Studies 1253, 1271, 2151, 2211, 2218, 2248, 2251, 3257, 3296, 4221, 4248, and 4389)

All Temple students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed above and are identified by "WI" in the Attribute column.

## Distinction in Major

African American Studies majors may graduate with a distinction in major if they have earned a GPA of 3.3.

Requirements for the Minor and Suggested Order of Completion

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| African American Studies | 1296 | Introduction to African American Studies | 3 | WI |
| African American Studies | 3215 | Languages \& Cultures of West Africa | 3 |  |
| African American Studies | 2201 | African Civilization | 3 |  |
| African American Studies | 3268 | Critical Readings in African American History | 3 |  |
| African American Studies | 2255 | Introduction to Research Methods <br> (offered during fall semester only) | 3 |  |


|  | Electives | Select two (2) additional courses, one of which must be at <br> or above the 2000 level.** | 6 |  |
| :--- | :--- | :--- | :--- | :--- |
| Total |  |  | $\mathbf{2 1}$ |  |
|  |  |  |  |  |

**Make these selections based on the content areas in which you desire greater familiarity (e.g., African American Studies literature, African American Studies social issues, African American Studies psychology, etc.). One of these two upper-level courses may be an African American Studies-related course outside the department; however, students must seek written approval from the African American Studies undergraduate director prior to enrolling in outside courses that they want to apply toward the African American Studies minor. Students must earn a grade of B or higher in external courses that they wish to apply toward the African American Studies minor. The department does not accept other research courses as substitutes for African American Studies 2255.

## Suggested Semester-by-Semester Plan

Freshman Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08 xx or 09xx | Quantitative Literacy | 4 | GQ |
| Foreign Language | 1001 | Foreign Language (first level) | 4 |  |
| GenEd | 08 xx or 09xx | Human Behavior | 3 | GB |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

Freshman Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Foreign Language | 1002 | Foreign Language (second level) | 4 |  |
| GenEd | $08 \times x$ or 09xx | Science \& Technology I | 3 | GS |
| GenEd | $08 \times x$ or 09xx | Race \& Diversity | 3 | GD |
| African American Studies | 1296 | Introduction to African American Studies | 3 | WI |
| Subtotal |  | $\mathbf{1 6}$ |  |  |

Sophomore Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Foreign Language/ GenEd | 0800+ | Foreign Language (third level) or GenEd Global/World Society course or Internationally-Focused Course From Approved List | 3 | GG |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| African American Studies | 2201 | African Civilization | 3 |  |
| African American Studies | 2000-4999 | One African American Studies Elective | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 2 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |


| African American Studies | $1000+$ | One Cultural Aesthetic African American Studies <br> Course From Approved List | 3 |  |
| :--- | :--- | :--- | :--- | :--- |
| CLA/CST | $2000+$ | One 2000+ Humanities/CST Course | 3 |  |
| Subtotal |  |  | $\mathbf{1 5 - 1 6}$ |  |
|  |  |  |  |  |
| Junior Year - 1st Semester | Course \# | Course Title | Hours | Attribute |
| Subject | $2000+$ | One 2000+ Humanities/CST Course | 3 |  |
| CLA/CST | Critical Readings in African American History | 3 |  |  |
| African American Studies | 3268 | One Socio-Behavioral African American Studies <br> Course From Approved List | 3 |  |
| African American Studies | $1000+$ | Any CLA/CST Elective | 3 |  |
| CLA/CST | $0800+$ | $2000+$ | One 2000+ CLA/CST Course | 3 |

Junior Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| African American Studies | 3215 | Languages \& Cultures of West Africa | 3 |  |
| African American Studies | 1000+ | One Socio-Behavioral African American Studies Course From Approved List | 3 |  |
| African American Studies | 1000+ | One Literature-Focused Cultural Aesthetic African American Studies Course From Approved List | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| African American Studies | 2255 | Introduction to Research Methods (offered during fall semester only) | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |

Senior Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| African American Studies | 4096 | Senior Seminar <br> (offered during spring semester only) | 3 | WI |
| CLA/CST | $2000+$ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | $2000+$ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |
| Any | $0800-4999$ | One Elective in Any School or College | 3 |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |
|  |  |  |  |  |
| Degree Total |  | $\mathbf{1 2 3}$ |  |  |

# American Studies 

## 832 Anderson Hall

215-204-1644
www.temple.edu/american_studies/

## Faculty Administration

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American Studies is a broad-based interdisciplinary program that explores the rich complexity of American culture and American lives. Courses focus on national myths and everyday realities, race and ethnicity, work, technology, media and popular culture, architecture and city planning, and the production and consumption of art forms like photography, film, dance, and music. In American Studies, though, we do not treat these topics as discrete categories, but instead explore their relationships to each other. For instance, we look at ideas about race and class embedded in national symbols and ideas. Through a variety of courses and in a mix of different categories, American Studies provides students with a deep understanding of the many forces and ideas shaping America over a long sweep of time in any number of places, the East, the West, in the heartland and at the borders. The program also offers student internship opportunities, and other hands-on kinds of learning, at a variety of cultural institutions in Philadelphia and the Delaware Valley. American Studies courses are known as challenging and thought-provoking, and many of them are cross-listed with the Temple University Honors Program. The major program stresses development of reading, writing, and analytical skills that are necessary for successful careers in
a range of professional fields. American Studies majors go on to graduate school in the humanities and social sciences, law school, and medical school. They also may take jobs in schools, non-profit organizations, museums, libraries, business, social services, public relations, and the media.

## Summary of Degree Requirements

## 1. University Requirements

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. See below for a list of the specific courses required for your major.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section of the Undergraduate Bulletin for more details.


## 2. College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999). For Social Science majors, 6 upper level credits must be taken in the Humanities Departments (English, French, German, Greek and Roman Classics, Hebrew, Italian, Japanese (only available at our Japan campus), Philosophy, Religion, Russian, and Spanish), Art History, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.


## 3. Foreign Language/Global Studies Requirements

1) All students must complete the second level of a foreign language;
2) All students must complete at least one course from the GenEd Global/World Society category; and
3) All students must complete one of the following options:

- Third level of a foreign language;
- Demonstrated proficiency in a foreign language;
- A second General Education Global/World Society course;
- Study Abroad at an approved program; or
- Take one Global Studies course from the list on the CLA College Graduation Requirements page.


## 4. Major Requirements (39 s.h.)

Specifically Required courses:

- American Studies 2098
- American Studies 4097 (or 4098)

Other Requirements:

- One course from the American Biography and Work array (below).
- One course from the American Culture array (below).
- One course from the Place in American Life array (below).
- One course from the Diversity in America array (below).
- One course from the Change in America array (below).


## Electives in Major

- Three courses in American Studies numbered 2000 or higher that do not overlap with any other requirement above.
- Three cognate courses outside the American Studies curriculum but which focus on related topics. See your faculty advisor for more information and approval.

5. General electives vary according to a student's individual program of study. Consult your academic advisor for more information.

Requirements for the Major

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Introduction |  |  | 3 |  |
| American Studies | 2098 | Reading Culture |  | WI |
| All majors must complete five American Studies core courses, one out of each group below: |  |  |  |  |
| American Biography and Work - Select one: |  |  | 3 |  |
| American Studies | 1001/1901 | American Lives |  |  |
| American Studies | 1042 | Work in America |  |  |
| American Studies | 1002 | Key Documents in American Civilization |  |  |
|  |  |  |  |  |
| American Culture - Select one: |  |  | 3 |  |
| American Studies | 2011 | The Arts in America |  |  |
| American Studies | 2022 | Museums and American Culture |  |  |
| American Studies | 2012 | Introduction to Material Culture |  |  |
| American Studies | 3011 | Photography in America |  |  |
| American Studies | 3012 | Film and American Society |  |  |
| American Studies | 3061 | Mass Media and American Popular Culture |  |  |
| American Studies | 3013 | The Documentary Mode |  |  |
| American Studies | 2120/2900 | Topics in American Culture+ |  |  |
|  |  |  |  |  |
| Place in American Life - Select one: |  |  | 3 |  |
| American Studies | 2051/2951 | American Places: Home, City, Region |  |  |
| American Studies | 2021 | Philadelphia Neighborhoods |  |  |


| American Studies | 3022 | Architecture, Urban Design and American Culture |  |  |
| :--- | :--- | :--- | :--- | :--- |
| American Studies | $3051 / 3951$ | American Frontiers |  |  |
| American Studies | 2001 | Tourism in America |  |  |
| American Studies | $2120 / 2900$ | Topics in American Culture+ |  |  |
|  |  |  | 3 |  |
| Diversity in America - Select one: |  |  |  |  |
| American Studies | 3096 | American Woman: Visions and Revisions | WI |  |
| American Studies | 2096 | Asian Diaspora | WI |  |
| American Studies | 2097 | Asian Women in Transition |  | WI |
|  |  |  |  |  |
| Change in America - Select one: |  |  |  |  |
| American Studies | 3041 | Contemporary Trends in the American Workplace |  |  |
| American Studies | 2041 | Technology and American Culture |  |  |
| American Studies | 3901 | Honors Ideal America: Reform, Revolution, and Utopia |  |  |
| American Studies | 3032 | Literature and Political Change |  |  |
| American Studies | 3033 | Courtroom in American Society |  |  |
| American Studies | 2064 | America in the 1950s |  |  |
| American Studies | $3031 / 3931$ | Political Protest and Culture in the 60 's |  |  |
| American Studies | 3075 | Literature of American Slavery |  |  |
| American Studies | 2031 | Radicalism in the United States |  |  |
| American Studies | 2032 | Critical Moments in the American Past |  |  |
| American Studies | 2065 | Global America |  |  |
| American Studies | $2120 / 2900$ | Topics in American Culture+ |  |  |
|  |  |  |  |  |

+Specific subjects change each semester. See course descriptions for information on a particular offering. American Studies 2120 may meet one or more of the above requirements with permission of director.

Students must also complete three additional courses in American Studies. These can include choices from the American Studies core courses as well as choices from all other American Studies courses.

| American Studies |  | Electives (select from 2000-4999) | 9 |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |

In addition, students must take at least three courses outside of the major selected in consultation with the American Studies director and congruent with an American Studies focus. We recommend that at least 6 of these credits be in American history and literature.

| Open |  | Electives - American Studies Focus | 9 |  |
| :---: | :---: | :---: | :---: | :---: |
| Capstone course - Select one** |  |  | 3 |  |
| American Studies <br> American Studies | $\begin{aligned} & 4097 \\ & \text { or } \\ & 4098 \end{aligned}$ | Senior Seminar in American Studies <br> Senior Independent Study |  | $\begin{aligned} & \hline \mathrm{WI}^{*} \\ & \mathrm{WI}^{*} \end{aligned}$ |
| Total |  |  | 39 |  |
| * Indicates Writing Capstone for the Major |  |  |  |  |

All Temple students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed above and are identified by "WI" in the Attribute column.

## Distinction in Major

American Studies majors may graduate with distinction in the major if they have a GPA of at least 3.5 in the major and a cumulative GPA of at least 3.0

## Requirements for the American Studies Minor

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| American Studies | Select six American Studies courses, at least three of which <br> should be taken from American Studies Core Areas as listed <br> under "Major Requirements." | 18 |  |  |
|  |  |  |  |  |

## Asian American Studies Minor

This interdisciplinary minor focuses on Asian American history, culture, and contemporary issues as well as their Asian roots and American context. The Asian American Minor is six courses (18 s.h.), four in Asian American Studies, one in American Studies, and one Asian Studies course under an Asian Studies or cross-listed number, as distributed below. In lieu of taking regular academic courses, students can earn credits through fieldwork and independent study under a professor's guidance. This minor is a useful credential for majors in education, journalism and communication, social administration, health science, social science, humanities, history, pre-law studies, and business fields such as personnel and marketing.

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Select four Asian American courses listed or cross-listed in American Studies. |  |  | 12 |  |
| American Studies | 2107 | Asian American Experiences |  |  |
| American Studies | 1901 | Honors American Lives |  |  |
| American Studies | 3074 | Introduction to Asian American Literature |  |  |
| American Studies | 2096 | Asian Diaspora |  | WI |
| American Studies | 2097 | Asian Women in Transition |  | WI |
|  |  |  |  |  |
| Select one American Studies course on race or ethnicity (or an alternative approved by an advisor). |  |  | 3 |  |
| American Studies | 2071 | Immigrant Experiences in America |  |  |
| American Studies | 2072 | Puerto Ricans in Philadelphia |  |  |
| American Studies | 3071 | African American Experiences |  |  |
| American Studies | 3101 | Latino Identity in the U.S. |  |  |
| Italian | 4161 | Italian American Literature \& Culture |  |  |
|  |  |  |  |  |
| Select one Asian Studies course under an Asian Studies or cross-listed number. Advisors can help choose from a list of over 60 courses. |  |  | 3 |  |
|  |  |  |  |  |
| Total |  |  | 18 |  |

Suggested Semester-by-Semester Plan

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Foreign Language | 1001 | Foreign Language (first level) | 4 |  |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Foreign Language | 1002 | Foreign Language (second level) | 4 |  |
| GenEd | 08xx or 09xx | Diversity and Race | 3 | GD |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| American Studies | 1000+ | One American Biography and Work Course From Approved List | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Foreign Language/ GenEd | 0800+ | Foreign Language (third level) or <br> a GenEd Global/World Society course or <br> an Internationally Focused Course From Approved List | 3 | GG |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| American Studies | 2098 | Reading Culture | 3 | WI |
| American Studies | 2000+ | One American Culture Course From Approved List | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 2 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| American Studies | 2000+ | One Diversity in America Course From Approved List | 3 | WI |
| American Studies | 2000+ | One Place in American Life Course From the Approved List | 3 |  |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Humanities/CST Course | 3 |  |
| American Studies | 2000+ | One Change in America Course From the Approved List | 3 |  |
| American Studies | 2000-4999 | One American Studies Elective | 3 |  |
| Any | 1000+ | One Focus Elective (Choose This Course With the American Studies Director) | 3 |  |


| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Subtotal |  |  | 15 |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Humanities/CST Course | 3 |  |
| American Studies | 2000-4999 | One American Studies Elective | 3 |  |
| American Studies | 2000-4999 | One American Studies Elective | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Any | 1000+ | One Focus Elective (Choose This Course With the American Studies Director) | 3 |  |
| American Studies | $\begin{gathered} 4097 \\ \text { or } \\ 4098 \end{gathered}$ | ```Senior Seminar in American Studies (usually offered fall semester) or Senior Independent Study (with Department Permission)``` | 3 | WI |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Any | 1000+ | One Focus Elective (Choose This Course With the American Studies Director) | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Degree Total |  |  | 123 |  |

# Anthropology 

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Anthropology is the study of human origins, development, and diversity. Anthropologists explore the ways in which people understand and adapt to living in a variety of settings, ranging from urban environments to rural villages, all over the world and across time. Anthropologists are interested in investigating such questions as: What does it mean to be human? What are the historical, social, political, economic, and environmental pressures that have helped shape the experiences of particular groups of people? How do human beings interact with the physical environment? Does the language that one speaks affect the ways in which one thinks and experiences the world? Anthropology includes four broad sub-fields, all of which are well represented at Temple University: Cultural Anthropology, Archaeology, Biological Anthropology, and Linguistic Anthropology.

Undergraduate majors in Anthropology pursue one of three courses of study: General Anthropology, the Human Biology concentration, or the Visual Anthropology concentration. Laboratory facilities, internships, fieldwork, and experiential learning courses provide students with practical experiences in all of Anthropology's sub-fields. A minor can be taken in General Anthropology or in Visual Anthropology.

## General Anthropology

The general anthropology major is intended to give students a foundation in all of the four subfields associated with the discipline of anthropology. Each of the sub-fields requires the development of a number of skills, including formulating hypotheses; developing research programs and proposals; applying theories to the interpretation of data, including artifacts; and gathering ethnographic information through participant-observation. There is sufficient flexibility in the requirements for the general anthropology major so that a student can focus their coursework, if desired, on any one of the four sub-fields.

With its focus on human diversity and its emphasis on cultural relativism, the general anthropology major well prepares students for the issues they are likely to encounter in today's workplaces. At Temple we offer a number of courses on such topics as the Anthropology of Policy, Medical Anthropology, and Urban Anthropology, which prepare students for careers in public administration, social work, health policy, urban planning, and other aspects of public policy-related work, in addition to professional careers in fields such as business, law, and medicine. Anthropology students are also well-prepared to participate in activities which call for cultural sensitivity and an understanding of cultural differences, such as the teaching of English as a foreign language and other work with immigrant communities or work in the global marketplace. A variety of courses on archaeology prepare students for careers in the field of cultural resources management and historic preservation.

Interested students can contact the faculty advisor for additional information. A brochure describing the General Anthropology major can be obtained in the department.

## Summary of Degree Requirements for the General Anthropology Major

## 1. University Requirements

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. All General Anthropology majors take Anthropology 2396 and one of the following writing-intensive courses for this requirement: Anthropology 4196, 4398, 4596, 4897.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section of the Undergraduate Bulletin for more details.


## 2. College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999). For Social Science majors, 6 upper level credits must be taken in the Humanities Departments (English, French, German, Greek and Roman Classics, Hebrew, Italian, Japanese (only available at our Japan campus), Philosophy, Religion, Russian, and Spanish), Art History, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.


## 3. Foreign Language/Global Studies Requirement

1) All students must complete the second level of a foreign language;
2) All students must complete at least one course from the GenEd Global/World Society category; and
3) All students must complete one of the following options:

- Third level of a foreign language;
- Demonstrated proficiency in a foreign language;
- A second General Education Global/World Society course;
- Study Abroad at an approved program; or
- Take one Global Studies course from the list on the CLA College Graduation Requirements page.


## 4. Major Requirements (37-38 s.h.) in Anthropology

- Four Fundamentals courses: Anthropology 2104, 2396, 2507, 2705.
- One Methods course from: Anthropology 3170, 3175, 3189, 3389, 3444, 3509, 3510, 3770, 3771.
- One Capstone course from: Anthropology 4196, 4398, 4596, 4897.
- A minimum of three advanced electives in Anthropology numbered between 3000-4999.
- An additional three upper-level electives numbered between 2000-4999.

5. General electives vary according to a student's individual program of study. Consult your academic advisor for more information.

Requirements for the Major - General Anthropology

| Required Courses |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Four Required Fundamentals Courses: |  |  | 13 |  |
| Anthropology | 2104 | Fundamentals of Archaeology <br> (Required for all Archaeology courses numbered 3000+) | 3 |  |
| Anthropology | 2396 | Fundamentals of Cultural Anthropology <br> (Required for all Cultural \& Visual Anthropology courses numbered 3000+) | 3 | WI |
| Anthropology | 2507 | Fundamentals of Linguistic Anthropology <br> (Required for all Linguistic Anthropology courses numbered 3000+) | 3 |  |
| Anthropology | 2705 | Fundamentals of Biological Anthropology <br> (Required for all Biological Anthropology courses numbered 3000+) | 4 |  |
|  |  |  |  |  |
| Methods - Select one:* |  |  | 3-4 |  |
| Anthropology | 3170 | Methods in Archaeology (Topics vary.)* | 3 |  |
| Anthropology | 3175 | Heritage Management in Archaeology | 3 |  |
| Anthropology | 3189 | Field Session in Archaeology | 3 |  |
| Anthropology | 3389 | Field Work in Ethnography | 3 |  |
| Anthropology | 3444 | Anthropological Problems in Visual Production | 3 |  |
| Anthropology | 3509 | Language Socialization and Cultural Reproduction | 3 |  |
| Anthropology | 3510 | Theory and Method in Linguistic Anthropology | 3 |  |
| Anthropology | 3770 | Methods in Physical Anthropology (Topics vary.)* | 4 |  |
| Anthropology | 3771 | Quantitative Methods in Anthropology | 3 |  |
|  |  |  |  |  |
| Capstone - Select one: |  |  | 3 |  |


| Anthropology | 4196 | Theory and Practice of Contemporary Archaeology | 3 | WI |
| :--- | :--- | :--- | :---: | :---: |
| Anthropology | 4398 | Research in Socio-Cultural Anthropology | 3 | WI |
| Anthropology | 4596 | Socio-Cultural Ecologies of Language | 3 | WI |
| Anthropology | 4897 |  | Research in Biological Anthropology | 3 |
|  |  | WI |  |  |
|  |  | Note: Electives may not have been used to satisfy other requirements <br> of the major. | $\mathbf{1 8}$ |  |
| Electives - Select six: | Select no more than three courses. | 9 |  |  |
| Anthropology | $2000-4999$ | Select at least three courses. | 9 |  |
| Anthropology | $3000-4999$ | Sel |  |  |
|  |  |  | $\mathbf{3 7 - 3 8}$ |  |
| Total |  |  |  |  |

*Additional methods courses can be taken as electives; 3170 and 3770 are topics courses and may be taken multiple times for additional credit.

## Distinction in Major

Anthropology majors may graduate with distinction in the major if they have earned a GPA of 3.5 or higher.

Requirements for the Minor - General Anthropology

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Fundamentals - Select two: | $\mathbf{6 - 7}$ |  |  |  |
| Anthropology | 2104 | Fundamentals of Archaeology <br> (Required for all Archaeology courses numbered 3000+) |  |  |
| Anthropology | 2396 | Fundamentals of Cultural Anthropology <br> (Required for all Cultural \& Visual Anthropology courses numbered <br> $3000+$ ) | 3 | WI |
| Anthropology | 2507 | Fundamentals of Linguistic Anthropology <br> (Required for all Linguistic Anthropology courses numbered 3000+) | 3 |  |
| Anthropology | 2705 | Fundamentals of Biological Anthropology <br> (Required for all Biological Anthropology courses numbered 3000+) | 4 |  |
| Electives - Select four: |  | $\mathbf{1 2}$ |  |  |
| Anthropology | $2000-4999$ | Chosen from remaining courses at the 2000 level and above |  |  |
| Total |  |  | $\mathbf{1 8 - 1 9}$ |  |

## Human Biology Concentration

The Human Biology concentration in Anthropology prepares students for careers in medicine, dentistry, physical therapy, optometry, podiatry, and other allied health fields. Human Biology students major in Anthropology but take departmental courses primarily in biological anthropology. These courses deal in human genetics, human paleontology, human physiology, and human reproductive biology and behavior. They stress an evolutionary perspective on humans and integrate molecular, whole-organism, population, and species-level data on humans. The Human Biology Concentration also includes required courses in biology, and elective
options in human anatomy, physiology, and public health. This program also encourages students to take courses in other disciplines to fulfill admission requirements to professional schools in the health sciences. As a result, our students have the broad, liberal arts background that many health science professional schools find attractive.

Interested students should contact the pre-med advisor at 1810 Liacouras Walk, 1st Floor, or the Human Biology Concentration advisor, Dr. Charles Weitz, at 215-204-7330 or weitz@temple.edu. A brochure describing the Human Biology Concentration can be obtained in the Anthropology Department, room 209, Gladfelter Hall.

## Summary of Degree Requirements for the Anthropology Major - Human Biology Concentration

## 1. University Requirements:

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. All students majoring in the Anthropology Human Biology concentration must take Anthropology 3796 and 4897.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section of the Undergraduate Bulletin for more details.


## 2. College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999). For Social Science majors, 6 upper level credits must be taken in the Humanities Departments (English, French, German, Greek and Roman Classics, Hebrew, Italian, Japanese (only available at our Japan campus), Philosophy, Religion, Russian, and Spanish), Art History, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.


## 3. Foreign Language/Global Studies Requirements:

1) All students must complete the second level of a foreign language;
2) All students must complete at least one course from the GenEd Global/World Society category; and
3) All students must complete one of the following options:

- Third level of a foreign language;
- Demonstrated proficiency in a foreign language;
- A second General Education Global/World Society course;
- Study Abroad at an approved program; or
- Take one Global Studies course from the list on the CLA College Graduation Requirements page.


## 4. Major Requirements (39-42 s.h.)

- Specifically required courses: Anthropology 2705, 3771, 3796
- One Capstone course: Anthropology 4897
- One Biology Sequence: either Biology 1011/1012 or Biology 1111/2112
- Four Human Biology Electives from the list below.
- One course from the Primate and Human Behavior list below.
- One course from the Health and Disease list below.

5. General electives vary according to a student's individual program of study. Consult your academic advisor for more information.

Requirements for the Major - Human Biology

| Required Courses |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Anthropology | 2705 | Fundamentals of Biological Anthropology (Note: 2705 is the prerequisite for all courses in Biological Anthropology numbered 3000+.) | 4 |  |
| Anthropology | 3771 | Quantitative Methods in Anthropology | 3 |  |
| Anthropology | 3796 | Evolutionary Biology | 3 | WI |
|  |  |  |  |  |
| Select One Introductory Sequence in Biology (must take full sequence): |  |  | 8 |  |
| Biology | 1011/1012 | General Biology I and II |  |  |
| OR |  |  |  |  |
| Biology | 1111/2112 | Introduction to Biology I and II |  |  |
|  |  |  |  |  |
| Select Four Human Biology Electives: |  |  | 12 |  |
| Anthropology | 2763 | Human Population Genetics |  |  |
| Anthropology | 2765 | Human Osteology |  |  |
| Anthropology | 3742 | Human Paleontology |  |  |
| Anthropology | 3743 | Human Biology of Modern Populations |  |  |
| Anthropology | 3744 | Human Evolutionary Genetics |  |  |
| Anthropology | 3746 | Human Reproduction: Evolutionary Perspectives |  |  |
| Anthropology | 3747 | Human Growth and Development |  |  |
| Biology | 2233 | Mammalian Anatomy |  |  |
| Biology | 3334 | Mammalian Physiology |  |  |
| Kinesiology | 1223 | Human Anatomy and Physiology I |  |  |
| Kinesiology | 1224 | Human Anatomy and Physiology II (Kinesiology 1223 prerequisite) |  |  |
|  |  |  |  |  |
| Select one of the following Primate and Human Behavior courses: |  |  | 3 |  |
| Anthropology | 2764 | Primate Behavior |  |  |
| Anthropology | 3764 | Primate Functional Morphology |  |  |
| Anthropology | 3765 | Human Behavioral Ecology |  |  |
|  |  |  |  |  |


| Select one of the following Health and Disease courses: | $\mathbf{3 - 4}$ |  |  |
| :--- | :--- | :---: | :---: |
| Anthropology 2332 | Medical Anthropology |  |  |
| Anthropology 3772 | Evolutionary Medicine |  |  |
| Anthropology 3774 | Environmental Physiology and Health |  |  |
| Public Health 2102 | Environmental Health |  |  |
| Public Health | 3101 | Epidemiology |  |
| Sociology | 2552 | Health and Disease in American Society |  |
| Sociology | 3521 | International Health |  |
|  |  |  |  |
|  |  |  | $\mathbf{3}$ |
| One Capstone course: |  |  |  |
| Anthropology | 4897 | Research in Biological Anthropology |  |
| Total |  |  | WI |
| Note: students may take either Biology 2233 and 3334 OR Kinesiology 1223 and 1224 |  |  |  |

## Distinction in Major

Anthropology majors may graduate with distinction in the major if they have earned a GPA of 3.5 or higher.

## Visual Anthropology Concentration

The Visual Anthropology curriculum emphasizes a well-rounded liberal arts background and a comprehensive understanding of the world's varied systems of visual representation. The Visual Anthropology curriculum allows students to combine cultural anthropology with the study and practice of visual communication. Courses in the Visual Anthropology curriculum combine topics and methods familiar to the social sciences, humanities, and media arts. It is well suited to those students interested in popular culture as well as the fine arts; documentary and ethnographic film as well as feature film; all forms of artistic performance, including the folk arts, fine arts, popular arts, and media arts; televisual communication, including both broadcast and narrowcast forms; and home media and alternative media. Additional attention is now dedicated to relationships of globalization and New Media.

In the Visual Anthropology curriculum, literary traditions and criticism find a place alongside pictorial traditions and media criticism. Students may do original research that involves still photography and/or video production. Students apply field methods familiar to cultural anthropology to achieve a better understanding of the processes and products of visual communication. Laboratories are available for both still photography and video production. There are ongoing field programs in North America, Japan, and India. The summer program in India is intended to investigate Indian civilization through an anthropological and historical approach of its religions and artistic traditions, both ancient and contemporary. For more details on the summer program in India, go to the Temple University in India web site at http://isc.temple.edu/jihala/templeindia/.

Interested students should contact the Visual Anthropology Advisor, Jayasinhji Jhala, at 215-

204-7727 or jjhala@temple.edu. A brochure describing the Visual Anthropology curriculum can be obtained in the Anthropology Department, room 209, Gladfelter Hall.

## Summary of Degree Requirements for the Anthropology Major - Visual Anthropology

## 1. University Requirements

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. All Visual Anthropology majors take Anthropology 2396 and 4496.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section of the Undergraduate Bulletin for more details.


## 2. College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999). For Social Science majors, 6 upper level credits must be taken in the Humanities Departments (English, French, German, Greek and Roman Classics, Hebrew, Italian, Japanese (only available at our Japan campus), Philosophy, Religion, Russian, and Spanish), Art History, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.


## 3. Foreign Language/Global Studies Requirements

1) All students must complete the second level of a foreign language;
2) All students must complete at least one course from the GenEd Global/World Society category; and
3) All students must complete one of the following options:

- Third level of a foreign language;
- Demonstrated proficiency in a foreign language;
- A second General Education Global/World Society course;
- Study Abroad at an approved program; or
- Take one Global Studies course from the list on the CLA College Graduation Requirements page.


## 4. Major Requirements (36-37 s.h.) in Anthropology

- Specifically Required courses: Anthropology 2396, 2408, 2507, 3444, 4496
- Select one from: Anthropology 2104 or 2705
- Select six electives from: Anthropology 2409, 2432, 2434, 3324, 3433, 3436, 3438, 3439, others by approval of the faculty advisor.

5. General electives vary according to a student's individual program of study. Consult your academic advisor for more information.

Requirements for the Major - Visual Anthropology

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Anthropology | 2396 | Fundamentals of Cultural Anthropology <br> (Required for all Cultural \& Visual Anthropology courses numbered 3000+) | 3 | WI |
| Anthropology | 2408 | Fundamentals of the Anthropology of Visual Communication | 3 |  |
| Anthropology | 2507 | Fundamentals of Linguistic Anthropology | 3 |  |
| Anthropology | 3444 | Anthropological Problems in Visual Production | 3 |  |
|  |  |  |  |  |
| Select one: |  |  | 3-4 |  |
| Anthropology | 2104 | Fundamentals of Archaeology |  |  |
| Anthropology | 2705 | Fundamentals of Biological Anthropology |  |  |
|  |  |  |  |  |
| Capstone: |  |  | 3 |  |
| Anthropology | 4496 | Research in Visual Anthropology |  | WI |
|  |  |  |  |  |
| Electives - Sel | ect six: |  | 18 |  |
| Anthropology | 2409 | Introduction to Visual Production |  |  |
| Anthropology | 2432 | Indigenous Media |  |  |
| Anthropology | 2434 | Anthropology in Feature Films |  |  |
| Anthropology | 3324 | Anthropology and Art |  |  |
| Anthropology | 3433 | Anthropological Film |  |  |
| Anthropology | 3436 | Anthropology of New Media |  |  |
| Anthropology | 3438 | Anthropology of Mass Media |  |  |
| Anthropology | 3439 | Anthropology of Photography |  |  |
| Total |  |  | 36-37 |  |

All Temple students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed above and are identified by "WI" in the Attribute column.

## Distinction in Major

Anthropology majors may graduate with distinction in the major if they have earned a GPA of 3.5 or higher.

Requirements for the Minor - Visual Anthropology

| Required Courses |  |  |  |
| :--- | :--- | :---: | :---: |
| Subject $\mid$ Course \# | Course Title | Hours | Attribute |
| Fundamentals - All of the following: | $\mathbf{9}$ |  |  |


| Anthropology | 2396 | Fundamentals of Cultural Anthropology <br> (Required for all Cultural \& Visual Anthropology courses numbered <br> $3000+$ |  | WI |
| :--- | :--- | :--- | :---: | :---: |
| Anthropology | 2408 | Fundamentals of the Anthropology of Visual Communication |  |  |
| Anthropology | 2507 |  | Fundamentals of Linguistic Anthropology |  |
|  |  |  |  |  |
|  |  |  | $\mathbf{3}$ |  |
| Methods: |  | Anthropological Problems in Visual Production |  |  |
| Anthropology | 3444 |  | Introduction to Visual Production | $\mathbf{6}$ |
|  | Indigenous Media |  |  |  |
| Electives - Select two: |  |  |  |  |
| Anthropology | 2409 | Anthropology in Feature Films |  |  |
| Anthropology | 2432 | Anthropology and Art |  |  |
| Anthropology | 2434 | Anthropology of New Media |  |  |
| Anthropology | 3324 | Anthropology of Mass Media |  |  |
| Anthropology | 3433 | Anthropology of Photography |  |  |
| Anthropology | 3436 |  | $\mathbf{1 8}$ |  |
| Anthropology | 3438 |  |  |  |
| Anthropology | 3439 |  |  |  |
|  |  |  |  |  |
| Total |  |  |  |  |

## Suggested Semester-by-Semester Plan for General Anthropology

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812, or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Foreign Language | 1001 | Foreign Language (first level) | 4 |  |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Foreign Language | 1002 | Foreign Language (second level) | 4 |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| GenEd | 08xx or 09xx | Race and Diversity | 3 | GD |
| CLA/CST | 0800+ | CLA/CST elective | 3-4 |  |
| Subtotal |  |  | 16-17 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Foreign Language/ GenEd | 0800+ | Foreign Language (third level) or GenEd Global/World Society Course or Internationally Focused Course From Approved List | 3 | GG |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Anthropology | 2396 | Fundamentals of Cultural Anthropology | 3 | WI |
| Any | 0800-4999 | One Elective in Any School or College | 1-3 |  |


| Subtotal |  |  | 16-18 |  |
| :---: | :---: | :---: | :---: | :---: |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| CLA/CST | 0800+ | One CLA/CST elective | 3 |  |
| Anthropology | 2104 | Fundamentals of Archaeology | 3 |  |
| Anthropology | 2705 | Fundamentals of Biological Anthropology | 4 |  |
| Subtotal |  |  | 16-17 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Humanities/CST Course | 3 |  |
| Anthropology | 2507 | Fundamentals of Linguistic Anthropology | 3 |  |
| Anthropology | 2000-4999 | One Anthropology elective numbered 2000 or higher | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 0800+ | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Humanities/CST Course | 3 |  |
| Anthropology |  | Select one Anthropology Methods Course from list above | 3-4 |  |
| Anthropology | 2000-4999 | One Anthropology Elective numbered 2000 or higher | 3 |  |
| Anthropology | 2000-4999 | One Anthropology Elective numbered 2000 or higher | 3 |  |
| CLA/CST | 0800+ | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Anthropology | 3000-4999 | One Anthropology elective numbered 3000 or higher | 3 |  |
| Anthropology | 3000-4999 | One Anthropology elective numbered 3000 or higher | 3 |  |
| CLA/CST | 0800+ | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800+ | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800+ | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Anthropology | $\begin{aligned} & 4196,4398,4596, \\ & 4897 \\ & \hline \end{aligned}$ | Select one Capstone in Anthropology | 3 | WI |
| Anthropology | 3000-4999 | One Anthropology elective numbered 3000 or higher | 3 |  |
| CLA/CST | 0800+ | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800+ | Any CLA/CST Elective | 3 |  |
| Any | 0800+ | One Elective in Any School or College | 3 |  |
| Subtotal |  |  | 15 |  |
| Degree Total |  |  | 123 |  |

## Suggested Semester-by-Semester Plan for the Human Biology Concentration

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812, or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Foreign Language | 1001 | Foreign Language (first level) | 4 |  |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Foreign Language | 1002 | Foreign Language (second level) | 4 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Foreign Language/ GenEd | 0800+ | Foreign Language (third level) or GenEd Global/World Society Course or Internationally Focused Course From Approved List | 3 | GG |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| Biology |  | General Biology I <br> or <br> Introduction to Biology I <br> (must follow sequence) | 4 |  |
| CLA/CST | 0800+ | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 16-17 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| Anthropology | 2705 | Fundamentals of Biological Anthropology | 4 |  |
| Biology |  | General Biology II or Introduction to Biology II (must follow sequence) | 4 |  |
| CLA/CST | 0800+ | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Humanities/CST Course | 3 |  |
| Anthropology | 3771 | Quantitative Methods in Anthropology | 3 |  |
| Anthropology | 3796 | Evolutionary Biology | 3 | WI |


| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 4 |  |
| :---: | :---: | :---: | :---: | :---: |
| CLA/CST | 0800+ | Any CLA/CST Elective | 1-3 |  |
| Subtotal |  |  | 14-16 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Humanities/CST Course | 3 |  |
| Human Biology Elective |  | Select from Human Biology list above | 4 |  |
| Human Biology Elective |  | Select from Human Biology list above. | 3 |  |
| Primate and Human Behavior Elective |  | Select one from the Primate and Human Behavior list above. | 3 |  |
| CLA/CST | 0800+ | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Health and Disease Elective |  | Select from Health and Disease list above. | 3 |  |
| Human Biology Elective |  | Select from Human Biology list above. | 3 |  |
| Human Biology Elective |  | Select from Human Biology list above | 3 |  |
| CLA/CST | 0800+ | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800+ | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST Elective | 2000+ | One CLA/CST Elective | 3 |  |
| Anthropology | 4897 | Research in Biological Anthropology | 3 | WI |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| Any | 0800+ | One Elective in Any School or College | 3 |  |
| Any | 0800+ | One Elective in Any School or College | 2-3 |  |
| Subtotal |  |  | 14-15 |  |
|  |  |  |  |  |
| Degree Total |  |  | 123 |  |

## Suggested Semester-by-Semester Plan for Visual Anthropology

| Freshman Year - 1st Semester | Course Title | Hours | Attribute |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course \# | 4 | GW |  |
| English | 0802,0812, or 0902 | Analytical Reading \& Writing | 4 | GQ |
| GenEd | $08 \times x$ or 09xx | Quantitative Literacy | 4 |  |
| Foreign Language | 1001 | Foreign Language (first level) | 3 | GB |
| GenEd | $08 \times x$ or 09xx | Human Behavior | $\mathbf{1 5}$ |  |
| Subtotal |  |  |  |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester | Course \# | Course Title | Hours | Attribute |
| Subject |  |  |  |  |



| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Anthropology | 3444 | Anthropological Problems in Visual Production | 3 |  |
| Anthropology | $3000+$ | One Approved Elective (See List or Faculty Advisor) | 3 |  |
| CLA/CST | $0800+$ | Any CLA/CST Elective | 3 |  |
| CLA/CST | $0800+$ | Any CLA/CST Elective | 3 |  |
| CLA/CST | $0800+$ | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester | Course \# | Course Title |  |  |
| Subject | Research in Visual Anthropology | 3 | WI |  |
| Anthropology | 4496 | One Approved Elective (See List or Faculty Advisor) | 3 |  |
| Anthropology | $3000+$ | Any CLA/CST Elective | 3 |  |
| CLA/CST | $0800+$ | Any CLA/CST Elective | 3 |  |
| CLA/CST | $0800+$ | One Elective in Any School or College | 3 |  |
| Any | $0800+$ |  | $\mathbf{1 5}$ |  |
| Subtotal |  |  |  |  |
|  |  | $\mathbf{1 2 3}$ |  |  |
| Degree Total |  |  |  |  |

## Asian Studies

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Asian Studies draws on the resources of many departments to provide a comprehensive program of study on Asia (especially East Asia). Majors may concentrate on a geographic area, field, or theme(s). By combining language with the study of politics, history, society, art, religion, philosophy, and literature, each student can construct a major tailored to individual interests.

Temple's campus in Japan can provide students with experience abroad while taking their coursework. The East West Club offers lectures, films, and career development programs, as well as fun and fellowship through extracurricular activities.

The curriculum gives students a foundation for living or working in Asia, or continuing their studies through developing a knowledge base, cross-cultural sensitivity, analytic thinking, and communication and writing skills in English and an Asian language. After graduation, students find employment in private firms, nonprofit organizations, or educational institutions. Some enter graduate programs in law, business, or academic fields, including Asian Studies.

The Asian Studies program will assist students in:

- understanding the broad foundations of at least one major Asian culture, including the history, culture, and socio-economic-political organization,
- recognizing the utility of different humanistic and social science disciplines in understanding a culture,
- understanding the distinction between theory and data and the links between the two components while drawing generalizations from actual social experience,
- recognizing the way language serves as a foundation of culture,
- understanding the issues and requirements of cross-cultural communication, and
- taking more initiative in educating themselves, to make analytical generalizations, to make ethical choices, and to feel confident in these and other exercises of personal responsibility.


## Summary of Degree Requirements

## 1. University Requirements:

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. See below for a list of the specific courses required for your major.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section of the Undergraduate Bulletin for more details.


## 2. College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999). For Social Science
majors, 6 upper level credits must be taken in the Humanities Departments (English, French, German, Greek and Roman Classics, Hebrew, Italian, Japanese (only available at our Japan campus), Philosophy, Religion, Russian, and Spanish), Art History, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.


## 3. Foreign Language/Global Studies Requirements:

1) All students must complete the second level of a foreign language;
2) All students must complete at least one course from the GenEd Global/World Society category; and
3) All students must complete one of the following options:

- Third level of a foreign language;
- Demonstrated proficiency in a foreign language;
- A second General Education Global/World Society course;
- Study Abroad at an approved program; or
- Take one Global Studies course from the list on the CLA College Graduation Requirements page.


## 4. Major Requirements (30-44 s.h.)

Specifically Required courses:

- Asian Studies 4096 (offered in spring semester only)

Other Required Courses

- Completion of the fourth semester of either Hindi, Chinese, Japanese, Korean, Vietnamese, or equivalent, see * below
- Two of the following foundation courses: Asian Studies 1801, 2074, 2501, or 2502


## Electives in Major

- One Asian Studies Writing Intensive course (see list below)
- Six Asian Studies electives from three different subject areas (see list below)

5. General electives vary according to a student's individual program of study. Consult your academic advisor for more information.

## Requirements for the Major

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Select two foundation courses from the list below. |  |  | 6 |  |
| Asian Studies Asian Studies Asian Studies Asian Studies | $\begin{aligned} & 1801 \\ & 2074 \\ & 2501 \\ & 2502 \end{aligned}$ | Chinese \& Japanese Literature in Cultural Context Geography of East and South Asia Introduction to East Asia: China Introduction to East Asia: Japan |  |  |
| Completion of the fourth semester of a language below*: |  |  | 3 |  |
| Hindi <br> Chinese <br> Japanese <br> Korean <br> Vietnamese | 2002 2002 2002 2002 2002 | Hindi Intermediate II Chinese Intermediate II Intermediate Japanese II Korean Intermediate II Second-Year Vietnamese II |  | $\begin{aligned} & \hline \hline \text { LC } \\ & \text { LC } \\ & \text { LC } \end{aligned}$ |
| Select one writing-intensive elective from the following list: |  |  | 3 |  |
| Asian Studies | 2097 | Asian Diaspora |  | WI |
| Asian Studies | 2098 | Japanese Popular Culture and its Literature |  | WI |
| Asian Studies | 2696 | Introduction to Islam |  | WI |
| Asian Studies | 3696 | Asian Women in Transition |  | WI |
| Asian Studies | 4696 | Modern Japan: Empire, War, Society |  | WI |
|  |  |  |  |  |
| Asian Studies | Electives | Six electives from three different subject areas. | 18 |  |
|  |  |  |  |  |
| Asian Studies | 4096 | Seminar in Asian Studies | 3 | WI |
|  |  |  |  |  |
| Total |  |  | 30-44 |  |
| *The language requirement may also be satisfied by examination of oral/aural and reading skills in any Asian language approved by the Asian Studies head advisor. |  |  |  |  |

All Temple students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed above and are identified by "WI" in the Attribute column.

## Distinction in Asian Studies Major

Asian Studies majors may graduate with distinction in the major if they have a GPA of at least 3.5 in the major and a cumulative GPA of at least 3.0.

Requirements for the Minor

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Select two foundation courses from the list below. May incorporate the study | 6 |  |  |  |
| of South or Southeast Asia, Asian Studies 1051, Asian Studies 1052, if approved |  |  |  |  |
| by the Asian Studies advisor. |  |  |  |  |
| Asian Studies | 1801 |  |  |  |
| Asian Studies | 2074 | Chinese \& Japanese Literature in Cultural Context <br> Asian Studies | Geography of East and South Asia <br> 2501 <br> Asian Studies | Introduction to East Asia: China |
| 2502 | Introduction to East Asia: Japan |  |  |  |
|  |  |  |  |  |


| Asian Studies | Electives | Four electives from three different subject areas. | 12 |  |
| :--- | :--- | :--- | :--- | :--- |
| $\mid$ |  |  |  |  |
| Completion of the second semester of a language below*: |  |  |  |  |
| Hindi | 1002 | Hindi Elements II | 4 |  |
| Chinese | 1002 | Chinese Elements II |  | LC |
| Japanese | 1002 | Japanese Elements II | LC |  |
| Korean | 1002 | Korean Elements II | LC |  |
|  |  |  |  |  |
| Total |  |  | $\mathbf{1 8 - 2 6}$ |  |
|  |  |  |  |  |
| *The language requirement may also be satisfied by examination of oral/aural and reading |  |  |  |  |
| Skills in any Asian language approved by the Asian Studies head advisor. |  |  |  |  |

## Asian Business \& Society Certificate



* The language requirement may also be satisfied by examination of oral/aural and reading skills in any Asian language approved by the Asian Studies head advisor.
** The country of the Asian Studies Country Elective and the Asian Studies Writing-Intensive Elective must match the country of the language studied. For example, if the language requirement is met with Chinese, then courses on China must be chosen for both the Country and Writing-Intensive Electives.


## Asian American Studies - Minor

This interdisciplinary minor focuses on Asian American history, culture, and contemporary issues as well as their Asian roots and American context. The Asian American Minor is six courses (18 s.h.), four in Asian American Studies, one in American Studies, and one Asian Studies course under an Asian Studies or cross-listed number, as distributed below. In lieu of taking regular academic courses, students can earn credits through fieldwork and independent study under a professor's guidance. This minor is a useful credential for majors in education, journalism and communication, social administration, health science, social science, humanities, history, pre-law studies, and business fields such as personnel and marketing.

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Select four Asian American courses listed or cross-listed in American Studies. | 12 |  |  |  |
| American Studies | 2107 | Asian American Experiences |  |  |
| American Studies | 1901 | Honors American Lives |  |  |
| American Studies | 3074 | Introduction to Asian American Literature |  |  |
| American Studies | 2096 | Asian Diaspora |  | WI |
| American Studies | 2097 | Asian Women in Transition | WI |  |
|  |  |  |  |  |
| Select one American Studies course on race or ethnicity     <br> (or an alternative approved by an Asian Studies faculty advisor). 3    <br> American Studies 2071 Immigrant Experiences in America   <br> American Studies 2072 Puerto Ricans in Philadelphia   <br> American Studies 3071 African American Experiences   <br> American Studies 3101 Latino Identity in the U.S.   <br> Italian 4161 Italian American Literature \& Culture   <br>      <br> Select one Asian Studies course under an Asian Studies or cross-listed number. <br> Advisors can help choose from a list of over 60 courses. 3    <br>      <br> Total  $\mathbf{1 8}$   |  |  |  |  |

## Suggested Semester-by-Semester Plan

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812, or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Hindi, Chinese, <br> Japanese, Korean <br> or Vietnamese | 1001 | Foreign Language (first level) | 4 |  |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |


| Hindi, Chinese, <br> Japanese, Korean <br> or Vietnamese | 1002 | Foreign Language (second level) | 4 |  |
| :---: | :---: | :---: | :---: | :---: |
| GenEd | 08xx or 09xx | Diversity and Race | 3 | GD |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Asian Studies | 1801, 2074, 2501, or 2502 | One Asian Studies Foundation Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Hindi, Chinese, Japanese, Korean or Vietnamese | 2001 | Foreign Language (third level) | 3 | LC |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Asian Studies | 1801, 2074, 2501, or 2502 | One Asian Studies Foundation Course | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 2 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| Asian Studies | 1000-4999 | One Elective From One of Three Different Subject Areas: To Be Determined With Asian Studies Advisor | 3 |  |
| Hindi, Chinese, Japanese, Korean or Vietnamese | 2002 | Foreign Language (fourth level) | 3 | LC |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Humanities/CST Course | 3 |  |
| Asian Studies | 1000-4999 | One Elective From One of Three Different Subject Areas: To Be Determined With Asian Studies Advisor | 3 |  |
| Asian Studies | 1000-4999 | One Elective From One of Three Different Subject Areas: To Be Determined With Asian Studies Advisor | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Humanities/CST Course | 3 |  |


| Asian Studies | 1000-4999 | One Elective From One of Three Different Subject Areas: To Be Determined With Asian Studies Advisor | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Asian Studies | $\begin{aligned} & 2097,2098,2696, \\ & 3696, \text { or 4696 } \end{aligned}$ | One Asian Studies Writing-Intensive Course | 3 | WI |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Asian Studies | 1000-4999 | One Elective From One of Three Different Subject Areas: To Be Determined With Asian Studies Advisor | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Asian Studies | 1000-4999 | One Elective From One of Three Different Subject Areas: To Be Determined With Asian Studies Advisor | 3 |  |
| Asian Studies | 4096 | Seminar in Asian Studies | 3 | WI |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Degree Total |  |  | 123 |  |

## Classics

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Students in the Department of Greek and Roman Classics study the cultures and languages of two major civilizations of the ancient Mediterranean world. Classics is an interdisciplinary field of study which encompasses major disciplines of the liberal arts: languages, history, literature, art, and philosophy. Students select from two different major concentration options: either Classical Languages \& Literature or Classical Civilization, depending on their interests and goals.

Classics offers a sound liberal arts background that prepares students for any career. Classics majors have held senior positions in government, law, and public service organizations, have founded and headed companies and organizations, and have worked as correspondents and journalists. Recent Temple Classics majors have gone on to law school, veterinary school, graduate school, and business and teaching careers.

Classics Majors and Minors are encouraged to study a semester at Temple's Rome Campus.
The organization for majors and minors is Zeta Beta Chapter of Eta Sigma Phi, the National Honorary Society for Classics.

Summary of Degree Requirements for the Major in Classics

## 1. University Requirements:

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. See below for a list of the specific courses required for your major.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section of the Undergraduate Bulletin for more details.


## 2. College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999). For Humanities majors, 6 upper level credits must be earned in the Social Sciences: African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Geography and Urban Studies, History, Jewish Studies, Latin American Studies, Mathematical Economics, Neuroscience: Systems, Behavior and

Plasticity, Political Science, Psychology, Sociology, Women's Studies, or any department in the College of Science and Technology.

- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.


## 3. Foreign Language/Global Studies Requirements:

1) All students must complete the second level of a foreign language;
2) All students must complete at least one course from the GenEd Global/World Society category; and
3) All students must complete one of the following options:

- Third level of a foreign language;
- Demonstrated proficiency in a foreign language;
- A second General Education Global/World Society course;
- Study Abroad at an approved program; or
- Take one Global Studies course from the list on the CLA College Graduation Requirements page.


## 4. Major Requirements (35 s.h.):

Select either the option in Classical Languages \& Literature or Classical Civilizations. Students are not permitted to take both concentrations.

Classical Languages and Literatures Major Concentration

## Minimum of 35 credits in Greek \& Roman Classic, Greek (Ancient) or Latin courses

Specifically required courses:

- Seven courses in Greek (Ancient) or Latin 1001, 1002, 2001, 2002, 3002, and two additional courses in Greek (Ancient) or Latin
- Greek (Ancient) or Latin 3096
- One course in Mythology: Greek \& Roman Classic 3001/3196, or 3296

Electives in Major:

- Two courses in Greek and Roman Classic, numbered 1003-4999


## Classical Civilizations Major Concentration

## Minimum of 35 credits in Greek \& Roman Classic, Greek (Ancient) or Latin courses

Specifically required courses:

- Greek \& Roman Classic 2101
- Greek \& Roman Classic 2102

Language Requirement:

- Greek (Ancient) or Latin 1001
- Greek (Ancient) or Latin 1002

Arrays within the Major:

- Select two Writing Intensive Courses from: Greek \& Roman Classic 3596, 3696, 3796, 3896, or 3897
- Select one Art History course from: Art History 2105, 2111, 2135, 2215, 2129, 2196, or 2216
- Select three courses from: Greek \& Roman Classic 1003, 1004, 2001, 2002, 2003, 3000, 3001, 3096, 3196, 3296, 3311, 3312, 3396, 3496
- Select one course in Greek (Ancient) or Latin, numbered 2001 or higher.

5. General electives vary according to a student's individual program of study. Consult your academic advisor for more information.

## Distinction in Major

Distinction in Major requires a senior thesis and a minimum GPA of 3.5 in Greek, Latin, or Greek and Roman Classics courses.

Classical Languages \& Literatures Major Concentration

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Greek (Ancient)/Latin | 1001 | Ancient Greek/Latin 1 | 4 | LA |
| Greek (Ancient)/Latin | 1002 | Ancient Greek/Latin 2 | 4 | LA |
| Greek (Ancient)/Latin | 2001 | Ancient Greek/Latin 3 | 3 | LB |
| Greek (Ancient)/Latin | 2002 | Ancient Greek/Latin 4 | 3 |  |
| Greek (Ancient)/Latin | 3002 | Readings in Greek/Latin Literature II | 3 |  |
|  |  |  |  |  |
| Greek (Ancient)/Latin | Electives | Select two courses in Greek (Ancient) and/or Latin <br> languages. If exempt from beginning Greek (Ancient) and/or <br> Latin courses through placement, substitute additional <br> electives until a total of seven language courses is <br> completed. | $6-8$ |  |


|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| One Writing Capstone: |  |  | 3 |  |
| Greek (Ancient)/Latin | 3096 | Readings in Greek/Latin Literature I* |  | WI |
| Select one from: |  |  | 3 |  |
| Greek \& Roman Classic <br> Greek \& Roman Classic | $\begin{aligned} & 3001 / 3196 \\ & 3296 \end{aligned}$ | Classical Greek \& Roman Mythology or Comparative Mythology |  | $\begin{gathered} \hline \hline-/ \mathrm{WI} \\ \mathrm{WI} \\ \hline \end{gathered}$ |
| Select two: |  |  | 6 |  |
| Greek \& Roman Classic | 1003-4999 | Electives** |  |  |
|  |  |  |  |  |
| Total |  |  | 35-37 |  |
| Note: Greek (Ancient) 1003 (7 s.h.) may be substituted for Greek (Ancient) 1001 and 1002. |  |  |  |  |
| *Capstone course in major; select Greek (Ancient) or Latin. Two Writing Intensive courses must be selected. |  |  |  |  |
| **May include advanced courses in Greek (Greek) and/or Latin. Or may include related courses in other departments, per departmental approval. |  |  |  |  |

Classical Civilizations Major Concentration

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Greek \& Roman Classic | 2101 | The Greeks | 3 |  |
| Greek \& Roman Classic | 2102 | The Romans | 3 |  |
|  |  |  |  |  |
| Language Requirement: |  |  | 7-8 |  |
| Greek (Ancient)/Latin | 1001 | Ancient Greek/Latin 1 |  | LA |
| Greek (Ancient)/Latin | 1002 | Ancient Greek/Latin 2 |  | LA |
| Note: Greek (Ancient) 1003 (7 s.h.) may be substituted for Greek (Ancient) 1001 and 1002. |  |  |  |  |
|  |  |  |  |  |
|  |  |  | 6 |  |
| Greek \& Roman Classic | 3596 | Ancient City: Periclean Athens |  | WI |
| Greek \& Roman Classic | 3696 | Ancient City: Hellenistic Alexandria |  | WI |
| Greek \& Roman Classic | 3796 | Ancient City: Augustan Rome |  | WI |
| Greek \& Roman Classic | 3896 | Ancient City: Byzantium |  | WI |
| Greek \& Roman Classic | 3897 | Ancient City: Jerusalem |  | WI |
|  |  |  |  |  |
| Select one course in the history of the art of the ancient world from the following options: |  |  | 4 |  |
| Art History | 2105 | Roman Art and Archaeology |  |  |
| Art History | 2111 | Minoan Art |  |  |
| Art History | 2135 | Art and Culture of Rome |  |  |
| Art History | 2215 | Late Antique/Byzantine Art |  |  |
| Art History | 2129 | Greek and Roman Sculpture |  |  |
| Art History | 2196 | Greek and Roman Sculpture (Writing Intensive) |  | WI |
|  |  |  |  |  |
|  |  |  |  |  |
| Select four electives; up to three may be drawn from this listing of Greek \& Roman Classics courses: |  |  | 9 |  |
| Greek \& Roman Classic | 1003 | Greek Drama \& Culture |  | AR |
| Greek \& Roman Classic | 1004 | Introduction to the Ancient City |  | IS |


| Greek \& Roman Classic | 2001 | Slavery in Antiquity |  |
| :--- | :--- | :---: | :---: |
| Greek \& Roman Classic | 2002 | Gender in Classical Antiquity |  |
| Greek \& Roman Classic | 2003 | Race: Ancient \& Modern |  |
| Greek \& Roman Classic | 3311 | Ancient Greek Historians | RG |
| Greek \& Roman Classic | 3312 | Ancient Roman Historians |  |
| Greek \& Roman Classic | 3096 | Romans and Their Literature |  |
| Greek \& Roman Classic | 3001 | Classical Greek \& Roman Mythology | WI |
| Greek \& Roman Classic | 3196 | Classical Greek \& Roman Mythology (Writing Intensive) |  |
| Greek \& Roman Classic | 3296 | Comparative Mythology | WI |
| Greek \& Roman Classic | 3396 | Classical Epic | WI |
| Greek \& Roman Classic | 3000 | Topics in Classical Culture | WI |
| Greek \& Roman Classic | 3496 | Writing Seminar |  |
| Greek (Ancient)/Latin | 2001 or | Intermediate or Advanced language courses | WI |
| higher |  |  |  |
| Note: The fourth elective must be taken in a related department, with consultation of your |  |  |  |
| academic advisor. This elective may come from Anthropology, History, Art History, Religion |  |  |  |
| or Philosophy. |  |  |  |

All Temple students must take a minimum of two writing-intensive courses, one of which will be the capstone. The specific writing-intensive courses required for this major are listed above and are identified by "WI" in the Attribute column.

## Requirements for the Minor in Classical Languages and Literature

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Greek (Ancient)/Latin | $1001-2002$ | Ancient Greek/Latin 4 or proficiency | $0-14$ |  |
| Greek \& Roman Classic | $3001 / 3196$ | Classical Greek \& Roman Mythology <br> or <br> Comparative Mythology | 3 | -/WI |
| Greek \& Roman Classic | 3296 | Flectives | Four additional courses (see note below) | 12 |
| Greek \& Roman Classic |  | $\mathbf{1 5 - 2 9}$ |  |  |
| Total |  |  | WI |  |

Note: At least two of these courses must be above the 2000-level. Courses must fall under the following categories: a) Advanced courses in Greek (Ancient) and/or Latin; b) Courses in Classical Culture; c) Courses on aspects of the ancient Greek and Roman world offered in other Temple departments such as Art History, History, Religion, and Philosophy, and approved by the department advisor.

Note: Greek (Ancient) 1003 (7 s.h.) may be substituted for Greek (Ancient) 1001 and 1002.

## Requirements for the Minor in Ancient Mediterranean Studies

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Greek (Ancient)/Latin | $1001-1002$ | Ancient Greek/Latin 2 or proficiency | $0-8$ | LA |
| Select one of the following: |  |  | 3 |  |
| Greek \& Roman Classic | $3001 / 3196$ | Classical Greek \& Roman Mythology |  | -/WI |
|  | 3296 | Comparative Mythology |  | WI |
|  | 3396 | Classical Epic |  | WI |
| Select two courses*: |  |  | 6 |  |


| Greek \& Roman Classic | 3596 | Ancient City: Periclean Athens |  | WI |
| :--- | :--- | :--- | :---: | :---: |
|  | 3696 | Ancient City: Hellenistic Alexandria |  | WI |
|  | $3002 / 3796$ | Ancient City: Augustan Rome |  | $-/ \mathrm{WI}$ |
|  | $3003 / 3896$ | Ancient City: Byzantium |  | -/WI |
|  | 3897 |  |  |  |
|  |  |  |  | WI |
| Greek \& Roman Classic | Elective | One additional course at or above 2000^ |  |  |
| Total |  |  | $\mathbf{1 2 - 2 0}$ |  |
|  |  |  |  |  |
| *Cycle of five cities offered: Jerusalem, Augustan Rome, Byzantium, Periclean Athens, Hellenistic Alexandria. |  |  |  |  |
| The elective can be from this department or from another department, such as Anthropology, Art History, Religion, |  |  |  |  |
| History, or Philosophy, as approved by Greek \& Roman Classics department advisors. |  |  |  |  |

## Suggested Semester-by-Semester Plan for the Classical Languages \& Literatures Major Concentration

## Freshman Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| English | 0802, 0812, or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Greek (Ancient)/Latin | 1001 | Ancient Greek/Latin 1 | 4 | LA |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Greek (Ancient)/Latin | 1002 | Ancient Greek/Latin 2 | 4 | LA |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Greek (Ancient)/Latin | 2001 | Ancient Greek/Latin 3 | 3 | LB |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 2 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| Greek (Ancient)/Latin | 2002 | Ancient Greek/Latin 4 | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |


| CLA/CST | $2000+$ | One 2000+ CLA/CST Course | 3 |  |
| :--- | :--- | :--- | :---: | :---: |
| CLA/CST | $2000+$ | One 2000+ CLA/CST Course | 3 |  |
| Subtotal |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | $\mathbf{1 5 - 1 6}$ |  |
| CLA/CST | $2000+$ | One 2000+ Social Science/CST Course | 3 |  |
| Greek (Ancient)/Latin | 3002 | Readings in Greek/Latin Literature II | 3 |  |
| Greek \& Roman Classic | $1003-4999$ | One Greek \& Roman Classic Elective | 3 |  |
| CLA/CST | $2000+$ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

## Junior Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| CLA/CST | $2000+$ | One 2000+ Social Science/CST Course | 3 |  |
| Greek (Ancient)/Latin | $1000+$ | One Greek (Ancient) or Latin Language Course | $3-4$ |  |
| Greek \& Roman Classic | $1003-4999$ | One Greek \& Roman Classic Elective | 3 |  |
| CLA/CST | $2000+$ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |
| Subtotal |  | $\mathbf{1 5 - 1 6}$ |  |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |


| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Greek (Ancient)/Latin | $1000+$ | One Greek (Ancient) or Latin Language course | $3-4$ |  |
| Greek (Ancient)/Latin | 3096 | Readings in Greek/Latin Literature I | 3 | WI |
| CLA/CST | $2000+$ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |
| Any | $0800-4999$ | One Elective in Any School or College | 3 |  |
| Subtotal |  | $\mathbf{1 5 - 1 6}$ |  |  |
|  |  |  |  |  |
| Senior Year $\boldsymbol{Z}$ 2nd Semester |  |  |  |  |

$\left.\left.\begin{array}{|l|l|l|c|c|}\hline \text { Subject } & \text { Course \# } & \text { Course Title } & \text { Hours } & \text { Attribute } \\ \hline \text { Greek \& Roman Classic } \\ 3001 / 3196 \\ \text { or } \\ 3296\end{array}\right) \begin{array}{l}\text { Classical Greek \& Roman Mythology } \\ \text { or } \\ \text { Comparative Mythology }\end{array}\right)$

## Suggested Semester-by-Semester Plan for the Classical Civilizations Major Concentration

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | $\begin{aligned} & 0802,0812 \text {, or } \\ & 0902 \end{aligned}$ | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Greek (Ancient)/Latin | 1001 | Ancient Greek/Latin 1 | 4 | LA |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Greek (Ancient)/Latin | 1002 | Ancient Greek/Latin 2 | 4 | LA |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| GenEd | 08xx or 09xx | Race and Diversity | 3 | GD |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Greek (Ancient)/Latin/ GenEd | 0800+ | Ancient Greek/Latin III or GenEd Global/World Society course or Internationally Focused Course From Approved List | 3 | GG |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Greek \& Roman Classic | 2101 | The Greeks | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 1-2 |  |
| Subtotal |  |  | 16-17 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| Greek \& Roman Classic | 1000+ | One Greek \& Roman Classic Elective From the Approved List | 3 |  |
| Greek \& Roman Classic | 2102 | The Romans | 3 |  |
| CLA/CST | 0800+ | Any CLA/CST Elective | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Social Science/CST Course | 3 |  |
| Greek \& Roman Classic | 1000+ | One Greek \& Roman Classic Elective From the Approved List | 3 |  |
| Greek \& Roman Classic | 3000+ | One Greek \& Roman Classic Writing-Intensive Course From the Approved List | 3 | WI |


| Art History | 2000+ | One 2000+ Art History Course From Approved List | 4 |  |
| :---: | :---: | :---: | :---: | :---: |
| CLA/CST | 0800+ | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Social Science/CST Course | 3 |  |
| Greek \& Roman Classic | 2000+ | One Greek \& Roman Classic Elective From the Approved List | 3 |  |
| Greek \& Roman Classic | 3000+ | One Greek \& Roman Classic Writing-Intensive Course From the Approved List | 3 | WI |
| CLA/CST | 0800+ | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800+ | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA (see above) | 1000+ | One Greek \& Roman Classic Elective (Consult With Faculty Advisor for Approval) | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 0800+ | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 0800+ | Any CLA/CST Elective | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Degree Total |  |  | 123 |  |

## Criminal Justice

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## Mission and Goals

The mission of the Bachelor of Arts program in Criminal Justice is to foster a comprehensive understanding of the nature of crime and the effectiveness and fairness of society's efforts to prevent and control it. Students engage in a multi-disciplinary approach to the study of crime, offenders, and victims, as well as the agencies, goals, laws, policies, and processes of the criminal justice system. Emphasis is upon promoting critical thinking about the kinds of questions and problems that shape developments in research, practice, policy and reform, and the skills utilized by scholars and professionals in the field. Majoring in criminal justice helps to prepare students for careers as practitioners, researchers, and academics in a variety of public and private sector professions in both adult and juvenile systems of justice, at the federal, state, and local levels of government. It also provides the core liberal arts foundations for students interested in alternative career paths or advanced education in law school and graduate programs in criminal justice, criminology, and related social-science fields.

## Internship

Many students opt to take our specialized internship program, earning 3 credits for Criminal Justice 4077: Criminal Justice Practicum (which can be used toward the electives in the major) and 3, 6, or 9 credits in the Practicum Lab, Criminal Justice 4087, which count towards the 123 credits required for graduation but may not be used to fulfill any requirements of the Criminal Justice major. This program runs in the Fall, Spring, and Summer (over the two summer sessions).

## Criminal Justice Honors Program

The Department has its own Honors Program in which majors who are also University Honors students may tailor their honors experience to include a criminal justice specialization. In addition to the honors-level elective courses offered, an invaluable part of the program is the opportunity for students to develop an honors thesis based upon an undergraduate research project individually mentored by a criminal justice professor.

## Criminal Justice 4+1 BA/MA Program

High-achieving undergraduates will be invited by the faculty of the Criminal Justice Department to apply for the BA/MA 5 year program. Students admitted to this program begin taking graduate courses along with their undergraduate curriculum in their last three undergraduate semesters. They then complete the remaining requirements of a MA in Criminal Justice in the subsequent year. Up to 9 credits of graduate work may count for both the Bachelor's and Master's degree programs; these are used as Criminal Justice major electives in the undergraduate degree. Eligible students have a minimum 3.5 overall GPA and will have completed 83 credits of their overall program by the time they are admitted to this program in the spring of their Junior year. Students must have completed the following courses to be considered for this program: Criminal Justice 1001, 2401, 2601, and 2602. Eligible students will receive notification at the end of their Sophomore year, and applications will be accepted until September 30th of their Junior year.

## Summary of Degree Requirements

## 1. University Requirements:

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. See below for a list of the specific courses required for your major.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section of the Undergraduate Bulletin for more details.


## 2. College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999). For Social Science majors, 6 upper level credits must be taken in the Humanities Departments (English, French, German, Greek and Roman Classics, Hebrew, Italian, Japanese (only available at our Japan campus), Philosophy, Religion, Russian, and Spanish), Art History, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.


## 3. Foreign Language/Global Studies Requirements:

1) All students must complete the second level of a foreign language;
2) All students must complete at least one course from the GenEd Global/World Society category; and
3) All students must complete one of the following options:

- Third level of a foreign language;
- Demonstrated proficiency in a foreign language;
- A second General Education Global/World Society course;
- Study Abroad at an approved program; or
- Take one Global Studies course from the list on the CLA College Graduation Requirements page.


## 4. Major Requirements (42 s.h.)

- Specifically Required courses: Criminal Justice 1001, 2401, 2501, 2601, 2602, and 2696
- Other Requirements:
o One Writing Seminar, select from: Criminal Justice 4096, 4098, or 4196
- Electives in Major
o Seven Criminal Justice electives numbered 2000-4999 (may not overlap with any of the above-noted courses)

5. General electives vary according to a student's individual program of study. Consult your academic advisor for more information.

## Requirements for the Major

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Criminal Justice | 1001 | Introduction to Criminal Justice | 3 |  |
| Criminal Justice | 2401 | Nature of Crime | 3 |  |
| Criminal Justice | 2501 | Introduction to Criminal Law | 3 |  |
| Criminal Justice | 2601 | Introduction to Criminal Justice Research | 3 |  |
| Criminal Justice | 2602 | Criminal Justice Research and Analysis | 3 |  |
| Criminal Justice | 2696 | Planned Change | 3 | WI |
| Criminal Justice | electives | Seven Upper-Level Criminal Justice Electives (2000-level or higher) | 21 |  |
|  |  |  |  |  |
| Select one Writing Seminar from: | 3 |  |  |  |
| Criminal Justice | 4096 | Writing Seminar: Crime and Social Policy \#\# |  | WI |
| Criminal Justice | 4098 | Writing Seminar: Gender and Criminal Justice |  | WI |
| Criminal Justice | 4196 | Writing Seminar: Critical Issues in Law Enforcement \#\# |  | WI |
|  |  |  |  |  |
| Total credits required for the major in Criminal Justice: | $\mathbf{4 2}$ |  |  |  |
|  |  |  |  |  |
| A student may count Criminal Justice 4077 toward the Criminal Justice major electives. Criminal Justice 4087, |  |  |  |  |
| Practicum Lab, does not count toward the major requirements. |  |  |  |  |

## \#\# DUPLICATE CREDIT WARNING:

The following courses have similar content and students may only earn academic credit for one from each set:

- Criminal Justice 4001 (Crime and Social Policy) OR Criminal Justice 4096 (Writing Seminar: Crime and Social Policy)
- Criminal Justice 4101 (Critical Issues in Law Enforcement) OR Criminal Justice 4196 (Writing Seminar: Critical Issues in Law Enforcement)

All Temple students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed above and are identified by "WI" in the Attribute column.

## Distinction in Major

Criminal Justice majors may graduate with distinction in the major if they have earned a GPA of 3.5 in the major and a cumulative GPA of at least 3.25.

Requirements of Minor

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Criminal Justice | 1001 | Introduction to Criminal Justice | 3 |  |
| Criminal Justice | 2401 | Nature of Crime | 3 |  |
| Criminal Justice | 2501 | Introduction to Criminal Law | 3 |  |
| Criminal Justice | 2696 | Planned Change | 3 | WI |
| Criminal Justice |  | Any three Criminal Justice courses above the 2000 level | 9 |  |
| Criminal Justice |  | Any seminar (4000-level) course | 3 |  |
|  |  |  |  |  |
| Total credits required for the minor in Criminal Justice: |  |  | 24 |  |

## Suggested Semester-by-Semester Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

| Freshman Year - 1st Semester | Course Title | Hours | Attribute |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course \# | 4 | GW |  |
| English | 0802,0812, or 0902 | Analytical Reading \& Writing | 4 | GQ |
| GenEd | $08 x x$ or 09xx | Quantitative Literacy | 4 |  |
| Foreign Language | 1001 | Foreign Language (first level) | 3 | GB |
| GenEd | $08 \times x$ or 09xx | Human Behavior | $\mathbf{1 5}$ |  |
| Subtotal |  |  |  |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester | Course \# | Course Title | Hours | Attribute |
| Subject | Mosaic: Humanities Seminar I | 3 | GY |  |
| Intellectual Heritage | 0851 or 0951 |  |  |  |


| Foreign Language | 1002 | Foreign Language (second level) | 4 |  |
| :---: | :---: | :---: | :---: | :---: |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Criminal Justice | 1001 | Introduction to Criminal Justice | 3 |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Foreign Language/ GenEd | 0800+ | Foreign Language (third level) or GenEd Global/World Society course or Internationally-Focused Course From Approved List | 3 | GG |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| Criminal Justice | 2401 | Nature of Crime | 3 |  |
| Criminal Justice | 2601 | Introduction to Criminal Justice Research | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 2 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Criminal Justice | 2602 | Criminal Justice Research and Analysis | 3 |  |
| Criminal Justice | 2501 | Introduction to Criminal Law | 3 |  |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Humanities/CST Course | 3 |  |
| Criminal Justice | 2696 | Planned Change | 3 | WI |
| Criminal Justice | 2000+ | One 2000+ Criminal Justice Course | 3 |  |
| Criminal Justice | 2000+ | One 2000+ Criminal Justice Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Humanities/CST Course | 3 |  |
| Criminal Justice | 2000+ | One 2000+ Criminal Justice Course | 3 |  |
| Criminal Justice | 2000+ | One 2000+ Criminal Justice Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Criminal Justice | 2000+ | One 2000+ Criminal Justice Course | 3 |  |
| Criminal Justice | 2000+ | One 2000+ Criminal Justice Course | 3 |  |


| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |
| :--- | :--- | :--- | :---: | :---: |
| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |
| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester | Course \# | Course Title | Hours | Attribute |
| Subject | One 2000+ Criminal Justice Course | 3 |  |  |
| Criminal Justice | $2000+$ | Any CLA/CST Elective | 3 | WI |
| Criminal Justice | 4096 or 4098 or 4196 | Writing-Intensive Seminar | 3 |  |
| CLA/CST | $0800-4999$ | $0800-4999$ | Any CLA/CST Elective | 3 |
| CLA/CST | One Elective in Any School or College | 3 |  |  |
| Any |  | $\mathbf{1 5}$ |  |  |
| Subtotal |  |  |  |  |
|  |  |  | $\mathbf{1 2 3}$ |  |
| Degree Total |  |  |  |  |

## Critical Languages

## 332 Anderson Hall

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Critical Languages offers courses in Arabic, Chinese, Hebrew, Hindi, Japanese, Korean, and Vietnamese. Students enroll in these courses for a variety of reasons, which include career goals, personal interest, preparation for study abroad, and the desire to fulfill college graduation requirements.

For students in any major, Critical Languages offers many courses taught in English, including:

- General Education courses in Chinese and Japanese literature, film, and popular culture-all given in translation-invite students from any major to develop familiarity with Chinese and Japanese culture.
- Israeli literature as well as Hebrew literature from the Diaspora. Thematically, these courses explore contemporary Israel and its relations to its region and the world as well as the Jewish historical experience and the cultural heritage.
- Courses are offered in Arabic literature and film. These courses invite students from any major to develop familiarity with the cultures of countries and regions where Arabic is used as the primary language of communication.

Within Critical Languages, students can earn a major in Japanese (at TUJ only - see the Temple University Japan menu at the bottom of the CLA menu on left), a Minor in Japanese, or Certificates of Specialization in Arabic, Chinese, or Japanese. Critical Languages courses also count toward many of the requirements and electives of the Asian Studies major and minor. Students are encouraged to study Japanese language and culture at Temple University in Japan. Contact the Office of International Programs for more information.

## Minor in Arabic

The minor in Arabic focuses on intermediate and advanced language skills and an understanding of contemporary Arabic culture. Students who already have a grounding in Arabic and are interested in languages, literature, film, and culture will find this minor of particular interest. This program is ideal for students considering careers in international business, government service, or other professions where foreign language proficiency is important. Students who place out of one or more of the Arabic language courses may replace those requirements with independent study or electives as approved by the Arabic faculty advisor.

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Arabic | 2002 | Arabic Intermediate II | 3 |  |
| Arabic | 3001 | Arabic Advanced I | 3 |  |
| Arabic | 3002 | Arabic Advanced II | 3 |  |
| Elective |  | Selected in consultation with the Arabic faculty advisor. | 3 |  |
| Select two from: |  | 6 |  |  |
| Arabic | 2012 | Contemporary Arabic Literature (in Translation) |  |  |
| Arabic | 2021 | Contemporary Arab Society in Film (in Translation) |  |  |
| Arabic | 0868 | World Society in Literature and Film |  |  |
| Total |  |  | $\mathbf{1 8}$ |  |

## Certificate of Specialization in Arabic

A Certificate of Specialization in Arabic focuses on learning language skills and developing a strong foundation for the effective use of Arabic socially and professionally. This program should be of particular interest to students considering careers in international business, government service, or other professions where foreign language proficiency is important. This program has two tracks: one for undergraduate students who enter Temple University with little or no previous background in Arabic; and one for students who enter Temple University with a
previous background in Arabic. The curriculum consists of six developmentally-sequenced semesters of instruction in Arabic. Students with no background in Arabic will begin the sixcourse sequence with Arabic 1001. Students who enter the program with a placement above Arabic 1001 will need to complete the six-course requirement by taking either or both Arabic 4183 and 4283. A grade of C- or higher must be earned in all required courses to qualify for the certificate.

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Arabic | $1001^{*}$ | Arabic Elements I | 4 | LC |
| Arabic | $1002^{*}$ | Arabic Elements II | 4 | LC |
| Arabic | 2001 | Arabic Intermediate I | 3 | LC |
| Arabic | 2002 | Arabic Intermediate II | 3 |  |
| Arabic | 3001 | Arabic Advanced I | 3 |  |
| Arabic | 3002 | Arabic Advanced II | 3 |  |
| Total |  |  | $\mathbf{1 8 - 2 0}$ |  |

*Students who place above Arabic 1001 will need to complete the six-course requirement by taking either or both Arabic 4183 and 4283.

## Minor in Chinese

The minor in Chinese focuses on learning Chinese language, literature, film, and culture. This program should be of particular interest to students considering careers in international business, government service, or other professions where foreign language proficiency is important. This program also contributes to meeting the diverse language needs of students with personal or academic interests in China and its culture. A grade of C- or higher must be earned in all required courses.

| Subject | Course $\#$ Course Title | Hours | Attribute |  |
| :--- | :--- | :--- | :---: | :---: |
| Chinese | 2002 | Chinese Intermediate II | 3 |  |
| Chinese | 3001 | Chinese Advanced I | 3 |  |
| Chinese | 3002 | Chinese Advanced II | 3 |  |
| Elective |  | Selected in consultation with the Chinese faculty advisor. | 3 |  |
| Select two from: |  | 6 |  |  |
| Chinese | 2011 | Pre-Modern Chinese Literature |  |  |
| Chinese | 2022 | Contemporary Chinese Urban Film and Fiction in Translation |  |  |
| Chinese | 0868 | World Society in Literature and Film |  |  |
| Total |  |  | $\mathbf{1 8}$ |  |

## Certificate of Specialization in Chinese

A certificate of specialization in Chinese focuses on learning language skills and developing a strong foundation for the effective use of Chinese socially and professionally. This program should be of particular interest to students considering careers in international business, government service, or other professions where foreign language proficiency is important. This program also contributes to meeting the diverse language needs of students with personal or
academic interests in China and its culture. A grade of C- or higher must be earned in all required courses.

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Chinese | 1001 | Chinese Elements I | 4 |  |
| Chinese | 1002 | Chinese Elements II | 4 | LC |
| Chinese | 2001 | Chinese Intermediate I | 3 | LC |
| Chinese | 2002 | Chinese Intermediate II | 3 |  |
| Chinese | 3001 | Chinese Advanced I | 3 |  |
| Chinese | 3002 | Chinese Advanced II | 3 |  |
| Total |  |  | $\mathbf{2 0}$ |  |

## Minor in Japanese

The Minor in Japanese emphasizes language study while also recognizing the importance of learning about Japan through work in fields such as literature, history, anthropology, religion, and geography and urban studies. A grade of C- or higher must be earned in all courses for the minor.

Students who place out of 2002 will need one additional elective; those who place out of 3001 will need two additional electives; those who place out of 3002 will need three additional electives.

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Japanese | 2002 | Intermediate Japanese II | 3 |  |
| Japanese | 3001 | Advanced Japanese I | 3 |  |
| Japanese | 3002 | Advanced Japanese II | 3 |  |
|  |  |  |  |  |
| Select one course from the following list: |  |  | 3 |  |
| Japanese | 2096 or 2996 | Japanese Popular Culture \& Literature |  | WI |
| Asian Studies | 2098 | Japanese Popular Culture \& Literature |  | WI |
| Japanese/Asian Studies | 2021 | Japanese Literature in Film |  |  |
| Japanese/Asian Studies | 2011 | Survey of Japanese Literature: Pre-Modern |  |  |
| Japanese/Asian Studies | 2012 | Modern \& Contemporary Japanese Literature in Translation |  |  |
|  |  |  |  |  |
| Select any two CLA courses that focus exclusively on Japan |  |  | 6 |  |
|  |  |  |  |  |
| Total |  |  | 18 |  |

## Certificate of Specialization in Japanese

A Certificate of Specialization in Japanese focuses on learning language skills and developing a strong foundation for the effective use of Japanese socially and professionally. This program should be of particular interest to students considering careers in international business, government service, or other professions where foreign language proficiency is important. This program also contributes to meeting the diverse language needs of students with personal or academic interests in Japan and its culture. A grade of C- or higher must be earned in all required courses.

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Japanese | 1001 | Japanese Elements I | 4 | LC |
| Japanese | 1002 | Japanese Elements II | 4 | LC |
| Japanese | 2001 | Intermediate Japanese I | 3 | LC |
| Japanese | 2002 | Intermediate Japanese II | 3 |  |
| Japanese | 3001 | Advanced Japanese I | 3 |  |
| Japanese | 3002 | Advanced Japanese II | 3 |  |
| Total |  |  | $\mathbf{2 0}$ |  |

## Economics

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The major in economics exposes a student to the economist's way of thinking about social problems and behavior. The major helps a student understand the economic aspect of current events and public policy and is good preparation for careers in law and business. The student honorary fraternity is Omicron Delta Epsilon. Along with the more general student organization, The Economics Society, it provides opportunities for students to network with other students and with practicing economists in learning more about economics and finding internships and employment opportunities. There is also a Cooperative Education option. Through this program, students may earn income while gaining valuable work experience which can enhance their job market prospects upon graduation. By completing an academic research project under the guidance of a faculty member, Co-op students may earn credit for Economics 3581.

## Summary of Degree Requirements

## 1. University Requirements:

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. See below for a list of the specific courses required for your major.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section of the Undergraduate Bulletin for more details.


## 2. College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999). For Social Science majors, 6 upper level credits must be taken in the Humanities Departments (English, French, German, Greek and Roman Classics, Hebrew, Italian, Japanese (only available at our Japan campus), Philosophy, Religion, Russian, and Spanish), Art History, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.


## 3. Foreign Language/Global Studies Requirements:

1) All students must complete the second level of a foreign language;
2) All students must complete at least one course from the GenEd Global/World Society category; and
3) All students must complete one of the following options:

- Third level of a foreign language;
- Demonstrated proficiency in a foreign language;
- A second General Education Global/World Society course;
- Study Abroad at an approved program; or
- Take one Global Studies course from the list on the CLA College Graduation Requirements page.


## 4. Major Requirements (37 s.h.)

- Specifically Required courses:
o Economics 1101 or 1901; 1102 or 1902; 3501; 3502; 3598 (capstone); and Statistics 2103
- International:
o Select one from Economics: 3563 or 3564
- Writing Electives:
o Select one from Economics: 3596, 3597, or 3696
- Major Electives:
o Select three courses in Economics at the 3000 level or higher (that do not overlap with any of the above)
o Select one additional course-- either a 3000 level Economics course or an additional CLA course numbered at 2000-4999 related to Economics. Consult your faculty advisor for more information. This requirement may not overlap with any other requirement.

5. General electives vary according to a student's individual program of study. Consult your academic advisor for more information.
B.A. Major Requirements

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Economics | 1101 or 1901 | Macroeconomic Principles or Honors Macroeconomic Principles* | 3 |  |
| Economics | 1102 or 1902 | Microeconomic Principles or Honors Microeconomics Principles* | 3 |  |
|  |  |  |  |  |
| Statistics | 2103 | Business Statistics | 4 |  |
|  |  |  |  |  |
| Economics | 3501 | Intermediate Microeconomic Analysis | 3 |  |
| Economics | 3502 | Intermediate Macroeconomic Analysis | 3 |  |
|  |  |  |  |  |
| Select one of the following options: |  |  | 3 |  |
| Economics <br> Economics | $\begin{array}{\|} 3563 \\ 3564 \\ \hline \end{array}$ | ```International Trade or International Monetary Economics``` |  |  |
| - |  |  |  |  |
| One writing-intensive elective in Economics (select from list below): |  |  | 3 |  |
| Economics | 3596 | Energy, Ecology, \& Economy or |  | WI |
| Economics | 3597 | Health Economics or |  | WI |
| Economics | 3696 | Behavioral Economics |  | WI |
|  |  |  |  |  |
| Capstone |  |  |  |  |
| Economics | 3598 | Economics Writing Seminar (Capstone) | 3 | WI |
|  |  |  |  |  |
| Electives |  |  |  |  |
| Economics | 3000+ | Three electives in Economics at the 3000 level or above. | 9 |  |
| One additional elective | 2000+ | Course in Economics at the 3000+ level or course in the College of Liberal Arts at the 2000+ level related to the student's program in Economics.** | 3 |  |
| Total |  |  | 37 |  |
|  |  |  |  |  |
| * These courses are prerequisites for most of the Economics 2000-3900 courses. Check specific course descriptions for details. |  |  |  |  |
| ** This course is to be chosen in consultation with an Economics faculty advisor. |  |  |  |  |
| Note: Students preparing for graduate study in economics or in an economics-related area are strongly encouraged to take Economics 3504: Mathematical Economics, Economics 3503: Introduction to Econometrics, and courses in calculus and linear algebra in the Mathematics department. |  |  |  |  |

All Temple students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed above and are identified by "WI" in the Attribute column.

## Minor Requirements

(For Liberal Arts and all other colleges allowing a minor in Economics)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Economics | 1101 or 1901 | Macroeconomic Principles or Honors Macroeconomic Principles | 3 |  |
| Economics | 1102 or 1902 | Microeconomic Principles or Honors Microeconomic Principles | 3 |  |
| Economics | 3501 | Intermediate Microeconomic Analysis <br> or <br> Intermediate Macroeconomic Analysis | 3 |  |
| Economics | 3502 | Three electives in Economics at the 3000-level or above. If both 3501 <br> and 3502 are taken, one counts as one of these electives. | 9 |  |
| Total |  |  | $\mathbf{1 8}$ |  |

## Mathematical Economics

In cooperation with the Department of Mathematics, the Department of Economics offers a special concentration leading to a B.A. degree in Mathematical Economics. The program and its requirements are described in full in the Intercollegial Programs section of this Bulletin.

## Certificate in Political Economy

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This is a joint program offered by the Department of Economics and the Department of Political Science leading to certificate of specialization in political economy.

## Purpose

The purpose of the Political Economy program is to provide undergraduate students with the opportunity to study more intensely the relationship between the political and economic spheres of society. The program is based on the belief that a focused examination of this relationship provides us with a better understanding of several social phenomena. Chief among these is a better understanding of public policy choices and the policy making process, as well as a better understanding of how government actions affect the process of economic change and vice versa.

For these reasons the Political Science and Economics departments offer an interdisciplinary certificate in Political Economy. The program is open to all matriculated undergraduate students. Applicants need not be declared majors in either economics or political science. The Political Economy program provides an excellent preparation for graduate study in the social sciences and for the study of law.

## Program Requirements

The program consists of two components: required core courses at the lower-division level and elective courses at the upper-division level.

## Core Courses:

All students must take the following core courses:

- Economics 1101 or 1901: Macroeconomic Principles (3 s.h.)
- Economics 1102 or 1902: Microeconomic Principles (3 s.h.)
- Political Science 1101 or 1911: The American Political System (3 s.h.)
and one of the following:
- Political Science 1201 or 1921: Foreign Governments and Politics (3 s.h.) or
- Political Science 1301 or 1931: International Politics (3 s.h.)


## Elective Courses:

All students must successfully complete (grade of C- or better) four courses from the following list. Two of the four courses must be in economics, and two courses must be in political science. Students should select courses that correspond to their own substantive interests and are encouraged to take cognate areas (e.g., if you choose international politics courses, also choose international economics courses). Students should plan their schedules well in advance, since many courses are not offered each semester.

Select two from the following list for a total of 6 credits:

- Economics 3531: History of Economic Theory
- Economics 3547: Economics of Development and Growth
- Economics 3511: The Economics and Management of Privatization
- Economics 3512: Public Finance
- Economics 3513: Economics of State and Local Governments
- Economics 3563: International Trade
- Economics 3564: International Monetary Economics
- Economics 3506 (or 3596*): Energy, Ecology, and Economy
- Economics 3507 (or 3597*): Health Economics
- Economics 3545: Economics of Labor Markets
- Economics 3546: Women in the Economy
- Economics 3535: Public Control of Business: Antitrust
- Economics 3536: Economics of American Industry
and select two from the following list for a total of 6 credits:
- Political Science 3131 (or 3196*): Urban Politics and Problems
- Political Science 3134: The Politics of Inequality
- Political Science 2102: American State and Local Politics
- Political Science 2103: U.S. Public Policy Making
- Political Science 3151: Public Policy Analysis
- Political Science 3152: U.S. Environmental Policy
- Political Science 3155: Business and Public Policy
- Political Science 2201: Comparative Politics: Developing Nations
- Political Science 3252: East Asia and the United States
- Political Science 3296: Politics of Modern Capitalism
- Political Science 2321: Politics of the Global Economy
- Political Science 2441: Democracy, Capitalism, and Socialism

A "*" denotes that the courses in parentheses are Writing Intensive courses.

## Management Career Certificate

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This certificate program is designed for students who intend to seek employment in the business or nonprofit sectors of the economy. It is designed to provide students with skills that complement those acquired through a traditional liberal arts education and to make the students more appealing to potential employers.

Requirements for the Management Career Certificate

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Economics | 1001 <br> $1102 / 1902$ | Introduction to the Economy <br> or <br> Microeconomic Principles/Honors Microeconomic Principles | 3 |  |
| Accounting | 2101 | Financial Accounting | 3 |  |
| Human Resource | 1101 | Leadership \& Organizational Management | 3 |  |
| Management |  |  |  |  |


| Statistics |  | One course selected in consultation with the certificate advisor. | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Approved Elective** - Select one: |  |  | 3-4 |  |
| Accounting | 2102 | Managerial Accounting |  |  |
| Economics | 1101 | Macroeconomic Principles |  |  |
| Economics | 3536 | Economics of American Industry |  |  |
| Economics | 3541 | The Economics of Sports |  |  |
| Marketing | 2101 | Marketing Management* |  |  |
| Human Resource Management | 2501 | Introduction to Human Resource Management |  |  |
| Computer \& Information Sciences | 1055 | Computers \& Applications |  |  |
| Geography \& Urban Studies | 2031 | Economic Geography |  |  |
| Political Science | 2321 | Politics of the Global Economy |  |  |
| Political Science | 3155 | Business \& Public Policy |  |  |
| Psychology | 2402 | Foundations of Industrial \& Organizational Psychology* |  |  |
| Total |  |  | 18-19 |  |
|  |  |  |  |  |
| * Students may not double count either Marketing 2101 or Psychology 2402 within this certificate program |  |  |  |  |
| ** An alternative elective or an internship or practicum may be approved to substitute for the elective. Please see the certificate advisor prior to registration for written approval. |  |  |  |  |

Suggested Semester-by-Semester Plan for the Economics Major

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Foreign Language | 1001 | Foreign Language (first level) | 4 |  |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Foreign Language | 1002 | Foreign Language (second level) | 4 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Economics | 1101 or 1901 | Macroeconomic Principles | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Foreign Language/ GenEd | 0800+ | Foreign Language (third level) or <br> a GenEd Global/World Society course or Internationally Focused Course From Approved List | 3 | GG |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |


| GenEd | 08xx or 09xx | Diversity and Race | 3 | GD |
| :--- | :--- | :--- | :---: | :---: |
| Economics | 1102 or 1902 | Microeconomic Principles | 3 |  |
| Any | $0800+$ | One Elective in Any School or College | 2 |  |
| Subtotal |  |  | $\mathbf{1 7}$ |  |

Sophomore Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Economics | 3501 | Intermediate Microeconomic Analysis | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Humanities/CST Course | 3 |  |
| Economics | 3502 | Intermediate Macroeconomic Analysis | 3 |  |
| Statistics | 2103 | Business Statistics | 4 |  |
| Economics/ <br> CLA | 2000+ | One 3000+ Economics Course or One 2000+ Approved CLA Elective | 3 |  |
| CLA/CST | 0800+ | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Humanities/CST Course | 3 |  |
| Economics | 3000+ | One 3000+ Economics Elective | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| Economics | $\begin{gathered} 3563 \\ \text { or } \\ 3564 \end{gathered}$ | International Trade or International Monetary Economics | 3 |  |
| CLA/CST | 0800+ | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Economics | 3000+ | One 3000+ Economics Elective | 3 |  |
| Economics | 3596 or 3597 or 3696 | Energy, Ecology, and Economy or <br> Health Economics <br> or <br> Behavioral Economics | 3 | WI <br> WI <br> WI |
| CLA/CST | 0800+ | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800+ | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800+ | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |


| Economics | $3000+$ | One 3000+ Economics Elective | 3 |  |
| :--- | :--- | :--- | :---: | :---: |
| Economics | 3598 | Economics Writing Seminar (Capstone) | 3 | WI |
| CLA/CST | $0800+$ | Any CLA/CST Elective | 3 |  |
| CLA/CST | $0800+$ | Any CLA/CST Elective | 3 |  |
| Any | $0800+$ | One Elective in Any School or College | 3 |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |
|  |  |  |  |  |
| Degree Total |  |  | $\mathbf{1 2 3}$ |  |

## English

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The English major helps students develop as readers of interesting, complex texts, including literary texts. Majors read writing from a variety of historical contexts and cultures; this experience builds their understanding of the relation between society and language. English majors become critical and reflective readers, aware of the history and development of writing in

English. They are also good, inventive writers who are able to analyze problems, do careful and inventive research, argue and evaluate the arguments of others.

The English major is good preparation for a career in writing or editing-of stories, speeches, legal documents, advertising, research projects, poems, grant proposals, essays, or letters. English majors also find careers in publishing and journalism, public relations, business, industry, management, marketing, social services, and government. English is a strong preprofessional major for law, medicine, library science, and teaching, from the elementary to the post-secondary level.

The English department has a distinguished faculty of nationally-known critics, writers, and scholars who will teach you, usually in small classes. You will choose from a range of exciting courses (about forty English courses each semester) and from interdisciplinary programs such as the Five-year Program in English and Education, or a double major in English and any other department throughout the university. Internships are offered with area institutions such as the Temple Press, the University of Pennsylvania Press, the Urban League, WHYY public radio, Philadelphia Magazine, United Way, the Red Cross, Bread and Roses, J. B. Lippincott Publishers, and the Academy of Natural Sciences. The department offers community-based projects, such as the New City Press and our Institute for the Study of Literature, Literacy, and Culture. There is an active program of readings by resident and visiting writers and artists. Students are active in writing and producing our literary magazine: Hyphen.

## Summary of Degree Requirements for the English Major

## 1. University Requirements:

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. See below for a list of the specific courses required for your major.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section of the Undergraduate Bulletin for more details.


## 2. College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999). For Humanities majors, 6 upper level credits must be earned in the Social Sciences: African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Geography and Urban Studies, History, Jewish Studies, Latin American Studies, Mathematical Economics, Neuroscience: Systems, Behavior and Plasticity, Political Science, Psychology, Sociology, Women's Studies, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.


## 3. Foreign Language/Global Studies Requirements:

1) All students must complete the second level of a foreign language;
2) All students must complete at least one course from the GenEd Global/World Society category; and
3) All students must complete one of the following options:

- Third level of a foreign language;
- Demonstrated proficiency in a foreign language;
- A second General Education Global/World Society course;
- Study Abroad at an approved program; or
- Take one Global Studies course from the list on the CLA College Graduation Requirements page.


## 4. Major Requirements (36 s.h.)

## Select either the English Major or the English Major with a Concentration in Creative Writing

## English Major

Specifically Required courses:

- English 2097
- English 2201
- English 2202
- English 2301
- English 2302
- English Capstone

Electives in Major

- Three English courses numbered 2000-2999
- Three English courses numbered 3000-3999


## OR

English Major with a Concentration in Creative Writing

Specifically Required courses:

- English 2097
- English 2201
- English 2202
- English 2301
- English 2302
- Select one Creative Writing Sequence
o English 2003 \& 3003
o English 2004 \& 3004
o English 2005 \& 3005
- English 4096


## Electives in Major

- Two additional English courses numbered 2000-2999
- Two additional English courses numbered 3000-3999

5. General electives vary according to a student's individual program of study. Consult your academic advisor for more information.

## Requirements for the Major

| Major in English |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 2097 | Introduction to English Studies | 3 | WI |
| English | 2201 | Survey of English Literature: Beginnings to 1660 | 3 |  |
| English | 2202 | Survey of English Literature: 1660-1900 | 3 |  |
| English | 2301 | Survey of American Literature I | 3 |  |
| English | 2302 | Survey of American Literature II | 3 |  |
| English | 2000-2999 | Three English Electives | 9 |  |
| English | 3000-3999 | Three English Electives | 9 |  |
| English | 4000 level course | One Senior Capstone Course | 3 | WI* |
|  |  |  |  |  |
| Total |  |  | 36 |  |
| *Indicates writing capstone for the major |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Major in English with a Concentration in Creative Writing |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 2097 | Introduction to English Studies | 3 | WI |
| English | 2201 | Survey of English Literature: Beginnings to 1660 | 3 |  |
| English | 2202 | Survey of English Literature: 1660-1900 | 3 |  |
| English | 2301 | Survey of American Literature I | 3 |  |
| English/ | 2302 | Survey of American Literature II | 3 |  |
| Two courses from one Genre: |  |  | 6 |  |
| English | 2003 \& 3003 or 2004 \& 3004 or $2005 \& 3005$ | ```Creative Writing: Poetry & Advanced Creative Writing: Poetry or Creative Writing: Fiction & Advanced Creative Writing: Fiction or Creative Writing: Plays & Advanced Creative Writing: Plays``` |  |  |
| English | 2000-2999 | Two English Electives | 6 |  |
| English | 3000-3999 | Two English Electives | 6 |  |
| English | 4096 | Studies in Creative Writing (Capstone) | 3 | WI* |
|  |  |  |  |  |


| Total |  |  | 36 |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| *Indicates writing capstone for the major |  |  |  |  |

All Temple students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed above and are identified by "WI" in the Attribute column.

## Distinction in Major

Students need at least a 3.65 GPA in English courses to earn distinction in major.
Requirements for the Minor

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
|  |  |  |  |  |
| Select two Literature Surveys from: | 6 |  |  |  |
| English | 2201 | Survey of English Literature: Beginnings to 1660 <br> English | 2202 | Survey of English Literature: 1660-1900 |
| Survey of American Literature I |  |  |  |  |
| English | 2301 | Survey of American Literature II |  |  |
| English | 2302 |  |  |  |
|  |  |  |  |  |

Select four Electives in English, no more than two of which are in writing (creative, technical, or business):

| English | $2000-3999$ | Four Electives | 12 |  |
| :--- | :--- | :--- | :---: | :--- |
| Total |  |  | 18 |  |

## Writing Certificate

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |

Select a total of five courses in Writing. At least one from each area listed below, no more than three in any single area. All of the courses must have a grade of B- or higher.

| Advanced Expository and Professional Writing Electives | $3-9$ |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| English | 2006 (2496) | Introduction to Non-Fiction |  |  |
| English | 2007 (2596) | Writing for Business and Industry |  |  |
| English | 2008 (2696) | Technical Writing |  |  |
| English | 2009 (2796) | Writing the Research Essay |  |  |
| English | 3085 | Career Internship |  |  |
| English | 3813 | Writers at Work |  |  |
|  |  |  | $3-9$ |  |
| Creative Writing |  |  |  |  |
| English | 2003 | Creative Writing: Poetry |  |  |
| English | 2004 | Creative Writing: Fiction |  |  |
| English | 2005 | Creative Writing: Plays |  |  |
| English | 3003 | Advanced Creative Writing: Poetry |  |  |
| English | 3004 | Advanced Creative Writing: Fiction |  |  |
| English | 3005 | Advanced Creative Writing: Plays |  |  |
|  |  |  | $3-9$ |  |
| Writing Theory |  |  |  |  |


| English | 2821 | Introduction to Linguistics |  |  |
| :--- | :--- | :--- | :--- | :---: |
| English | 2831 (2897) | Literacy and Society |  |  |
| English | 2832 (2898) | Texts/Cultures of Science |  |  |
| English | 3811 | Theories of Language and Literacy |  |  |
| English | 3821 | Linguistics and Grammar |  |  |
| English | 3822 | Semantics |  |  |
| English | 3823 | History of the English Language |  |  |
| English | 4196 | Studies in Language and Literacy |  | WI |
|  |  |  | $\mathbf{1 5}$ |  |
| Total |  |  |  |  |

## Suggested Semester-by-Semester Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

| Freshman Year - 1st Semester | Course Title | Hours Attribute |  |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course \# | 0802,0812, or 0902 | Analytical Reading \& Writing | 4 |
| GW |  |  |  |  |
| English | $08 x x$ or 09xx | Quantitative Literacy | 4 | GQ |
| GenEd | Foreign Language (first level) | 4 |  |  |
| Foreign Language | 1001 | Race \& Diversity | 3 | GD |
| GenEd | $08 x x$ or 09xx |  | $\mathbf{1 5}$ |  |
| Subtotal |  |  |  |  |

Freshman Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Foreign Language | 1002 | Foreign Language (second level) | 4 |  |
| GenEd | $08 x x$ or 09xx | Science \& Technology I | 3 | GS |
| GenEd | $08 x x$ or 09xx | Human Behavior | 3 | GB |
| GenEd | $08 x x$ or 09xx | Global/World Society | 3 | GG |
| Subtotal |  |  | $\mathbf{1 6}$ |  |

Sophomore Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Foreign Language/ GenEd | 0800+ | Foreign Language (third level) or GenEd Global/World Society Course or Internationally Focused Course From Approved List | 3 | GG |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| English | 2097 | Introduction to English Studies | 3 |  |
| English | 2201 | Survey of English Literature: Beginnings to 1660 | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 2 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours Attribute |  |



# Environmental Studies 

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Environmental Studies is an interdisciplinary major offered by the Department of Geography and Urban Studies that examines the nature, causes and consequences of human interactions with the environment. Students in Environmental Studies gain the intellectual and methodological tools to understand and address the crucial environmental issues of our time and the impact on individuals, society, and the planet. Students are introduced to a physical lab science, an understanding of the economic system, and social science methods in order to prepare for our core courses.

The Environmental Studies core courses are designed to develop the theoretical and methodological frameworks and tools necessary to understand the relationships between people and their environment as they interact through local to global connections. Students examine environmental policy and the role of political institutions; environmental decision-making; natural hazards and risk assessment; environmental ethics and legal issues; and environmental justice. The electives give students the opportunity to develop an area of emphasis around their particular interests.

We encourage our students to incorporate a semester abroad and/or an internship into their plan of study. Each student's program is developed with a departmental advisor to suit individual interests and is designed to maximize educational and career opportunities. Our graduates find employment with government environmental agencies, nonprofits (domestic and international), citizens' organizations, consulting firms, and corporate environmental affairs departments. Many
also go on to graduate programs in environmental studies, law, geography, planning, and other fields.

We offer the B.A. as well as a minor in Environmental Studies. Many of our students choose to complete a double major or a minor in a complementary discipline.

## Internships

We encourage students to apply their skills and knowledge in a credit-bearing internship that utilizes their academic training. Assignments at planning, social service, environmental and other agencies, as well as at firms that specialize in mapping and geographic data analysis, have helped in securing employment opportunities. The internship is complemented by a seminar in which students discuss their experiences. Contact guses@temple.edu for more information on this opportunity.

## Requirements for the B.A. Degree in Environmental Studies

## 1. University Requirements:

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. See below for a list of the specific courses required for your major.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section of the Undergraduate Bulletin for more details.


## 2. College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999). For Social Science majors, 6 upper level credits must be taken in the Humanities Departments (English, French, German, Greek and Roman Classics, Hebrew, Italian, Japanese (only available at our Japan campus), Philosophy, Religion, Russian, and Spanish), Art History, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.


## 3. Foreign Language/Global Studies Requirements:

1) All students must complete the second level of a foreign language;
2) All students must complete at least one course from the GenEd Global/World Society category; and
3) All students must complete one of the following options:

- Third level of a foreign language;
- Demonstrated proficiency in a foreign language;
- A second General Education Global/World Society course;
- Study Abroad at an approved program; or
- Take one Global Studies course from the list on the CLA College Graduation Requirements page


## 4. Major Requirements (49 s.h.)

## Specifically Required courses:

- Biology 1011, 1012
- Economics 1101, 1102, 3596
- Environmental Studies/Geography \& Urban Studies 1051 (or 1951), 1052, 3062
- Geography and Urban Studies 3161
- Environmental Studies 4198

Other major requirements:

- A Research Methods course selected from Geography \& Urban Studies 4197 (which also completes the second writing intensive course) or Environmental Studies/Geography \& Urban Studies 4078 (which is *not* writing intensive, so a student must select a WI Elective to compensate for this).
- One course selected from the Policy Listing Below
- One course selected from the Natural Science Topics Listing below
- One additional course from either area.

5. General electives vary according to a student's individual program of study. Consult your academic advisor for more information.

| Prerequisite and Fundamental courses: |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Economics | 1101 | Macroeconomic Principles | 3 |  |
| Economics | 1102 | Microeconomic Principles | 3 |  |
|  |  |  |  |  |
| Major courses: | Course \# | Course Title |  |  |
| Subject | 1051 or 1951 | Environment and Society | Hours | Attribute |
| Environmental Studies / |  |  |  |  |
| Geography \& Urban Studies |  |  | 3 |  |
| Environmental Studies / | 1052 | Introduction to the Physical Environment | 4 |  |
| Geography \& Urban Studies |  |  | General Biology I (with lab) | 4 |
| Biology | 1011 | 1012 | General Biology II (with lab) | 4 |
| Biology | Fundamentals of Geographic Information Systems | 3 |  |  |
| Environmental Studies / | 3062 | Statistics for Urban and Spatial Analysis | 3 |  |
| Geography \& Urban Studies |  |  |  |  |
| Geography \& Urban Studies | 3161 |  |  |  |


| Economics | 3596 | Energy, Ecology, and Economy (prerequisites: Economics 1101 \& 1102) | 3 | WI |
| :---: | :---: | :---: | :---: | :---: |
| Environmental Studies | 4198 | Senior Research Seminar | 3 | WI |
| Select one Research Methods course from: |  |  | 3 |  |
| Geography \& Urban Studies <br> Environmental Studies / <br> Geography \& Urban Studies | $\begin{aligned} & 4197 \\ & 4078 \end{aligned}$ | Research Methods in Geography and Urban Studies or <br> Research Methods in Environmental Studies** |  | WI |
| Electives |  | Choose three courses from the list of approved electives below. One must be a policy course and one must be from the natural sciences. <br> Note: No electives may double-count between the Environmental Studies major and either the Geography \& Urban Studies major or minor. | 9 |  |
| Major subtotal: |  |  | 39 |  |
|  |  |  |  |  |
| Total |  | major + prerequisites | 45 |  |

All Temple students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed above and are identified by "WI" in the Attribute column.

## Double-Counting Across Curricula

Many students elect to take a combination of the Environmental Studies major or minor and the Geography and Urban Studies major or minor as they are complementary programs.

The ONLY courses that can double-count between the Geography and Urban Studies and Environmental Studies majors are: Geography \& Urban Studies 3161, Geography \& Urban Studies 4197, Environmental Studies/Geography \& Urban Studies 4078. When used for the major in either program, these courses may not be used to fulfill the minor elective requirements of the other program. Note Geography \& Urban Studies 4198 and Environmental Studies 4198 are NOT cross-listed seminars. Anyone pursuing a double major in Geography \& Urban Studies and ES must take both capstone courses.

Students may not combine a major or minor in Environmental Studies and a major or minor in Environmental Science in the College of Science and Technology.

## Distinction in Major

Environmental Studies majors may graduate with distinction in major with a 3.5 in Environmental Studies coursework and a 3.0 GPA overall.

## Requirements for the Minor

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Environmental Studies / Geography \& Urban Studies | 1051 or 1951 | Environment and Society | 3 |  |
|  |  |  |  |  |
| One of the following (plus any required prerequisites): |  |  | 3-4 |  |
| Biology <br> Earth \& Environmental Science <br> Environmental Studies / Geography \& Urban Studies <br> Economics | $\begin{array}{r} 2227 \\ 3021 \\ 3062 \\ 3596 \end{array}$ | Principles of Ecology <br> or <br> Introduction to Hydrology <br> or <br> Fundamentals of Geographic Information Systems <br> or <br> Energy, Ecology, and Economy |  |  |
| Policy Elective |  | Select one policy course from the list of approved electives below. | 3 |  |
| Environmental Studies Electives |  | Select three topics courses from the list of approved electives below. <br> Note: No electives may double-count between the Geography \& Urban Studies major and either the Geography \& Urban Studies major or minor. | 9 |  |
| Total |  |  | 18-19 |  |

## Environmental Studies Electives List

Note: Upper-level Science and Liberal Arts courses from this list can be used to satisfy the CLA 45 credit upper-level distribution requirement. Please consult with an advisor.
*NS - Indicates that the course counts as a Natural Science course in fulfillment of B.A. requirements.

| Subject | Course \# | Course Title | Hours | NS |
| :--- | :--- | :--- | :--- | :---: |
| Select at least three electives, one must be policy-related, one must be science-related, <br> the third can be any course on this list. |  |  |  |  |
| Policy Electives Select at least one: | 2014 | Planning Policy and Law |  |  |
| Community \& Regional Planning | 3175 | Heritage Management in Archaeology |  |  |
| Environmental Studies/Anthropology | 3512 | Public Finance | 3 |  |
| Economics | 3513 | Economics of State \& Local Government | 3 |  |
| Economics | Environmental Regulations | 3 |  |  |
| Environmental Engineering Technology | 4761 | Environmental Law and Regulation | 3 |  |
| Environmental Studies | 3025 | Environmental Policy Issues | 3 |  |
| Environmental Studies/Geography \& | 3051 | 3 |  |  |
| Urban Studies |  | U.S. Environmental Policy | 3 |  |
| Environmental Studies/Political Science | 3152 | 3 |  |  |
| Environmental Studies/Political Science | 3265 | International Environmental Policy |  |  |
|  |  |  |  |  |
| Natural Science Electives Select at least one: |  |  |  |  |


| Environmental Studies/Anthropology | 3170 | Methods in Archaeology (Soils, Sediments, Stratigraphy topic only) | 3 | NS |
| :---: | :---: | :---: | :---: | :---: |
| Environmental Studies/Anthropology | 3189 | Field Session in Archaeology | 3 | NS |
| Anthropology | 3774 | Environmental Physiology and Health | 3 | NS |
| Biology | 2227 | Principles of Ecology | 3 | NS |
| Biology | 3196 | Experimental Marine Biology | 4 | NS |
| Biology | 3245 | Marine Ecology | 4 | NS |
| Biology | 3316 | Tropical Marine Biology | 4 | NS |
| Biology | 3336 | Freshwater Ecology | 4 | NS |
| Biology | 4327 | Biological Impacts of Global Climate Change | 3 | NS |
| Botany | 1112 | Plant Ecology | 3 | NS |
| Earth \& Environmental Science | 2096 | Climate Change: Oceans to Atmosphere | 4 | NS |
| Earth \& Environmental Science | 2021 | Facies Models | 4 | NS |
| Earth \& Environmental Science | 2061 | Introduction to Geochemistry | 4 | NS |
| Earth \& Environmental Science | 3011 | Remote Sensing and GIS | 4 | NS |
| Earth \& Environmental Science | 3021 | Introduction to Hydrology | 4 | NS |
| Horticulture | 2114 | Soils | 3 | NS |
| Landscape Architecture | 2758 | Summer Field Ecology | 3 | NS |
|  |  |  |  |  |
|  |  |  |  |  |
| Topics |  |  |  |  |
| Environmental Studies/Anthropology | 4117 | Seminar in Environmental Archaeology | 3 |  |
| Environmental Studies/Anthropology | 4796 | Biocultural Adaptations in Human Populations | 3 |  |
| Community \& Regional Planning | 1027 | History and Practice of Community and Regional Planning | 3 |  |
| Community \& Regional Planning | 2114 | Urban Form and Design | 3 |  |
| Community \& Regional Planning | 2213 | Environmental Planning | 3 |  |
| Community \& Regional Planning | 2524 | Fundamentals of Geographic Information Systems | 3 |  |
| Community \& Regional Planning | 3256 | Sustainable Community Design and Development | 3 |  |
| Environmental Studies | 3000 | Special Topics in Environmental Studies | 3 |  |
| Environmental Studies | 4082 | Independent Study: Environmental Studies | 1-3 |  |
| Environmental Studies | 4085 | Internship: Environmental Studies | 3 |  |
| Environmental Studies/Geography \& Urban Studies | 2051 | The Urban Environment | 3 |  |
| Environmental Studies/Geography \& Urban Studies | 3052 | Environmental Problems in Asia | 3 |  |
| Environmental Studies/Geography \& Urban Studies | 3054 | Energy, Resources, and Conservation | 3 |  |
|  <br> Urban Studies | 3062 | Fundamentals of Geographic Information Systems | 3 |  |
| Environmental Studies/Geography \& Urban Studies | 3097 | Environment and Development | 3 |  |
| Environmental Studies/Geography \& Urban Studies | 4015 | The Geographic Basis of Land Use Planning | 3 |  |
| Environmental Studies/Geography \& Urban Studies | 4051 | Hazards Geography | 3 |  |
|  <br> Urban Studies | 4056 | Political Ecology | 3 |  |


| Environmental Studies/Geography \& | 4071 | Medical Geography | 3 |  |
| :--- | :--- | :--- | :--- | :---: |
| Urban Studies |  |  |  |  |
| Environmental Studies/Geography \& | 4096 | Problems of Environmental Quality | 3 |  |
| Urban Studies |  |  | 3 |  |
| Environmental Studies/History | 3214 | North American Environmental History | 3 |  |
| Environmental Studies/History | 4297 | Social History of American Medicine | 3 |  |
| Horticulture | $2334 / 2353$ | Food Crops I/II | 3 |  |
| Horticulture | 3514 | Landscape Restoration | 3 |  |
| Journalism | 3253 | Health and Environmental Reporting | 6 |  |
| Landscape Architecture | 2144 | Landscape Architecture Design Studio II | 3 |  |
| Environmental Studies/Philosophy | 2157 | Environmental Ethics | 3 |  |
| Environmental Studies/Philosophy | 2596 | Philosophical Perspectives on the Environment | 3 |  |
| Environmental Studies/Religion | 3001 | Earth Ethics | 3 |  |
| Public Health | 2102 | Environmental Health | 3 |  |
| Environmental Studies/Sociology | 3511 | Sociology of the Environment | 3 |  |

Further information is available at www.temple.edu/gus/undergraduate/esmajor/index.htm.

## Suggested Semester-by-Semester Plan

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812, or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Foreign Language | 1001 | Foreign Language (first level) | 4 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Foreign Language | 1002 | Foreign Language (second level) | 4 |  |
| Economics | 1101 | Macroeconomic Principles | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 2 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Foreign Language/ GenEd | 0800+ | Foreign Language (third level) or GenEd World Society course or Internationally Focused Course From Approved List | 3 | GG |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Economics | 1102 | Microeconomic Principles | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| Subtotal |  |  | 15 |  |


| Sophomore Year - 2nd Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Environmental Studies/ Geography \& Urban Studies | 1051 or 1951 | Environment and Society | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Humanities/CST Course | 3 |  |
| Environmental Studies/ Geography \& Urban Studies | 1052 | Introduction to the Physical Environment | 4 |  |
| Biology | 1011 | General Biology I * | 4 |  |
| Economics | 3596 | Energy, Ecology, and Economy | 3 | WI |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Humanities/CST Course | 3 |  |
| Biology | 1012 | General Biology II * | 4 |  |
| Geography \& Urban Studies | 3161 | Statistics for Urban and Spatial Analysis | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Environmental Studies/ Geography \& Urban Studies | 3062 | Fundamentals of Geographic Information Systems | 3 |  |
| Environmental Studies Electives List | 1000+ | One Approved Environmental Studies Elective (Natural Science) | 3 |  |
| Environmental Studies Electives List | 2000+ | One Approved Environmental Studies Elective (any) | 3 |  |
| Select one Research Methods Course: |  |  | 3 |  |
|  | $\begin{gathered} 4197 \\ \text { or } \\ 4078 \end{gathered}$ | Research Methods in Geography and Urban Studies <br> or <br> Research Methods in Environmental Studies |  | WI |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Environmental Studies | 4198 | Senior Research Seminar | 3 | WI |


| Environmental Studies | $2000+$ | One Approved Environmental Studies <br> Elective (Policy) | $3-4$ |  |
| :--- | :--- | :--- | :---: | :---: |
| Electives List |  | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | $2000+$ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | $2000+$ | Any CLA/CST Elective | 3 |  |
| CLA/CST | $0800-4999$ |  | $\mathbf{1 5 - 1 6}$ |  |
| Subtotal |  |  |  |  |
|  |  |  |  |  |
| Degree Total |  | $\mathbf{1 2 3}$ |  |  |
| *Completion of the Biology sequence fulfills the GenEd Science \& Technology requirement. |  |  |  |  |

## French

## www.temple.edu/fgis/French/

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The French major helps students develop skills in reading, writing and oral communication while providing them with a rich understanding of the literature, cinema, history, and traditions of one of more Francophone cultures. In all classes, students focus on communication and communities, comparisons and connection, and culture. As they improve their linguistic skills and study various forms of cultural production from other nations, French majors also strengthen their ability to analyze and interpret in a way that contributes to their education above and beyond courses they take for the major. Through study at Temple, often enhanced by study abroad, French majors gain insight into their own identities and assumptions in relation to others. Majors complete the program with an ability to communicate, a grounding in literary tradition, and an awareness of cultural differences that has become increasingly important in the contemporary world.

The French major is a good preparation for a career that requires analytical thinking and communication skills in general, which includes the domains of education, business, government service, travel, and tourism. It is a good major or a second major for students planning to attend
law or medical school. Studies have shown that learning a foreign language helps raise scores on the LSAT, GRE, and MCAT exams. This course of study also proves valuable to anyone who plans to work for a multinational corporation.

The French courses are often small, allowing students to get to know each other and their professors well. The program helps prepare students enrolled in the School of Education for careers teaching French and provides the opportunity to students enrolled in the Fox School of Business to acquire a certificate in French with a special course on French in the business world. Outside of class, students can share conversation and activities with an on-campus group for French speakers and gather at occasional film screenings and other events. Finally, those who are interested in publishing can help edit Temple's annual literary magazine for world languages, In Other Words.

## Summary of Degree Requirements

## 1. University Requirements

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. See below for a list of the specific courses required for your major.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section of the Undergraduate Bulletin for more details.


## 2. College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999). For Humanities majors, 6 upper level credits must be earned in the Social Sciences: African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Geography and Urban Studies, History, Jewish Studies, Latin American Studies, Mathematical Economics, Neuroscience: Systems, Behavior and Plasticity, Political Science, Psychology, Sociology, Women's Studies , or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in all CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.


## 3. Foreign Language/Global Studies Requirements

1) All students must complete the second level of a foreign language;
2) All students must complete at least one course from the GenEd Global/World Society category; and
3) All students must complete one of the following options:

- Third level of a foreign language;
- Demonstrated proficiency in a foreign language;
- A second General Education Global/World Society course;
- Study Abroad at an approved program; or
- Take one Global Studies course from the list on the CLA College Graduation Requirements page.


## 4. Major Requirements: Ten courses in French (30 s.h.)

- Specifically required courses: French 2001, 2041, 2096, 3096, 3101, 3102
- Electives in French (may not overlap with the above required courses):
o One course numbered 2002 or higher
o One course numbered 3000 or higher
o Two courses numbered 4000 or higher

5. General electives vary according to a student's individual program of study. Consult your academic advisor for more information.

## Requirements for the Major

- Prerequisites: French 1001, French 1002, and French 1003 with a minimum grade of C or equivalent placement.
- Course levels are incremental in skills and content. Courses must be taken sequentially or in some instances may be taken concurrently. Students who initially place beyond French 1003 may begin with French 2001 or a course beyond 2001, as appropriate.
- All Temple students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed below and are identified by "WI" in the Attribute column.

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| French | 2001 | Intermediate | 3 |  |
| French | 2041 | Reading I | 3 |  |
| French | 2096 | Composition I | 3 | WI |
| French | 3096 | Composition II | 3 | WI |
| French | 3101 | Survey of French Literature I | 3 |  |
| French | 3102 | Survey of French Literature II | 3 |  |
| French | $4000-l e v e l ~$ | Select two courses | 6 |  |
|  |  |  |  |  |
| Select one elective numbered 2002 to 4999 |  |  |  |  |
| Select one elective numbered 3000 to 4999 | 3 |  |  |  |
| Total |  |  | 3 |  |

## Distinction in Major

To be considered for Distinction in Major, students must:
(1) Complete the requirements for the concentration in French with a GPA of at least 3.50;
(2) Be recommended to the chair of the department by the French faculty advisor after consultation with the French faculty;
(3) Have an overall GPA of at least 3.25.

## Requirements for the Minor

Prerequisites: French 1001 with a minimum grade of C or equivalent placement.

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| French | 1002 | Introduction to French II | 4 | LA |
| French | 1003 | Introduction to French III | 3 | LB |
| French | 2001 | Intermediate | 3 |  |
|  |  |  |  |  |
| Select a minimum of two courses from: |  |  |  |  |
| French | 2021 |  |  |  |
| French |  |  |  |  |
| French |  |  |  |  |
| 2041 |  |  |  |  |
| 2096 |  |  |  |  |
| French |  |  |  |  |\(\left.\quad \begin{array}{l}Conversation I <br>

Reading I <br>
Composition I <br>
French for Business I\end{array}\right)\)

## Requirements for the Special Foreign Language Certificate in French

Six courses (18-20 semester hours) beginning with French 1001, including French 2501 (French for Business $I$ ) and an upper-level course (beyond French 2001).

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| French | 1001 | Introduction to French I | 4 | LA |
| French | 1002 | Introduction to French II | 4 | LA |
| French | 1003 | Introduction to French III | 3 | LB |
| French | 2001 | Intermediate | 3 |  |
| French | 2501 | French for Business I | 3 |  |
|  |  |  |  |  |
| Select one course from: |  |  |  |  |


| French <br> French <br> French | $\begin{aligned} & 2021 \\ & 2041 \\ & 2096 \end{aligned}$ | $\begin{aligned} & \text { Conversation I } \\ & \text { Reading I } \\ & \text { Composition I } \end{aligned}$ |  | WI |
| :---: | :---: | :---: | :---: | :---: |
| Total |  |  | 20 |  |

## Study Abroad

Students declaring a major in the department are encouraged to study abroad. Temple University has a summer program at the Sorbonne in Paris. Credits earned through the Temple Sorbonne Program may be used toward the French major, minor, certificate and for satisfaction of the GenEd World Society requirement.

## Suggested Semester-by-Semester Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.
Freshman Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| English | 0802, 0812, or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| French | 1001 | Introduction to French I | 4 | LA |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

Freshman Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| French | 1002 | Introduction to French II | 4 | LA |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | $08 x x$ or 09xx | U.S. Society | 3 | GU |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Subtotal |  |  | $\mathbf{1 6}$ |  |

Sophomore Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| French | 1003 | Introduction to French III | 3 | LB |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |
| Any | O800-4999 | One Elective in Any School or College | 2 |  |
| Subtotal |  | $\mathbf{1 7}$ |  |  |
|  |  |  |  |  |
| Sophomore Year $\boldsymbol{-}$ 2nd Semester | Course \# | Course Title | Hours Attribute |  |
| Subject |  |  |  |  |



# Geography \& Urban Studies 

www.temple.edu/gus

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The Department of Geography and Urban Studies combines the discipline of geography and the field of urban studies to offer a major that emphasizes geographic theory and methods to the study of urban and regional processes and problems in U.S. and international settings. Students majoring in Geography and Urban Studies are equipped with the intellectual and methodological tools necessary to understand and address a wide range of environmental, economic, social, and political challenges that are central to the well-being of billions of people around the globe in an urbanizing world. The major focuses on the three themes of globalization, sustainability, and social justice that are increasingly central to understanding such challenges and opportunities. Our fourth theme is geographic methods. There is a resurgence of interest in geographic theory and methods that examine the complexity of human-environmental interactions; the increasing interconnectedness of the global economy, environment, culture and politics; and the importance of place/context in people's daily lives. Students have the opportunity to gain skills in spatial statistics, geographic information systems (GIS), cartographic production and design, and qualitative methods that are highly valued by employers. We encourage our students to incorporate a semester abroad and/or an internship into their plan of study. Each student's program is developed with a departmental advisor to suit individual interests and is designed to maximize educational and career opportunities. Our graduates find employment with nonprofits (domestic and international), planning or government agencies, consulting firms, and citizens' organizations. Many also go on to graduate programs in geography, planning, environmental studies, law and other fields.

We offer the B.A. as well as a minor in Geography and Urban Studies. Many of our students choose to complete a double major or a minor in a complementary discipline.

## Summary of Degree Requirements

## 1. University Requirements:

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. See below for a list of the specific courses required for your major.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section of the Undergraduate Bulletin for more details.


## 2. College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999). For Social Science majors, 6 upper level credits must be taken in the Humanities Departments (English, French, German, Greek and Roman Classics, Hebrew, Italian, Japanese (only available at our Japan campus), Philosophy, Religion, Russian, and Spanish), Art History, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.


## 3. Foreign Language/Global Studies Requirements:

1) All students must complete the second level of a foreign language;
2) All students must complete at least one course from the GenEd Global/World Society category; and
3) All students must complete one of the following options:

- Third level of a foreign language;
- Demonstrated proficiency in a foreign language;
- A second General Education Global/World Society course;
- Study Abroad at an approved program; or
- Take one Global Studies course from the list on the CLA College Graduation Requirements page.


## 4. Major Requirements (36 s.h.)

Specifically Required courses:

- Select one geography course from: Geography \& Urban Studies 1051, 1031, 0866.
- Select one urban studies course from: Geography \& Urban Studies 1021, 1025, 0861.
- Geography \& Urban Studies 3161.
- Select two Intermediate courses from: Geography \& Urban Studies 2014, 2031, 2032, 2051, 3061, 3062, 3097.
- Select one Research Methods course from: Geography \& Urban Studies 4197 and Geography \& Urban Studies/Environmental Studies 4078.
- Geography \& Urban Studies 4198 - Capstone.
- Four Geography \& Urban Studies Electives numbered 2000-4999
- One Geography \& Urban Studies elective at any level, numbered 0800-4999.
o Note, no more than two Geography \& Urban Studies courses numbered 08000999 may count towards the major requirements.

5. General electives vary according to a student's individual program of study. Consult your academic advisor for more information.

## Requirements for the Major

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Select one of the following courses with a Geography focus: |  |  | 3 |  |
| Geography \& Urban Studies <br> Geography \& Urban Studies <br> Geography \& Urban Studies | $\begin{aligned} & 1051 \\ & 1031 \\ & 0866^{*} \end{aligned}$ | ```Environment and Society or Geography of World Affairs or World Affairs``` |  | GG |
| Select one of the following courses with an Urban Studies focus: |  |  | 3 |  |
| Geography \& Urban Studies <br> Geography \& Urban Studies <br> Geography \& Urban Studies | $\begin{aligned} & 1021 \\ & 1025 \\ & 0861 * \end{aligned}$ | Urban Society: Race, Class \& Community or <br> World Urban Patterns <br> or <br> Urban Dynamics: Global, Regional, \& Local <br> Connections |  | GU |
| Geography \& Urban Studies | 3161 | Statistics for Urban and Spatial Analysis | 3 |  |
| Select two of the following seven Intermediate courses: |  |  | 6 |  |
| Geography \& Urban Studies Geography \& Urban Studies Geography \& Urban Studies Geography \& Urban Studies Geography \& Urban Studies Geography \& Urban Studies Geography \& Urban Studies | 2014 2031 2032 2051 3061 3062 3097 | Urban Geography <br> Economic Geography <br> Urban Systems in a Global Economy <br> Urban Environment <br> Fundamentals of Cartography <br> Fundamentals of Geographic Information Systems <br> Environment \& Development |  | WI |
| Select one Research Methods course from: |  |  | 3 |  |
| Geography \& Urban Studies Geography \& Urban Studies/ Environmental Studies | $\begin{aligned} & 4197 \\ & 4078 \end{aligned}$ | Research Methods in Geography \& Urban Studies Research Methods in Environmental Studies ** |  | $\begin{aligned} & \hline \text { WI } \\ & \text { ** } \end{aligned}$ |
| Capstone Writing-intensive: |  |  | 3 |  |


| Geography \& Urban Studies | 4198 | Senior Seminar in Geography \& Urban Studies <br> (Capstone) |  | WI |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| Geography \& Urban Studies | Electives | Select five Geography \& Urban Studies electives, <br> a least four of which must be 2000+ level. | 15 |  |
| Total |  | Note: No electives may double-count between the <br> Geography \& Urban Studies major and either the <br> Environmental Studies major or minor. |  |  |

*For students who are completing the General Education Program, no more than two courses at the 0800 and 0900 levels may be used to complete major requirements.
**Note: Geography \& Urban Studies/Environmental Studies 4078 is not a writing-intensive course; students who elect this option must take another writing-intensive course in the Geography and Urban Studies department (in addition to Geography \& Urban Studies 4198-Capstone).

All Temple students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed above and are identified by "WI" in the Attribute column.

## Double-Counting Across Curricula

Many students elect to take a combination of the Geography and Urban Studies major or minor and the Environmental Studies major or minor and/or the Environmental Science major or minor as they are complementary programs, but there are limits in terms of which courses may count for the two curricula:
The ONLY courses that can double-count between the Geography and Urban Studies and Environmental Studies majors are: Geography \& Urban Studies 3161, Geography \& Urban Studies 4197, Environmental Studies/Geography \& Urban Studies 4078. When used for the major in either program, these courses may not be used to fulfill the minor elective requirements of the other program. Note Geography \& Urban Studies 4198 and Environmental Studies 4198 are NOT cross-listed seminars. Anyone pursuing a double major in Geography \& Urban Studies and ES must take both capstone courses.

## Distinction in the Major

Geography and Urban Studies students can graduate with distinction if they have, at the time of graduation, a 3.5 GPA in the major and a 3.0 cumulative GPA.

## Requirements for the Minor

| Subject | Course \#\| | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Select one Introductory course from: |  |  | 3 |  |
| Geography \& Urban Studies | 1051 | Environment \& Society or |  |  |
| Geography \& Urban Studies | 1031 | Geography of World Affairs or |  |  |
| Geography \& Urban Studies | 1021 | Urban Society: Race, Class \& Community or |  |  |
| Geography \& Urban Studies | 1025 | World Urban Patterns or |  |  |
| Geography \& Urban Studies | $\begin{aligned} & 0861 \\ & 0866 \end{aligned}$ | Urban Dynamics: Global, Regional, and Local Connections or <br> World Affairs |  | GU GG |
| Geography \& Urban Studies | 0866 | World Affairs |  | GG |
| Geography \& Urban Studies | Electives | Select five Geography \& Urban Studies electives, at least four of which must be 2000+ level.* <br> Note: No electives may double-count between the Geography \& Urban Studies minor and the Environmental Studies major or minor. | 15 |  |
| *One cognate course can substitute for an elective with written permission from the faculty advisor. |  |  |  |  |
| Total |  |  | 18 |  |

## Tracks

The department has identified several informal areas of concentration to assist students in making course selections. These do not constitute formal requirements but rather provide guidelines for developing a personalized curriculum. Students can focus on the following themes:

1. Urban Issues
2. Environmental Problems
3. International Development
4. Geographical Techniques

## Gamma Theta Upsilon

We nominate students for membership in the National Honorary Society in Geography on the basis of GPA. Students, who are initiated annually, can submit articles to the GTU journal and apply for national scholarships.

## Internships

We encourage students to apply their skills and knowledge in a credit-bearing internship that utilizes their academic training. Assignments at planning, social service, environmental and other agencies, as well as at firms that specialize in mapping and geographic data analysis, have helped in securing employment opportunities. The internship is complemented by a seminar in
which students discuss their experiences. Contact guses@temple.edu for more information on this opportunity.

## Double Major with the College of Education

Students may elect to earn certification in secondary school social studies by combining a major in Geography and Urban Studies with a major in Social Studies Education. Students may also earn certification through a Geography and Urban Studies major by following the 5-year B.A./M.A. program. For more information on this opportunity, please contact the CLA Academic Advising Center.

## Certificates of Specialization in Travel \& Tourism

Students may take a series of courses that examine the rapidly growing fields of tourism and recreation from an urban/geographical perspective. For more information please see the School of Tourism and Hospitality Management.

## Certificate of Specialization in the Geography of Tourism

The courses in this certification program examine all the world's culture regions and the linkages among them. Students can elect courses relevant to either domestic or international tourism. Additional courses would then be chosen to help the student acquire a sense of place as well as strategies for learning about new locations.

## Certificate in the Geography of Sports, Recreation \& Tourism Planning

Students in this program who are interested in urban recreation and sports can take courses related to urban social and policy issues, while those interested in outdoor/rural recreation can take courses on environmental issues. The course on geographical information systems (GIS) is particularly relevant to tourism planning.

## Suggested Semester-by-Semester Plan

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812, or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Foreign Language | 1001 | Foreign Language (first level) | 4 |  |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Foreign Language | 1002 | Foreign Language (second level) | 4 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |


| GenEd | 08xx or 9xx | Diversity and Race | 3 | GD |
| :---: | :---: | :---: | :---: | :---: |
| Select one Geography-Focused Course from: |  |  | 3 |  |
| Geography \& Urban Studies <br> Geography \& Urban Studies <br> Geography \& Urban Studies | $\begin{aligned} & 1051 \\ & 1031 \\ & 0866 \\ & \hline \end{aligned}$ | ```Environment and Society or Geography of World Affairs or World Affairs``` |  | GG |
| Subtotal |  |  | 16 |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Foreign Language/ GenEd | 0800+ | Foreign Language (third level) or GenEd Global/World Society course or Internationally Focused Course From Approved List | 3 | GG |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Select one Urban-Studies-Focused Course from: |  |  | 3 |  |
| Geography \& Urban Studies Geography \& Urban Studies Geography \& Urban Studies | $\begin{aligned} & 1021 \\ & 1025 \\ & 0861 \end{aligned}$ | Urban Society: Race, Class \& Community or <br> World Urban Patterns or <br> Urban Dynamics: Global, Regional, \& Local Connections |  | GU |
| Subtotal |  |  | 15 |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Geography \& Urban Studies | 3161 | Statistics for Urban and Spatial Analysis | 3 |  |
| Geography \& Urban Studies | 1000+ | One Geography \& Urban Studies Elective Any Level | 3 |  |
| Geography \& Urban Studies | see list above | One Intermediate Geography \& Urban Studies Course From Approved List | 3 |  |
| Subtotal |  |  | 15-16 |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Humanities/CST Course | 3 |  |
| Geography \& Urban Studies | see list above | One Intermediate Geography \& Urban Studies Course From Approved List | 3 |  |
| Geography \& Urban Studies | 2000+ | One 2000+ Geography \& Urban Studies Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 2 |  |
| Subtotal |  |  | 17 |  |
| Junior Year - 2nd Semester |  |  |  |  |


| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| CLA/CST | 2000+ | One 2000+ Humanities/CST Course | 3 |  |
| Geography \& Urban Studies | 2000+ | One 2000+ Geography \& Urban Studies Course | 3 |  |
| Geography \& Urban Studies | 2000+ | One 2000+ Geography \& Urban Studies Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Geography \& Urban Studies <br> Environmental Studies/ Geography \& Urban Studies | $\begin{aligned} & 4197^{*} \\ & 4078 \end{aligned}$ | Research Methods in Geography \& Urban Studies <br> or <br> Research Methods in Environmental <br> Studies** <br> **Note: Students who elect to take <br> Environmental Studies 4078 or Geography <br> \& Urban Studies 4078 must take a writingintensive elective in Geography \& Urban Studies | 3 | WI* |
| Geography \& Urban Studies | 2000+ | One 2000+ Geography \& Urban Studies Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Geography \& Urban Studies | 4198 | Senior Seminar in Geography \& Urban Studies (Capstone) | 3 | WI |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Degree Total |  |  | 123 |  |

## German

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German is a major world language spoken in Germany, Austria, and Switzerland, as well as in some communities in the United States. Whether you are interested in literature, music, theater, film, or art, German culture is a rich and exciting tradition. Temple's German program provides broad linguistic, cultural, and practical experiences to prepare students to participate meaningfully in the German-speaking world.

The German major and minor help students achieve their learning goals, whether they want to go on to use German to communicate with friends in Germany, Austria, or Switzerland; to engage in business with German partners; to work in government or in the media; or to participate in German culture. They develop skills in reading, writing, and oral communication while acquiring a rich understanding of the literature, cinema, history and culture of the Germanspeaking world.

Students who study German at Temple find that the program prepares them to do well in whatever they choose upon graduation; the German major is a good preparation for a career that requires analytical thinking and communication skills in general, which includes the domains of education, business, government service, travel, and tourism. It is a good major or second major for students planning to attend law school or medical school. Studies have shown that learning a foreign language helps raise scores on the LSAT, GRE, and MCAT examinations. This course of study also proves valuable to anyone who plans to work for a multinational corporation.

The German courses are often small, allowing students to get to know one another and their professors well. The program helps prepare students enrolled in the Fox School of Business and Management to acquire a special language certificate including a special course on German in the business world. Outside of class, students can share conversations and activities informally or
with the University German Society. In addition, they can publish their creative work in Temple’s annual literary magazine for world languages, In Other Words.

## Summary of Degree Requirements

## 1. University Requirements

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. See below for a list of the specific courses required for your major.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section of the Undergraduate Bulletin for more details.


## 2. College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999). For Humanities majors, 6 upper level credits must be earned in the Social Sciences: African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Geography and Urban Studies, History, Jewish Studies, Latin American Studies, Mathematical Economics, Neuroscience: Systems, Behavior and Plasticity, Political Science, Psychology, Sociology, Women's Studies , or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in all CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.


## 3. Foreign Language/Global Studies Requirements

1) All students must complete the second level of a foreign language;
2) All students must complete at least one course from the GenEd Global/World Society category; and
3) All students must complete one of the following options:

- Third level of a foreign language (Note: German 1003 completes this requirement);
- Demonstrated proficiency in a foreign language;
- A second General Education Global/World Society course;
- Study Abroad at an approved program; or
- Take one Global Studies course from the list on the CLA College Graduation Requirements page.


## 4. Major Requirements: Ten courses in German (30 s.h.)

o Specifically Required Courses: German 1003, 2001, 3096, 3201, 4296
o Electives in Major: 5 German courses at the upper level, numbered 2000-4999.
5. General electives vary according to a student's individual program of study. Consult your academic advisor for more information.

## Requirements for the Major

- Prerequisites: German 1001 and 1002, with a minimum grade of C or equivalent placement.
- Course levels are incremental in skills and content. Courses must be taken sequentially or in some instances may be taken concurrently. Students who initially place beyond German 1003 may begin with German 2001 or at the 2000-level, as appropriate.
- All Temple students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed below and are identified by "WI" in the Attribute column.

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| German | $1003^{* *}$ | Introduction to German III | 3 | LB |
| German | $2001^{* *}$ | Intermediate | 3 |  |
| German | 3096 | Composition I | 3 | WI |
| German | 3201 | Culture \& Civilization I | 3 |  |
| German | 4296 | Composition II | 3 | WI |
| German | Electives | Select five from 2000-, 3000-, and 4000-level courses | 15 |  |
| Total |  |  | $\mathbf{3 0}$ |  |
| *Indicates writing capstone for the major |  |  |  |  |
| **Students who place out of 1003 will need one additional elective; those who place out of 2001 will need two |  |  |  |  |
| additional electives. <br> Note: <br> relate to the two upper-level courses outside of the department will count as electives if they |  |  |  |  |

## Distinction in Major

To be considered for Distinction in the German Major, students must:
(1) Complete the requirements for the concentration in German with a GPA of at least 3.50;
(2) Have an overall GPA of at least 3.25;
(3) Be recommended to the chair of the department by the German faculty advisor after consultation with the German department faculty.

## Requirements for the Minor

Prerequisites: German 1001 or equivalent placement with a minimum grade of C.

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| German | 1002 | Introduction to German II | 4 | LA |
| German | 1003 | Introduction to German III | 3 | LB |


| German | 2001 | Intermediate | 3 |  |
| :--- | :--- | :--- | :---: | :---: |
| German | 3096 | Composition I | 3 | WI* $^{*}$ |
| German | 3201 | Culture \& Civilization I | 3 |  |
| German | Electives | Select one from 2000-, 3000-, and 4000-level courses | 3 |  |
| Total |  |  | $\mathbf{1 9 * *}$ |  |
| * Indicates writing capstone |  |  |  |  |
| **Students who place out of 1002 will meet the requirement for the minor with 18. |  |  |  |  |
| Note: Up to two upper-level courses outside of the department will count as electives if <br> they relate to the major as approved by the department advisor. |  |  |  |  |

## Requirements for the Special Foreign Language Certificate in German

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| German | 1001 | Introduction to German I | 4 | LA |
| German | 1002 | Introduction to German II | 4 | LA |
| German | 1003 | Introduction to German III | 3 | LB |
| German | 2001 | Intermediate | 3 |  |
| German | 2501 | German for Business I | 3 |  |
|  |  |  |  |  |
| Select one course from: |  |  | 3 |  |
| German German | $\begin{aligned} & 3096 \\ & 3201 \end{aligned}$ | Composition I Culture \& Civilization I |  | WI* |
|  |  |  |  |  |
| Total |  |  | 20 |  |
| *Indicates writing capstone |  |  |  |  |

## Study Abroad

Students declaring a major or minor in the department are strongly encouraged to study abroad. Temple University has programs at the universities of Hamburg, Tübingen, and Leipzig in Germany. Courses completed in these programs may be credited toward the German major or minor and in partial satisfaction of the CLA Global Studies requirement.

Students interested in Study Abroad should discuss their plans with the faculty advisor in German early in their academic program.

## Suggested Semester-by-Semester Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

| Freshman Year - 1st Semester | Course Title | Hours | Attribute |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course \# | Coung \& Writing | 4 | GW |
| English | 0802, 0812, or 0902 | Analytical Reading | 4 | GQ |
| GenEd | $08 x x$ or 09xx | Quantitative Literacy | 4 | LA |
| German | 1001 | Introduction to German I | 3 | GB |
| GenEd | Human Behavior |  |  |  |


| Subtotal |  |  | 15 |  |
| :---: | :---: | :---: | :---: | :---: |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| German | 1002 | Introduction to German II | 4 | LA |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| German | 1003 | Introduction to German III | 3 | LB |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 2 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| Any | 0800-4999 | One Elective in Any School or College | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| German | 2001 | Intermediate | 3 |  |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Social Science/CST Course | 3 |  |
| German | 3096 | Composition I | 3 | WI |
| German | 2000+ | One 2000+ German Elective | 3 |  |
| German | 2000+ | One 2000+ German Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Social Science/CST Course | 3 |  |
| German | 3201 | Culture and Civilization I | 3 |  |
| German | 2000+ | One 2000+ German Elective | 3 |  |
| German | 2000+ | One 2000+ German Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |


| Subject | Course \# | Course Title | Hours | Attribute |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
| German | $2000+$ | One 2000+ German Elective | 3 |  |  |
| CLA/CST | $2000+$ | One 2000+ CLA/CST Course | 3 |  |  |
| CLA/CST | $2000+$ | One 2000+ CLA/CST Course | 3 |  |  |
| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |  |
| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |  |
|  |  |  |  |  |  |
| Senior Year - 2nd Semester | Course \# | Course Title | Hours | Attribute |  |
| Subject | German Composition II | 3 | WI |  |  |
| German | A296 | Any CLA/CST Elective | 3 |  |  |
| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |  |
| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |  |
| CLA/CST | $0800-4999$ | One Elective in Any School or College | 3 |  |  |
| Any | $0800-4999$ |  | $\mathbf{1 5}$ |  |  |
| Subtotal |  |  |  |  |  |
|  |  |  | $\mathbf{1 2 3}$ |  |  |
| Degree Total |  |  |  |  |  |

## History

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## www.temple.edu/history

The faster our lives change, the more we need to understand our past, reflect on our present, and make decisions for our future. History helps us to understand who we are and where we came from. It provides unique insights and perspectives for our personal and professional pursuits.

The History Department divides its courses between American History, European History, and non-Western History. Within each division, one can choose history courses in political, diplomatic, social, cultural, economic, gender, and ethnic history. Students should concentrate in one field of history and also be well-versed in the three main divisions.

Temple History graduates have gone into a wide range of careers; business, law, politics, education, historical preservation, and information resources are just a few of the many areas. History arms the student for a maximum amount of flexibility for career choices.

Temple students regularly participate in the intellectual life of the region through their connections to such organizations and institutions as the McNeil Center for Early American Studies, the Balch Institute for Ethnic Studies, the Pennsylvania Historical Society, the Atwater Kent Museum, and the American Philosophical Society.

The Department of History offers an Honors Program for majors with outstanding academic records. Qualified majors are invited to join Phi Alpha Theta, the History honor society. Both minors and majors participate in the Undergraduate History Association. Special Programs allow undergraduates to major in History and earn teaching certification, or to major in history and earn a Master's in Education in five years (program administered through the School of Education).

## The History Major

The history major consists of a step approach. Courses numbered 0800 through 1999 are introductory level; courses numbered 2000-2999 are intermediate level, and courses numbered 3000-4999 are advanced level. Courses with " 9 " as a second digit are honors courses and are usually restricted to honors students.

The history major requires twelve courses ( 36 credits). Students must take two introductory level courses, of which one is selected from courses numbered 0800-1099 and one from courses numbered 1100-1999. Three courses ( 9 credits) are required at the 2000 level. Three elective courses ( 9 credits) are required at the 3000 level. All history majors take two required writing seminars: in the Junior year, students take a 3000 level writing course and in the Senior year, they take a complimentary Capstone course at the 4000 level. All writing intensive courses end in $-96,-97$ or -98 . Finally, students may select two history courses ( 6 credits) at any level.

- Within these broad requirements, students must complete a minimum of two courses in U.S. history, two courses in European history, and three courses in Asian, African, Latin American or Global/Comparative history.
- Two of the courses in any category or level must be predominantly pre-1900 in content.
- Students should take four courses that represent an area of concentration based on some geographic or thematic intellectual rationale. The area of concentration should be defined in writing and approved by a departmental advisor ideally at the start of the junior year and no later than the start of the senior year.


## Summary of Degree Requirements

## 1. University Requirements:

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. See below for a list of the specific courses required for your major.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section of the Undergraduate Bulletin for more details.


## 2. College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999). For Social Science majors, 6 upper level credits must be taken in the Humanities Departments (English, French, German, Greek and Roman Classics, Hebrew, Italian, Japanese (only available at our Japan campus), Philosophy, Religion, Russian, and Spanish), Art History, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.


## 3. Foreign Language/Global Studies Requirements:

- 1) All students must complete the second level of a foreign language;
- 2) All students must complete at least one course from the GenEd Global/World Society category; and
- 3) All students must complete one of the following options:
o Third level of a foreign language;
o Demonstrated proficiency in a foreign language;
o A second General Education Global/World Society course;
o Study Abroad at an approved program; or
o Take one Global Studies course from the list on the CLA College Graduation Requirements page.


## 4. History Major Requirements (36 s.h.)

NOTE: These twelve courses have both level and subject matter distributions. Any given course may count in both Category A (level) and Category B (content area) and possibly Category C as well. Please see the course descriptions for more information on which category/categories are applicable.

- CATEGORY A - COURSE LEVEL
o One history course numbered between 0800 and 1099
o One history course numbered between 1100 and 1899
o Three history courses at the 2000 level
o Three history courses at the 3000 level
o One junior writing seminar in history at the 3000 level
o One senior/capstone writing seminar in history at the 4000 level
o Two history courses at any level
- CATEGORY B - CONTENT AREA
o Two courses in American history
o Two courses in European history
o Three courses in Global/Comparative History, Asian, African, or Latin American history
- CATEGORY C- TIME PERIOD
o Two courses must focus on a pre-1900 period

5. General electives vary according to a student's individual program of study. Consult your academic advisor for more information.

Requirements for the Major

*Please note that the courses above also must satisfy the following content area distributional requirement: two U.S. History courses, two European History courses, and three Asian, African, Latin American or Global/Comparative History courses. Please note also that at least two of the twelve courses used to complete the major must be pre-1900 History courses.

## Distinction in Major

To receive Distinction in Major, students must complete History 4934: Honors Historiography and Research Methods, and History 4997: Honors Thesis Seminar. The end product of the Honors Thesis Seminar is an Honors Thesis, which the student will present at a scholarly conference sponsored by the department. The Honors Thesis will also fulfill the History major's thesis/capstone requirement. Students must maintain a 3.4 GPA in all history courses and a 3.4 GPA in Temple courses overall. Students who are not in the University Honors Program will require special permission to enroll in History 4934 and 4997 - see the History Honors Scholar Program Director, Jay Lockenour (jay.lockenour@temple.edu).

## History Honors Program

To participate in the History Honors Scholar Program, you must first apply to the University Honors office. Any History major who has earned or is in the process of earning 60 credits and has roughly a 3.7 cumulative GPA can apply for the program. The application form is available on the Honors web site: http://honors.temple.edu/. Students in the program take six courses (18 credits), including History 4934: Honors Historiography and Research Methods, History 4997: Honors Thesis Seminar, and four upper-level Honors electives (any department). With careful planning, these Honors courses can ALSO fulfill the requirements for the History major, so that students need not delay graduation. For example, the Honors Thesis Seminar (4997) fulfills the normal "capstone/writing" requirement, and the electives, if chosen from History offerings, will also fulfill major requirements. Students must maintain a 3.4 GPA in History and a 3.4 GPA overall. Make an appointment to meet with the Director of the History Honors Scholar Program, Jay Lockenour (jay.lockenour@temple.edu), for advice on completing the application and to discuss your intellectual interests.

## Requirements for the Minor

A History minor is an ideal complement to other majors and programs at Temple, from medicine to journalism, from computer science to finance, from film to marketing. Students with a minor in history are required to take six (6) courses totaling eighteen (18) semester hours. Of the six courses, at least two (2) must be numbered 2000 or above and at least one courses (1) must be numbered 3000 or above.

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Select two Introductory courses numbered 1000-1999: |  |  | 6 |  |
| History 1000-1999 |  |  |  |  |
| Select at least two 2000-level courses: |  |  |  |  |
|  |  |  | 6 |  |
| History | 2000-2999 | Intermediate History Courses |  |  |
|  |  |  |  |  |
| Select at least one 3000-level course: |  |  | 3 |  |
| History | 3000-3999 | Advanced History Courses |  |  |
|  |  |  |  |  |
| Select one course at any level: |  |  | 3 |  |


| History | $1000-4999$ |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| Total |  |  | 18 |  |

## Suggested Semester-by-Semester Plan

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Foreign Language | 1001 | Foreign Language (first level) | 4 |  |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Foreign Language | 1002 | Foreign Language (second level) | 4 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| History | 1000-1099 | One Introductory Course (United States/Concentration)* | 3 |  |
| History | 1100-1899 | One Introductory Course (Global) | 3 |  |
| Subtotal |  |  | 16 |  |

Sophomore Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Foreign Language/ <br> GenEd | $0800+$ | Foreign Language (third level) or <br> a GenEd Global/World Society course or <br> an Internationally-Focused Course From Approved List | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | $08 x x$ or 09xx | U.S. Society | 3 | GU |
| History | $2000-2999$ | One Intermediate Course (European) | 3 |  |
| Any | $0800-4999$ | One Elective in Any School or College | 2 |  |
| Subtotal |  |  | $\mathbf{1 7}$ |  |

Sophomore Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| History | 2000-2999 | One Intermediate Course (Pre-1900) | 3 |  |
| History | 2000-2999 | One Intermediate Course (United States/Concentration) | 3 |  |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Humanities/CST Course | 3 |  |
| History | 3000-3999 | One Intermediate Course (Global) | 3 |  |
| History | 3000-3999 | One Intermediate Course (European) | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |


| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Subtotal |  |  | 15 |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Humanities/CST Course | 3 |  |
| History | 3000-3999 | One Junior Writing Seminar (Concentration) | 3 | WI |
| History | 4000-4999 | One Intermediate Course (Pre-1900) | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| History | 0800-4999 | One Elective at Any Level (Global) | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| History | 0800-4999 | One Elective at Any Level (Concentration) | 3 |  |
| History | 4000+ | One Capstone Writing Seminar (Concentration) | 3 | WI |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Degree Total |  |  | 123 |  |
| *Fulfillment of concentration and distributional requirements can vary from suggestions here. Please consult an advisor for guidance on fulfilling these requirements. |  |  |  |  |

## Italian

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## Summary of Degree Requirements

## 1. University Requirements

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. See below for a list of the specific courses required for your major.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section of the Undergraduate Bulletin for more details.


## 2. College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999).
- For Humanities majors, 6 upper level credits must be earned in the Social Sciences: African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Geography and Urban Studies, History, Jewish Studies, Latin American Studies, Mathematical Economics, Neuroscience: Systems, Behavior and Plasticity, Political Science, Psychology, Sociology, Women's Studies, or any department in the College of Science and Technology.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.


## 3. Foreign Language/Global Studies Requirements

1) All students must complete the second level of a foreign language;
2) All students must complete at least one course from the GenEd Global/World Society category; and
3) All students must complete one of the following options

- Third level of a foreign language;
- Demonstrated proficiency in a foreign language;
- A second General Education Global/World Society course;
- Study Abroad at an approved program; or
- Take one Global Studies course from the list on the CLA College Graduation Requirements page.


## 4. Major Requirements (30 s.h.)

## Specifically Required courses:

- Italian 1003, 2001, 3096
- Italian 2096 or 4096

Six Elective courses in Italian numbered 2000-4999
5. General electives vary according to a student's individual program of study. Consult your academic advisor for more information.

Requirements for the Major

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Italian | 1003** | Italian Language III | 3 | LB |
| Italian | 2001** | Intermediate Italian | 3 |  |
| Italian | 3096 | Composition II: Advanced Writing Skills | 3 | WI* |
| Italian | Electives | Select six courses numbered 2000+ | 18 |  |
| Select one writing-intensive elective in Italian from list below: |  |  | 3 |  |
| Italian <br> Italian | $\begin{aligned} & 2096 \\ & 4096 \end{aligned}$ | Composition I: Italian Composition \& Conversation or <br> Creative Writing Through Reading |  | WI WI |
| Total |  |  | 30 |  |
|  |  |  |  |  |
| *Indicates writing capstone for the major |  |  |  |  |
| **Students who place out of Italian 1003 will need one additional elective; those who place out of Italian 2001 will need two additional electives. |  |  |  |  |
| Note: Up to two cognate courses in English may be accepted (by permission of the Italian advisor) as part of the required elective courses. |  |  |  |  |

All Temple students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed above and are identified by "WI" in the Attribute column.

## Requirements for the Minor

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Italian | $1002^{*}$ | Italian Language II | 4 | LA |
| Italian | $1003^{*}$ | Italian Language III | 3 | LB |
| Italian | 2001 | Intermediate Italian | 3 |  |
| Italian | Electives | Select three courses numbered 2000+ | 9 |  |
| Total |  |  | $\mathbf{1 9}$ |  |

[^4]All courses must be taught in Italian.

## Requirements for the Special Foreign Language Certificate in Italian

Six courses (20 semester hours), beginning with Italian 1001: Italian Language I and including Italian 2501: Italian for Business.

Students who place out of any course will need additional electives.

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Italian | 1001 | Italian Language I | 4 | LA |
| Italian | 1002 | Italian Language II | 4 | LA |
| Italian | 1003 | Italian Language III | 3 | LB |
| Italian | 2001 | Intermediate Italian | 3 |  |
| Italian | 2501 | Italian for Business | 3 |  |
| Italian | Elective | Select one course numbered 2000+ | 3 |  |
| Total |  |  | $\mathbf{2 0}$ |  |

All courses must be taught in Italian.

## Distinction in Major

To be considered for Distinction in Major in Italian, students must:

- Complete the requirements for the concentration in Italian with a GPA of at least 3.50;
- Have an overall GPA of at least 3.25;
- Be recommended to the chair of the department by the Italian faculty advisor.


## Study Abroad

Students declaring a major or minor in Italian are encouraged to study abroad. Temple has its own campus in Rome, Italy, which offers courses in a variety of fields, including language, art, architecture, and international business. Students interested in studying in Italy should discuss their plans with the Italian faculty advisor as early as possible.

## Suggested Semester-by-Semester Plan

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812, or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Italian | 1001 | Italian Language I | 4 | LA |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Subtotal |  |  | 15 |  |


| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Italian | 1002 | Italian Language II | 4 | LA |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Italian | 1003 | Italian Language III | 3 | LB |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 2 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Italian | 2001 | Intermediate Italian | 3 |  |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| Italian | 2000+ | One 2000+ Italian Course | 3 |  |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Social Science/CST Course | 3 |  |
| Italian | 2000+ | One 2000+ Italian Course | 3 |  |
| Italian | 2000+ | One 2000+ Italian Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Social Science/CST Course | 3 |  |
| Italian | $\begin{gathered} 2096 \\ \text { or } \\ 4096 \\ \hline \end{gathered}$ | ```Composition I: Italian Composition & Conversation or Creative Writing Through Reading``` | $\begin{aligned} & 3 \\ & 3 \\ & \hline \end{aligned}$ | $\overline{\mathrm{WI}}$ WI |
| Italian | 2000+ | One 2000+ Italian Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours Attribute |  |



# Jewish Studies 

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Jewish Studies is an interdisciplinary field that allows students to sample courses across the liberal arts curriculum at Temple University. Central to Jewish Studies is an examination of the history, culture, beliefs, customs, practices, texts, and languages of the Jewish people. It addresses the legacy of over 2,000 years of Jewish life as it has been lived in Jewish communities across the globe. At Temple we pay particular attention to contemporary issues of Jewish culture, identity, and practice. Students can either major or minor in Jewish Studies or do a certificate program in Jewish Secular Studies, a five-course mini-minor.

## Summary of Degree Requirements

## 1. University Requirements:

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. See below for a list of the specific courses required for your major.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section of the Undergraduate Bulletin for more details.


## 2. College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999). For Social Science majors, 6 upper level credits must be taken in the Humanities Departments (English, French, German, Greek and Roman Classics, Hebrew, Italian, Japanese (only available at our Japan campus), Philosophy, Religion, Russian, and Spanish), Art History, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.


## 3. Foreign Language/Global Studies Requirements:

1) All students must complete the second level of a foreign language;
2) All students must complete at least one course from the GenEd Global/World Society category; and
3) All students must complete one of the following options:

- Third level of a foreign language;
- Demonstrated proficiency in a foreign language;
- A second General Education Global/World Society course;
- Study Abroad at an approved program; or
- Take one Global Studies course from the list on the CLA College Graduation Requirements page.


## 4. Major Requirements (33 s.h.)

Specifically Required courses:

- Hebrew 2001 and 2002
- Jewish Studies 4096

Other Requirements:

- One Jewish Studies course numbered 2000-2999.
- Two courses in Jewish Religion selected from the list below.
- Two courses in Jewish History selected from the list below.
- One course in Hebrew language, literature, or culture selected from the list below.


## Electives in Major

- Two electives in Jewish Studies numbered 2000-4999. This requirement cannot doublecount with any of the above requirements.

5. General electives vary according to a student's individual program of study. Consult your academic advisor for more information.

Requirements for the Major

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Language Requirement |  |  |  |  |
| Hebrew | 2001 | Intermediate 1 | 3 | LB |
| Hebrew | 2002 | ```Intermediate 2 or Equivalent approved by a faculty advisor``` | 3 |  |
| *Jewish Studies | 2000-2999 | One course at the 2000 level | 3 |  |
|  |  |  |  |  |
| Two Jewish Religion courses from the following list: |  |  | 6 |  |
| Jewish Studies/Religion <br> Religion <br> Jewish Studies <br> Jewish Studies/Religion <br> Jewish Studies/Religion <br> Political Science <br> Jewish Studies/Religion | 3404 3405 3406 3407 3411 3411 4406 | Dead Sea Scrolls Judaism \& Literature Women in Judaism Jews, America, \& Sports The Philosophies of Judaism Classical Political Philosophy Between the Torah \& the Talmud |  |  |
|  |  |  |  |  |
| *Two Jewish History courses from the following list: |  |  | 6 |  |
| Jewish Studies/History <br> Jewish Studies <br> History <br> Jewish Studies/History <br> Religion <br> Jewish Studies <br> Jewish Studies <br> History <br> Jewish Studies <br> Jewish Studies/Religion <br> Jewish Studies <br> History | 2705 <br> 2706 <br> 2706 <br> 3221 <br> 3401 <br> 3406 <br> 3571 <br> 3571 <br> 3408 <br> 4406 <br> 4896 <br> 4896 | Anti-Semitism/Holocaust/Racism Survey of Jewish History Jewish Diaspora Jewish Experience in America Modern Trends in Judaism Women in Judaism Israel \& the Arabs Israel: History, Politics \& Society Israel in the Middle East Between the Torah \& the Talmud Modern Jewish History Jews, Judaism, \& the Modern World |  | $\begin{aligned} & \text { WI } \\ & \text { WI } \end{aligned}$ |
|  |  |  |  |  |
| *One course in Hebrew language, literature, or culture from the following list: |  |  | 3 |  |


| Jewish Studies/Hebrew | 2797 | Jewish Humor Past \& Present |  | WI |
| :---: | :---: | :---: | :---: | :---: |
| Jewish Studies/Hebrew | 2779 | Love Themes in Hebrew Literature |  |  |
| Religion | 3405 | Judaism \& Literature |  |  |
| Jewish Studies | 3406 | Women in Judaism |  |  |
| Jewish Studies/Religion | 3407 | Jews, America, \& Sports |  |  |
| Jewish Studies | 3408 | Israel in the Middle East |  |  |
| Jewish Studies/Hebrew | 3711 | Israelis \& Palestinians |  |  |
| Jewish Studies | 3250 | Topics: Jews \& Film |  |  |
| Jewish Studies/Religion | 3411 | The Philosophies of Judaism |  |  |
| Political Science | 3411 | Classical Political Philosophy |  |  |
| Hebrew | $\begin{aligned} & 2003+ \\ & 3797 \end{aligned}$ | All Hebrew language courses above 2002 |  |  |
| Jewish Studies/Hebrew | 3797 | Literature \& Art of the Holocaust |  | WI |
| Jewish Studies | Electives | Two electives numbered 2000+ | 6 |  |
| Jewish Studies | 4096 | Independent Study in Jewish Studies | 3 | WI |
|  |  |  |  |  |
| Total |  |  | 33 |  |

*All students must take two writing-intensive courses in their major. In addition to Jewish Studies 4096, students must select one Jewish Studies elective that is writing-intensive.

## Distinction in Major

Jewish Studies majors may graduate with distinction if they have a GPA of 3.5 or better in the major, a cumulative GPA of 3.0 or better, and a grade of 3.5 or better in the capstone course (4096: Individual research project with a specific faculty member, intended for majors in the final semester of coursework).

## Sub-tracks with Concentrations in History or Religion

Interested students should consult with a Jewish Studies advisor to plan an individual program of study.

Requirements for the Minor

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Language Requirement |  |  |  |  |
| Hebrew | 2001 | Intermediate I <br> or <br> Equivalent approved by a faculty advisor | 3 | LB |
|  |  |  |  |  |
| Jewish Studies | $2000-2999$ | One course at the 2000 level | 3 |  |
|  |  |  |  |  |
| One Jewish Religion course from the following list: |  |  |  |  |


| Jewish Studies/Religion <br> Religion <br> Jewish Studies <br> Jewish Studies/Religion <br> Jewish Studies/Religion <br> Political Science <br> Jewish Studies/Religion | 3404 3405 3406 3407 3411 3411 4406 | Dead Sea Scrolls <br> Judaism \& Literature <br> Women in Judaism <br> Jews, America, Sports <br> The Philosophies of Judaism <br> Classical Political Philosophy <br> Between the Torah \& the Talmud |  |  |
| :---: | :---: | :---: | :---: | :---: |
| One Jewish History course from the following list: |  |  | 3 |  |
| Jewish Studies/History <br> Jewish Studies <br> History <br> Jewish Studies/History <br> Jewish Studies <br> Jewish Studies <br> History <br> Jewish Studies <br> Jewish Studies/Religion <br> Jewish Studies <br> History | 2705 <br> 2706 <br> 2706 <br> 3221 <br> 3406 <br> 3571 <br> 3571 <br> 3408 <br> 4406 <br> 4896 <br> 4896 | Anti-Semitism/Holocaust/Racism Survey of Jewish History Jewish Diaspora Jewish Experience in America Women in Judaism Israel \& the Arabs Israel: History, Politics \& Society Israel in the Middle East Between the Torah \& the Talmud Modern Jewish History Jews, Judaism, \& the Modern World |  | $\begin{aligned} & \text { WI } \\ & \text { WI } \end{aligned}$ |
| One course in Hebrew Language, Literature, or Culture from the following list: |  |  | 3 |  |
| Jewish Studies/Hebrew Jewish Studies/Hebrew Religion <br> Jewish Studies <br> Jewish Studies/Religion <br> Jewish Studies <br> Jewish Studies/Hebrew <br> Jewish Studies <br> Jewish Studies/Religion <br> Political Science <br> Hebrew <br> Jewish Studies/Hebrew | 2797 <br> 2779 <br> 3405 <br> 3406 <br> 3407 <br> 3408 <br> 3711 <br> 3250 <br> 3411 <br> 3411 <br> $2003+$ <br> 3797 | Jewish Humor Past \& Present <br> Love Themes in Hebrew Literature <br> Judaism \& Literature <br> Women in Judaism <br> Jews, America, \& Sports <br> Israel in the Middle East <br> Israelis \& Palestinians <br> Topics: Jews \& Film <br> The Philosophies of Judaism <br> Classical Political Philosophy <br> All Hebrew language courses above 2002 <br> Literature \& Art of the Holocaust |  | WI |
| Jewish Studies | Electives | Two upper-level electives | 6 |  |
| Total |  |  | 21 |  |

Requirements for the Jewish Secular Studies Certificate

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Jewish Studies | 2408 | Jewish Secularism/Jewish Civilization I <br> or <br> Jewish Secularism/Jewish Civilization II <br> Note: If both courses are taken, one may be used as an elective below. | 2409 | 3 |
|  |  |  |  |  |
| Select four of the following electives: | 12 |  |  |  |



## Suggested Semester-by-Semester Plan

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812, or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Hebrew | 1001* | Elements I | 4 | LA |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Hebrew | 1002** | Elements II | 4 | LA |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Hebrew | 2001* | Intermediate I (2000+ Humanities) | 3 | LB |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 2 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Hebrew | 2002** | Intermediate II (2000+ Humanities) | 3 |  |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |


| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| :---: | :---: | :---: | :---: | :---: |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| Jewish Studies | 2000-2999 | One 2000-2999 Jewish Studies Course | 3 | WI+ |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| Jewish Studies | 2000+ | One 2000+ Jewish Studies Course | 3 |  |
| See Above | 3000+ | One Jewish Religion Course From Approved List | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| See Above | 2000+ | One Jewish History Course From Approved List | 3 |  |
| See Above | 3000+ | One Jewish Religion Course From Approved List | 3 |  |
| Jewish Studies | 2000+ | One 2000+ Jewish Studies Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| See above | 2000+ | One Jewish History Course From Approved List | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| See Above | 2000+ | One Hebrew Language, Literature, or Culture Course From Approved List | 3 |  |
| Jewish Studies | 4096 | Independent Study in Jewish Studies | 3 | WI |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Degree Total |  |  | 123 |  |
| *Course typically offered only in the fall semester. <br> **Course typically offered only in the spring semester. <br> +At least one required course for the major beside 4096 must be a writing-intensive course. This course can be either a general or an area elective. |  |  |  |  |

## Latin American Studies

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The Latin American Studies Major is an interdisciplinary program with a focus on the study of social problems of Latin America. Latin America's art, literature, and religious thought have been universally recognized for their high quality and contribution to world civilization. At the same time, extreme social inequality persists in Latin America in addition to rapid urban growth, dramatic ecological change, and political upheavals with powerful local and global implications. The Latin American Studies major offers a variety of courses that examine these issues. To complete the major, students must take twelve 3-credit courses in Latin American Studies and demonstrate a reading and speaking knowledge of Spanish or Portuguese.

## Requirements for the Major

All Temple students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed below and are identified by "WI" in the Attribute column.

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Introduction to Latin American Studies - Select one: |  |  | 3-6 |  |
| Latin American Studies | 1001 | Perspectives on Latin America <br> or <br> The Latin American Studies Semester Program (LASS) |  |  |
| Select one of the following writing intensive courses: |  |  | 3 | WI |
| Latin American Studies | $\begin{gathered} 2097 \\ \text { or } \\ 2098 \\ \text { or } \\ 4698 \end{gathered}$ | ```Writing Seminar I or The Legacy of Mesoamerica or Revolutionary Mexico``` |  |  |
| Latin American Studies | Electives numbered 1000- 4999 | Select eight courses, excluding courses used for another part of the major, from the approved list of undergraduate courses in Latin American Studies. See advisor for this list. | 24 |  |


|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Spanish-American Literature Courses - Select one: |  |  | 3 |  |
| Spanish | $\begin{aligned} & 3241 \\ & \text { or } \\ & 3243 \\ & \text { or } \\ & \text { any } 4000+\text {-level } \\ & \text { course } \end{aligned}$ | Spanish-American Culture \& Civilization <br> or <br> Puerto Rican Culture \& Civilization <br> or <br> Spanish-American literature course taught in Spanish from the approved list of undergraduate courses in Latin American Studies |  |  |
| Latin American Studies | 4097 | Latin American Studies Seminar (offered only one time per year) | 3 | WI* |
| Total |  |  | 36-39 |  |
| * Indicates Writing Capstone for the Major |  |  |  |  |

## Requirements for the Minor

The Latin American Studies Minor enables students to combine the requirements of their majors with the study of Latin America. It is designed to be of particular value to students who intend to engage in technical, professional, business, or government work involving Latin America. To earn the minor, students must complete six 3-credit courses in subjects with a Latin American emphasis and demonstrate a reading knowledge and speaking facility of Spanish or Portuguese.

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Select one Introductory Course: |  |  | 3-6 |  |
| Latin American Studies | 1001 | Perspectives on Latin America <br> or <br> Latin American Studies Semester Program (LASS) |  |  |
| Latin American Studies | Electives numbered 1000-4999 | Select four or five courses in Latin American Studies (depending on number of credits of chosen introductory course) | 12-15 |  |
| Total |  |  | 18 |  |
| Students also must demonstrate reading knowledge and speaking facility of Spanish or Portuguese through one of the following methods: |  |  |  |  |
|  |  | ```2000+ or Latin American Studies Semester or Proficiency examination``` | $3$ <br> 6 |  |
| Please note: LASS Program counts as one introductory course and one elective. |  |  |  |  |

## Distinction in Major

Latin American Studies majors may graduate with distinction in the major if they have a GPA of at least 3.5 in the major and a cumulative GPA of at least 3.0.

## Latin American Studies Semester (LASS)

The Latin American Studies Semester (LASS) has been offered every spring semester since 1973. It is a program designed to provide an intensive experience in the study of the Spanish language in combination with an interdisciplinary study of life and contemporary issues in Latin America.

LASS is an integration of several courses, totaling 17 semester hours credit, and must be taken as a package. Because of the credit-hour load and because the objective is to concentrate on Spanish and Latin American Studies, no other courses may be taken without prior approval.

The prerequisite for participation in LASS is two semesters of university-level Spanish or the equivalent. Students with more advanced levels of course background are encouraged to participate in the program as well. All participants in the program may expect to achieve marked improvement in Spanish fluency in only one semester.

- Morning sessions held from 9:00 to 11:50 on Mondays, Wednesdays and Fridays offer language instruction and conversation practice at intermediate and advanced levels guided by native or near native speakers.
- Morning sessions held from 9:30 to 10:50 and from 11:00 to 12:20 on Tuesdays and Thursdays focus on Latin American culture and economic development.
- A LASS Seminar held on Tuesdays and Thursdays from 1:10 to 3:00 highlights a series of topics in Latin American and Latino studies, includes presentations by guest speakers, and also provides for personal contact with the Latino community of Philadelphia.

An integral part of the LASS program is a three-week trip to the Costa Rica. The trip is akin to a laboratory in which students can practice their developing language skills. They experience firsthand a Latin American country's culture, history, and social development.

## Suggested Semester-by-Semester Plan

| Freshman Year - 1st Semester |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08 xx or 09xx | Quantitative Literacy | 4 | GQ |
| Spanish | 1001 | Basic I | 4 | LA |
| GenEd | $08 x x$ or 09xx | Race \& Diversity | 3 | GD |
| Subtotal |  | $\mathbf{1 5}$ |  |  |
|  |  |  |  |  |


| Freshman Year - 2nd Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Spanish | 1002 | Basic II | 4 | LA |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Latin American Studies | 1001* | Perspectives on Latin America | 3 |  |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Spanish | 1003 | Intermediate | 3 | LB |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08 xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Any | 0800-4999 | One Elective in Any School or College | 2 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Spanish | 2001 | Conversational Review | 3 |  |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Latin American Studies | 2000+ | Latin American Studies Course From Approved List | 3 |  |
| Latin American Studies | 2000+ | Latin American Studies Course From Approved List | 3 |  |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Spanish | 2002 | Hispanic Readings | 3 |  |
| Spanish | 2096 | Composition | 3 | WI |
| Latin American Studies | 2000+ | Latin American Studies Course From Approved List | 3 |  |
| Latin American Studies | 2000+ | Latin American Studies Course From Approved List | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Spanish | 3001 | Advanced Composition \& Conversation | 3 |  |
| Latin American Studies | 2000+ | Latin American Studies Course From Approved List | 3 |  |
| Latin American Studies | 2000+ | Latin American Studies Course From Approved List | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Latin American Studies | 2097 <br> or <br> 2098 <br> or <br> 4698 | Writing Seminar I <br> or <br> The Legacy of Mesoamerica or <br> Revolutionary Mexico | 3 | WI <br> WI <br> WI |
| Subtotal |  |  | 15 |  |


| Senior Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Spanish | $\left.\left\lvert\, \begin{array}{c}3241^{* *} \\ \text { or } \\ 3243 \\ \text { or } \\ 4000+ \\ \hline 000+\end{array}\right.\right]$ | ```Spanish-American Culture & Civilization or Puerto Rican Culture & Civilization or a 4000+ Literature Course``` | 3 |  |
| Latin American Studies | 2000+ | Latin American Studies Course From Approved List | 3 |  |
| Latin American Studies | 2000+ | Latin American Studies Course From Approved List | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Latin American Studies | 4097*** | Latin American Studies Seminar | 3 | WI |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Degree Total |  |  | 123 |  |
| *LASS can replace Latin American Studies 1001; see an advisor about this option. |  |  |  |  |
| **Prerequisites for Spanish 3241 are Spanish 1001, 1002, 1003, 2001, 2002, 2096, and 3001. Prerequisite for Spanish 3243 are Spanish 1001, 1002, 1003, 2001, 2002, 2096. Check prerequisites for 4000+ Spanish literature option. |  |  |  |  |
| ***Latin American Studies 4097 offered only once a year; see advisor before senior year. |  |  |  |  |

## Lesbian, Gay, Bisexual \& Transgender (LGBT) Minor

TBA, Advising Coordinator

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Gayle Schooley, Administrator
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LGBT Studies analyzes gender, sexuality, and sexual orientation as they are understood by various disciplines and in cross-cultural perspectives. The minor enables students to become familiar with concepts, theories, history, literature, and political and sociological issues concerning the LGBT community. It also gives students an opportunity to examine and think critically about the intersections of sexuality, sex, and gender, and become aware of the diversity of attitudes about sexuality in different cultures and historical eras.

## Requirements for the Minor

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| LGBT | 2405 | Gay \& Lesbian Lives | 3 |  |
| LGBT | 4489 | Field Work in LGBT Studies | 3 |  |
|  |  |  |  |  |

Four electives are required: Among those courses, minors must take either two LGBT themed courses and two gender themed courses or three LGBT themed courses and one gender themed course. See an advisor for options, some of which are listed here:

| Women's Studies | 0832 | Politics of Identity in America | 3 | GD |
| :--- | :--- | :--- | :---: | :---: |
| Women's Studies | 0932 | Honors Politics of Identity in American | 3 | GD |
| Women's Studies (cross-listed as <br> English 3097) | 3097 | Feminist Theory | 3 | WI |
| Sociology (cross-listed as <br> Women's Studies 3546) | 3546 | Sexuality \& Gender | 3 |  |
| History (cross-listed as Women's | 2109 | Sexuality \& Gender in American History | 3 |  |
| Studies 2109) |  |  | $\mathbf{1 8}$ |  |

## Intercollegial B.A. Degree in Mathematical Economics

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The Departments of Economics and Mathematics offer the Mathematical Economics program as a platform for systematic concentration in the mathematical approach to economics. Economics has progressed in the last several decades by making extensive use of mathematical techniques. As a result, students who wish to pursue graduate study in economics, finance, accounting, and other disciplines that make an extensive use of economics need a thorough grounding in both economics and mathematics. The Mathematical Economics curriculum provides this grounding
with a broad selection of courses that cover all important areas of economics and the mathematical tools required for a critical, deep mastery of these areas. This program is especially recommended for those students who intend to pursue graduate studies in economics. The program and its requirements are described in full in the Intercollegial Programs section of this Bulletin.

# Neuroscience: Systems, Behavior \& Plasticity 

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A major in Neuroscience enables students to pursue a curriculum in several departments, colleges, and schools at Temple University in one of the most dynamic areas of science. Neuroscience is an interdisciplinary field addressing neural and brain function at multiple levels. It encompasses a broad domain that ranges from molecular genetics and neural development, to brain processes involved in cognition and emotion, to mechanisms and consequences of neurodegenerative disease. The field of neuroscience also includes mathematical and physical principles involved in modeling neural systems and in brain imaging. The undergraduate, interdisciplinary Neuroscience Major will culminate in a Bachelor of Science degree. Many high-level career options within and outside of the field of neuroscience are open to students with this major. This is a popular major with students aiming for professional careers in the health sciences such as in medicine, dentistry, pharmacy, physical and occupational therapy, and veterinary science. Students interested in graduate school in biology, chemistry, communications science, neuroscience, or psychology are also likely to find the Neuroscience Major attractive.

The Bachelor of Science degree in Neuroscience includes 52-54 required credits: 25 credits in Neuroscience, 6-8 credits in electives on neuroscience topics from a variety of participating departments, and 21 credits of co-requisite courses in Biology, Chemistry, and Psychology. Students majoring in Neuroscience will be strongly encouraged to participate in research by taking courses in independent study as part of their elective credits for the major. Independent study opportunities will be offered in many of the laboratories of the more than 130
neuroscientist faculty members in the various colleges and schools participating in Temple University’s Neuroscience Program.

## Distinction in Neuroscience Major

Majors in Neuroscience: Systems, Behavior, Plasticity have the opportunity to be awarded departmental distinction upon graduation. Graduation with Distinction can be achieved by maintaining a Grade Point Average of 3.0 or better in all Neuroscience Courses, completing two semesters of Independent Study in Neuroscience (Neuroscience 4182 \& 4282) with an A- or better, and successfully completing a neuroscience research project based on the independent study work and described in a research paper and poster presented to Neuroscience Program faculty and students.

## Requirements for the Major

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Biology | 1012 | General Biology II | 4 |  |
| Chemistry | 1031/1033 | General Chemistry I and Lab | 4 |  |
| Chemistry | 1032/1034 | General Chemistry II and Lab | 4 |  |
| Psychology | 1001 | Introduction to Psychology | 3 |  |
| Psychology | 1003 | Statistics for Psychology | 3 |  |
| Neuroscience | 1051 | Fundamentals of Neuroscience | 3 |  |
| Neuroscience | 2001 | Functional Neuroanatomy | 3 |  |
| Neuroscience | 2121 | Development/Plasticity/Repair | 3 |  |
| Neuroscience | 2122 | Cellular Neuroscience | 3 |  |
| Neuroscience | 2222 | The Neurobiology of Disease | 3 |  |
| Neuroscience | 3087 | Techniques in Neuroscience | 3 |  |
| Neuroscience | 3096 | Conducting Neuroscience Research | 3 | WI |
| Neuroscience | 4197 | Capstone in Neuroscience | 4 |  |
|  |  |  |  |  |
| Choose one of the following courses: |  |  | 3 |  |
| Psychology Psychology | $\begin{aligned} & 2501 \\ & 2502 \end{aligned}$ | Foundations of Behavioral Neuroscience Foundations of Cognitive Neuroscience |  |  |
|  |  |  |  |  |
| Select two electives from the following list: |  |  | 6-8 |  |
| Communication Sciences \& Disorders | 3235 | Human Neuroscience |  |  |
| Communication Sciences \& Disorders | 3382 | Independent Study in Communication Sciences |  |  |
| Philosophy | 2144 | Introduction to the Philosophy of Mind |  |  |
| Neuroscience | 3000 | Current Topics in Neuroscience |  |  |
| Neuroscience | 4182 | Independent Study in Neuroscience 1 |  |  |
| Neuroscience | 4282 | Independent Study in Neuroscience 2 |  |  |
| Psychology | 2102 | Foundations of Evolutionary and Comparative Psychology |  |  |
| Psychology | 3306 | Neuroscience of Development and Aging |  |  |
| Psychology | 3561 | Psychopharmacology |  |  |
| Psychology | 3566 | Neurobiology of Learning and Memory |  |  |
| Psychology | 4182 | Independent Study in Cognitive Neuroscience I |  |  |
| Psychology | 4282 | Independent Study in Cognitive Neuroscience II |  |  |


| Biology | 3082 | Independent Research II |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: |
| Biology | 3096 | Cell Structure \& Function |  | WI |  |
| Biology | 3352 | Systems Neuroscience |  |  |  |
| Biology | 3354 | Neural Basis of Animal Behavior |  |  |  |
| Biology | 3356 | Organization \& Development of the Nervous System |  |  |  |
| Chemistry | 3881 | Cooperative Research |  |  |  |
| Chemistry | 4107 | Drug Analysis |  |  |  |
| Physics | Electricity and Magnetism |  |  |  |  |
|  |  |  |  |  |  |
| Total |  |  |  |  |  |

Please note: Students pursuing the BS degree in Neuroscience are not required to complete the CLA collegiate Foreign Language/Global Studies requirement. Neuroscience majors must only complete the GenEd requirement of one World Society course.

Students should check prerequisites for all courses.
All Temple students must take a minimum of two writing-intensive courses.

## Neuroscience Research Minor

The Neuroscience Research Minor expands opportunities for Temple students to get research experience and to become more competitive in their applications to graduate and professional schools. The required courses in the Neuroscience Research Minor focus on basic neuroscience, cellular and molecular neuroscience, and techniques. In addition to formal coursework, independent study resulting in a research project is required. The Neuroscience Research Project is a unique project developed over two semesters of independent study. The project is submitted in written form (research article format) and is presented to Neuroscience faculty members and graduate students as a poster. This project may not overlap with projects for other programs (e.g., Honors). Because of some overlap in coursework, the students must choose to minor in either the Neuroscience Research or the Cognitive Neuroscience minor.

Requirements for the Minor

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Four required courses: |  |  |  |  |
| Neuroscience | 1051 | Fundamentals of Neuroscience | 3 |  |
| Neuroscience | 2122 | Cellular Neuroscience | 3 |  |
| Neuroscience | 2001 | Functional Neuroanatomy | 3 |  |
| Neuroscience | 3096 | Conducting Neuroscience Research | 3 | WI |
|  |  |  |  |  |
| Select two electives from the course offerings below: | $6-7$ |  |  |  |
| Neuroscience | 2121 | Development/Plasticity/Repair |  |  |
| Neuroscience | 2222 | The Neurobiology of Disease |  |  |
| Neuroscience | 3000 | Current Topics in Neuroscience |  |  |
| Neuroscience | 3087 | Techniques in Neuroscience |  |  |
| Neuroscience | 4182 | Independent Study in Neuroscience 1 |  |  |
| Neuroscience | 4282 | Independent Study in Neuroscience 2 |  |  |


| Psychology | 2501 | Foundations of Behavioral Neuroscience |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Psychology | 2502 | Foundations of Cognitive Neuroscience |  |  |
| Psychology | 3141 | Neurobiology and Evolution of Social Behavior |  |  |
| Psychology | 3306 | Neuroscience of Development and Aging |  |  |
| Psychology | 3561 | Psychopharmacology |  |  |
|  |  |  |  |  |
| Total |  |  | $\mathbf{1 8 - 1 9}$ |  |

## Suggested Semester-by-Semester Plan

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812, or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Subtotal |  |  | 14 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| Neuroscience | 1051 | Fundamentals of Neuroscience | 3 |  |
| Psychology | 1001 | Introduction to Psychology | 3 |  |
| Biology | 1012 | General Biology II | 4 |  |
| Subtotal |  |  | 16-17 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Neuroscience | 2001 | Functional Neuroanatomy | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| CLA/CST | 2000+ | One 2000+ CLA/CST Elective | 3 |  |
| Psychology | 1003 | Statistics for Psychology | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Humanities/CST Course | 3 |  |
| Neuroscience | 3096 | Conducting Neuroscience Research | 3 | WI |



# Philosophy 

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The Philosophy Department offers a 36-credit B.A. degree program. The program is designed to provide a solid foundation for various professions in business, government, and professional schools (such as law), as well as an excellent background for the further study of philosophy. The department makes special provisions for students who have chosen the major as preparation for entry into law school. These students should follow a path slightly different from that of traditional majors, as indicated below. The Philosophy Department always has many majors who are transfer students. Students should be sure to see a departmental advisor to make the necessary adjustments for their progress through the major.

## Summary of Degree Requirements

## 1. University Requirements:

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. See below for a list of the specific courses required for your major.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section of the Undergraduate Bulletin for more details.


## 2. College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999). For Humanities majors, 6 upper level credits must be earned in the Social Sciences: African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Geography and Urban Studies, History, Jewish Studies, Latin American Studies, Mathematical Economics, Neuroscience: Systems, Behavior and Plasticity, Political Science, Psychology, Sociology, Women's Studies, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in all CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.


## 3. Foreign Language/Global Studies Requirements:

1) All students must complete the second level of a foreign language;
2) All students must complete at least one course from the GenEd Global/World Society category; and
3) All students must complete one of the following options:

- Third level of a foreign language;
- Demonstrated proficiency in a foreign language;
- A second General Education Global/World Society course;
- Study Abroad at an approved program; or
- Take one Global Studies course from the list on the CLA College Graduation Requirements page.


## 4. Major Requirements: 12 courses in Philosophy ( $\mathbf{3 6}$ s.h.)

- Specifically Required Courses: Philosophy 1066, 1196, 2161, 2172
- Other Requirements:
o One course in Ethics, selected from Philosophy 3222, 3226, 4225
o One Senior Seminar, selected from Philosophy 4298 or 4297
- Electives in Major
o Six courses in Philosophy numbered 2000-4999 (may not overlap with any of the above requirements).

5. General electives vary according to a student's individual program of study. Consult your academic advisor for more information.

Requirements for the Major

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Philosophy | 1066 | Introduction to Logic | 3 | QB |
| Philosophy | 2161 | History of Philosophy: Greek | 3 |  |
| Philosophy | 2172 | History of Philosophy: Modern | 3 |  |
| Philosophy | 1196 | Introduction to Philosophy | 3 | WI |
|  |  |  |  |  |
| Select one Ethics course: | 3222 |  |  |  |
| Philosophy | 3226 |  |  |  |
| Philosophy |  |  |  |  |
| Philosophy | 4225 | Contemporary Ethical Theory <br> Classics in Moral Philosophy <br>  <br> 1 <br> Metaethics | 3 |  |
|  |  |  |  |  |
| Select one Senior Seminar: |  | 3 |  |  |


| Philosophy | 4298 | Senior Seminar <br> or <br> Pre-Law Tutorial | WI |  |
| :--- | :--- | :--- | :--- | :---: |
| Philosophy | 4297 |  |  |  |
|  |  | 18 |  |  |
| Six additional Philosophy courses at the 2000+ level |  |  |  |  |
| Note: Philosophy 2196 does NOT count as an elective for the Philosophy major. |  |  |  |  |

All Temple students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed above and are identified by "WI" in the Attribute column.

## Suggestions for the Philosophy Major with a Pre-Law Emphasis

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Philosophy | 1196 | Introduction to Philosophy | 3 | WI |
| Philosophy | 1055 | Critical Thinking | 3 |  |
| Philosophy | 2161 | History of Philosophy: Greek | 3 |  |
| Philosophy | 2172 | History of Philosophy: Modern | 3 |  |
| Philosophy | 3243 | Philosophy of Law | 3 |  |
| Philosophy | 4297 | Pre-Law Tutorial | 3 | WI |
| Philosophy | 3085 | Pre-Law Internship | 3 |  |
| Philosophy | $2000+$ | 5additional philosophy courses at the 2000+ level | 15 |  |
|  |  |  |  |  |
| Total |  |  | $\mathbf{3 6}$ |  |

## Distinction in Major

Successful completion of Philosophy 4999: Honors Thesis.

## Requirements for the Minor

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Select one Introductory Philosophy course: |  |  | 3 |  |
| Philosophy Philosophy | $\begin{aligned} & 1196 \\ & 1001 \end{aligned}$ | Introduction to Philosophy Philosophical Challenges to the Individual |  | IN |
| Select one from the following list: |  |  | 3 |  |
| Philosophy Philosophy | $\begin{aligned} & 1066 \\ & 1055 \\ & \hline \end{aligned}$ | Introduction to Logic Critical Thinking |  | QB |
| Select one History of Philosophy course: |  |  | 3 |  |
| Philosophy Philosophy | $\begin{aligned} & 2161 \\ & 2172 \\ & \hline \end{aligned}$ | History of Philosophy: Greek History of Philosophy: Modern |  |  |
| Select one Ethics course: |  |  | 3 |  |


| Philosophy Philosophy Philosophy | $\begin{aligned} & 3222 \\ & 3226 \\ & 4225 \end{aligned}$ | Contemporary Ethical Theory Classics in Moral Philosophy ${ }^{1}$ Metaethics |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Three additional Philosophy courses: |  |  |  |  |
| Philosophy | 2000+ | Three electives numbered at the 2000+ level or higher Note: Philosophy 2196 does NOT count as an elective for the Philosophy minor. | 9 |  |
| Total |  |  | 21 |  |

## Suggested Semester-by-Semester Plan for the Philosophy Major

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Foreign Language | 1001 | Foreign Language (first level) | 4 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Foreign Language | 1002 | Foreign Language (second level) | 4 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Philosophy | 1066 | Introduction to Logic | 3 | QB |
| Philosophy | 1196 | Introduction to Philosophy | 3 | WI |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Atribute |
| Foreign Language/ GenEd | 0800+ | Foreign Language (third level) or GenEd Global/World Society course or Internationally Focused Course From Approved List | 3 | GG |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Philosophy | 2161 | History of Philosophy: Greek | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 2 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Philosophy | 2172 | History of Philosophy: Modern | 3 |  |


| Philosophy | 2000+ | One 2000+ Philosophy Course | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Subtotal |  |  | 15-16 |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Social Science/CST Course | 3 |  |
| Philosophy <br> Philosophy <br> Philosophy | 3222 or 3226 or 4225 | ```Contemporary Ethical Theory or Classics in Moral Philosophy or Metaethics``` | 3 |  |
| Philosophy | 2000+ | One 2000+ Philosophy Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Social Science/CST Course | 3 |  |
| Philosophy | 2000+ | One 2000+ Philosophy Course | 3 |  |
| Philosophy | 2000+ | One 2000+ Philosophy Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Philosophy | 2000+ | One 2000+ Philosophy Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| Philosophy <br> Philosophy | $\begin{aligned} & 4298^{*} \\ & \text { or } \\ & 4297^{*} \\ & \hline \end{aligned}$ | Senior Seminar or Pre-Law Tutorial | 3 | WI <br> WI |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Philosophy | 2000+ | One 2000+ Philosophy Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Degree Total |  |  | 123 |  |
| *Philosophy 4298/4297 may not be offered every semester. Check with advisor for offerings. |  |  |  |  |

## Suggested Semester-by-Semester Plan for the Philosophy Major with a Pre-Law

 Emphasis| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Foreign Language | 1001 | Foreign Language (first level) | 4 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Subtotal |  |  | 15 |  |

Freshman Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Foreign Language | 1002 | Foreign Language (second level) | 4 |  |
| GenEd | 08 xx or 09xx | Race \& Diversity | 3 | GD |
| Philosophy | 1055 | Critical Thinking | 3 |  |
| Philosophy | 1196 | Introduction to Philosophy | 3 | WI |
| Subtotal |  |  | $\mathbf{1 6}$ |  |

Sophomore Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Foreign Language/ | 0800+ | Foreign Language (third level) or <br> GenEd | GenEd Global/World Society course or <br> Internationally Focused Course From Approved List | 3 |
| GG |  |  |  |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Philosophy | 2161 | History of Philosophy: Greek | 3 |  |
| Any | O800-4999 | One Elective in Any School or College | 2 |  |
| Subtotal |  |  | $\mathbf{1 7}$ |  |

Sophomore Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| GenEd | 08xx or 09xx | Arts | $3-4$ | GA |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Philosophy | 2172 | History of Philosophy: Modern | 3 |  |
| Philosophy | $2000+$ | One 2000+ Philosophy Course | 3 |  |
| Subtotal |  |  | $\mathbf{1 5 - 1 6}$ |  |

Junior Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| CLA/CST | $2000+$ | One 2000+ Social Science/CST Course | 3 |  |
| Philosophy | $2000+$ | One 2000+ Philosophy Course | 3 |  |
| CLA/CST | $2000+$ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |
| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |
|  |  |  |  |  |


| Junior Year - 2nd Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Social Science/CST Course | 3 |  |
| Philosophy | 3243** | Philosophy of Law | 3 |  |
| Philosophy | 2000+ | One 2000+ Philosophy Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Philosophy | 2000+ | One 2000+ Philosophy Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| Philosophy | 4297* | Pre-Law Tutorial | 3 | WI |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Philosophy | 3075** | Pre-Law Seminar | 3 |  |
| Philosophy | 3085** | Pre-Law Internship | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Degree Total |  |  | 123 |  |
| *Course may not be offered every semester. Check with advisor for offerings. <br> **Philosophy 3085 must be taken with Philosophy 3075. These courses are typically offered only in the spring, as is <br> Philosophy 3243. |  |  |  |  |

## Political Science

## 408 Gladfelter Hall

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Belinda Wilson, Administrator
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The Political Science major and minor provide a systematic study of politics in the United States (federal, state, and local) and foreign countries. Students will have an opportunity to compare United States politics and policy to those of other nations and to study the relationship among states within the international system. Special emphasis will be placed on using theoretical tools to study the role institutions and social relations play in shaping political outcomes, as well as the relationship between politics and economics (political economy).

The key educational goal for political science students is analytical thinking. Students will recognize and understand various patterns in the distribution of political power and recurrent models of political behavior. Students will also gain insight into the relationship between the distribution of resources and power within society and political outcomes. As politics inherently involves how societies distribute life opportunities, students will also reflect upon the moral choices involved in political life. The department teaches students how to develop the capacity to conduct empirical research in order to illuminate and revise theoretical models of politics. Students will be expected to use a full range of data and to write clearly.

Political Science graduates pursue a wide range of careers. They may work in government offices (at all levels), political campaigns, private voluntary organizations, unions and community organizations, as well as the private sector. Some pursue teaching careers. A degree in Political Science is also excellent preparation for law school.

The department can arrange internships, which are typically linked to academic study. In addition, our Experiential Learning Program offers internships combined with academic seminars every term.

The department has two important student organizations: the Political Science Majors Association and the Political Science Honor Society - Pi Sigma Alpha, Temple Chapter.

## Course sequencing for Political Science Majors

Students begin the major by taking four introductory courses (Political Science 1101: The American Political System, Political Science 1201: Foreign Government and Politics, Political Science 1301: International Politics, and Political Science 2496: Introduction to Political Philosophy). Courses should be sequenced so that students take the introductory courses before the upper-level courses. Political Science 1101 is an introduction to U.S. politics and should be taken before upper-level courses in this area. Similarly, Political Science 1201 introduces foreign governments and precedes upper-level courses in this field. Political Science 1301 introduces
international politics and is a prerequisite for upper-level courses in this subject matter. Political Science 2496 introduces political theory and should be taken after a student has had several Political Science courses and should precede upper-level theory courses.

Once the introductory courses are completed, students can move on to the electives at the upper level (numbered 2000-4999), of which 3 are needed. Students should pay particular attention to the order in which they take the research methods-capstone sequence (which is taken concurrent with the electives; see notes below). The first course in this sequence is Evidence and Knowledge (Political Science 2503), a research design course that teaches students how to conduct empirical research, an essential skill for successfully completing the upper-level courses. Evidence and Knowledge will lay the foundation for the next two capstone preparation courses (Political Science 3501-3599). These research-intensive courses focus on an advanced topic, like other upper level courses, but they also place an emphasis on sharpening the research skills covered in the first course. Once two capstone prep/research intensive courses are completed, the student enrolls in a capstone seminar, the culminating experience of the Political Science major.

## Summary of Degree Requirements

## 1. University Requirements:

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. See below for a list of the specific courses required for your major.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section of the Undergraduate Bulletin for more details.


## 2. College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999). For Social Science majors, 6 upper level credits must be taken in the Humanities Departments (English, French, German, Greek and Roman Classics, Hebrew, Italian, Japanese (only available at our Japan campus), Philosophy, Religion, Russian, and Spanish), Art History, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.


## 3. Foreign Language/Global Studies Requirements:

1) All students must complete the second level of a foreign language;
2) All students must complete at least one course from the GenEd Global/World Society category; and
3) All students must complete one of the following options:

- Third level of a foreign language;
- Demonstrated proficiency in a foreign language;
- A second General Education Global/World Society course;
- Study Abroad at an approved program; or
- Take one Global Studies course from the list on the CLA College Graduation Requirements page.


## 4. Major Requirements (33 s.h.)

Specifically Required courses:

- Political Science 1101, 1201, 1301, 2496
- Political Science 2503
- Two Research Preparatory courses numbered Political Science 3501-3599
- Political Science 4896


## Electives in Major

- 3 courses in Political Science numbered 2000-4999, that are not used for any of the above requirements.

5. General electives vary according to a student's individual program of study. Consult your academic advisor for more information.

Requirements for the Major

| Subject | Course | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Political Science | 1101 | The American Political System (Honor Students take 1911) | 3 |  |
| Political Science | 1201 | Foreign Governments \& Politics (Honor Students take 1921) | 3 |  |
| Political Science | 1301 | International Politics (Honor Students take 1931) | 3 |  |
| Political Science | 2496 | Introduction to Political Philosophy | 3 | WI |
| Political Science | 2503 | Evidence and Knowledge | 3 |  |
| Political Science | 4896 | Capstone Seminar in Political Science | 3 | WI |
| Political Science |  | Select 2 Research Preparatory courses numbered 3501-3599 | 6 |  |
|  |  |  |  |  |
| Political Science | Electives | Select 3 upper-level courses numbered 2000-4999 (with the exception of <br> $2496)$ | 9 |  |
|  |  |  |  |  |
| Total |  |  | $\mathbf{3 3}$ |  |

Note: Political Science 4896 is the Capstone course for the major and should be taken in the senior year after the completion of Political Science 1101, 1201, 1301, 2496, 2503, three additional Political Science courses numbered 2000-4999, and two Research Preparatory courses numbered Political Science 3501-3599. Not all courses are offered every semester. Please check the Class Schedule for actual course offerings each semester.

Note: All Temple students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed above and are identified by "WI" in the Attribute column.

## Requirements for the Minor

| Subject | Course \# Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- |
| Introduction - select two |  | 6 |  |
| Political Science | 1101 | The American Political System (Honor Students take 1911) |  |
| Political Science | 1201 |  |  |
| Political Science | 1301 |  |  |
| Political Science | 2496 | Foreign Governments \& Politics (Honor Students take 1921) <br> International Politics (Honor Students take 1931) <br> Introduction to Political Philosophy |  |
|  |  |  |  |
| Political Science | Electives | Select 4 upper-level courses numbered 2000-4999 (with the <br> exception of 2496) | 12 |
|  |  |  |  |
| Total |  |  | $\mathbf{1 8}$ |

## Special Programs

Political Science Honors Program: The Political Science Honors Program is designed to give highly motivated Political Science students the opportunity to take academically rigorous honors seminars with other honors students, and to acquire the skills necessary to undertake in-depth independent research on topics of interest. The Department's Honors Program is excellent preparation for graduate school, and deepens the information literacy goals of the General Education requirement.

Political Science majors who have completed their sophomore year with a 3.6 GPA or above are eligible to be a member of the Departmental Honors Program in Political Science. Departmental Honors students are allowed to take the junior (Political Science 3996) and senior (Political Science 4996) capstones. Students who pass both capstones with a B or better will graduate with Distinction in the Major. In addition, Political Science 3996 counts as an upper-level elective and writing intensive course and Political Science 4996 counts as the senior capstone requirement.

## Admission into the Departmental Honors Program

Eligible students will be contacted via e-mail in the spring semester. Students who believe they are eligible for the program but who were not contacted are encouraged to contact the Political Science Honors Director, Dr. Orfeo Fioretos, kof@temple.edu.

Funding and Support: Honors Program students may apply for financial support to cover research-related activities, such as visits to archives, travel to present a scholarly paper, etc., through the Creative Arts, Research and Scholarship (CARAS) Program: www.temple.edu/vpus/opportunities/CARAS.htm.

Funding is also available through the Diamond Research Scholars Program: www.temple.edu/vpus/opportunities/ResearchScholars.htm.

Honors students are also encouraged to submit their completed senior thesis to the Library Prize for Undergraduate Research: http://guides.temple.edu/libraryprize.

Internship/Experiential Learning: The internship experience provides students the opportunity to learn more about the discipline in an actual work placement. Students may count up to 6 credits towards the requirements of the major (major electives) in approved, unpaid internship placements. (Additional credits may count toward free electives; check with your academic advisor.) Interested students should write to Dr. Orfeo Fioretos, Undergraduate Chairperson, kof@temple.edu, for more information.

The Pennsylvania Capital Semester: Open to students in any major, the Pennsylvania Capital Semester is an internship semester in Harrisburg where juniors and seniors have the opportunity to explore government affairs, policy making and implementation first-hand while earning fulltime credits and staying on track to graduation. Internships are customized for the student, as Temple makes the initial contacts and sets up interviews. Students take two required courses including an internship seminar, and State Politics and Policy, in addition to the internship experience and any other courses. For further information go to www.cla.temple.edu/ipa/, or contact: Michelle J. Atherton, Assistant Director, Institute for Public Affairs, 840 Anderson Hall, 215-204-9074, mjather@temple.edu.

Pre-Law Studies: Political Science is one of the most popular majors for pre-law students. Although law schools neither give preference to any particular major nor require any specific undergraduate courses, they do make some general recommendations about getting a sound Liberal Arts education. Students should visit the CLA web site, www.temple.edu/claprelaw/, for more information.

In general, pre-law students should develop skills in communicating ideas in both written and spoken form. In addition, pre-law students should sharpen their analytical abilities and ability to think logically. Law schools also recommend that pre-law students acquire in-depth understanding of at least one social science (such as Political Science). Finally, some knowledge of business structure and terminology may be useful in law school. For further information, students interested in pre-law studies should contact Dr. Paul Crowe in the Philosophy Department, pcrowe@temple.edu or Ms. Elizabeth Reynard, ereynard@temple.edu in the Academic Advising Center.

Study Abroad: Temple provides a number of opportunities for students to study abroad; and the experience of living in, and meeting people from, other cultures; seeing different countries; and learning a foreign language can greatly enrich the undergraduate experience. The Office of Education Abroad and Overseas Campuses ( 200 Tuttleman Learning Center; phone: 215-2040720; www.temple.edu/studyabroad/) has information on a variety of programs abroad. Temple study abroad locations include Tokyo, Rome, London, Paris, Germany, and Mexico.

The Political Economy Certificate Program: The Department of Political Science and the

Department of Economics offer an interdisciplinary program leading to a Certificate in Political Economy. The program focuses on the interaction between government and the economy and is ideal preparation for students planning careers in either the public or private sector. It also provides an excellent foundation for graduate studies in law, the social sciences, and public administration. The program is open to all matriculated students in the university. Contact Dr. Richard Deeg, rdeeg@temple.edu, for specific details and requirements.

## Student Organizations

The Political Science Majors Association is the organization of all Political Science majors at Temple University. The primary purpose of the association is to represent the opinions and interests of undergraduate majors within the Political Science Department. The association sponsors activities for undergraduate majors, including career forums, lectures, student and faculty mixers, law and graduate forums, seminars on popular topics, and trips to Harrisburg.

Pi Sigma Alpha is the national Political Science Honor Society, into which students who have distinguished themselves in the field of political science are inducted. Inquiries about membership should be directed to the faculty advisor of Pi Sigma Alpha, Dr. Robin Kolodny, rkolodny@temple.edu.

## Suggested Semester-by-Semester Plan

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Foreign Language | 1001 | Foreign Language (first level) | 4 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | tribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Foreign Language | 1002 | Foreign Language (second level) | 4 |  |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| Political Science | 1101 | The American Political System | 3 |  |
| Political Science | 1201 | Foreign Governments \& Politics | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Foreign Language/ GenEd | 0800+ | Foreign Language (third level) or <br> GenEd Global/World Society course or <br> Internationally Focused Course From Approved List | 3 | GG |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |


| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| :--- | :--- | :--- | :---: | :---: |
| Political Science | 1301 | International Politics | 3 |  |
| Any | $0800-4999$ | One Elective in Any School or College | 2 |  |
| Subtotal |  | $\mathbf{1 7}$ |  |  |
|  |  |  |  |  |

Sophomore Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| GenEd | 08 xx or 09xx | Arts | $3-4$ | GA |
| GenEd | 08 xx or 09xx | Diversity and Race | 3 | GD |
| GenEd | 08 xx or 09xx | Global/World Society | 3 | GG |
| Political Science | $2000+$ | One 2000+ Political Science Course | 3 |  |
| Political Science | 2496 | Introduction to Political Philosophy | 3 | WI |
| Subtotal |  |  | $\mathbf{1 5 - 1 6}$ |  |
|  |  |  |  |  |
| Junior Year - 1st Semester | Course \# | Course Title | Hours | Attribute |
| Subject | One 2000+ Humanities/CST Course | 3 |  |  |
| CLA/CST | $2000+$ | Evidence and Knowledge | 3 |  |
| Political Science | 2503 | One 2000+ Political Science Course | 3 |  |
| Political Science | $2000+$ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | $2000+$ | Any CLA/CST Elective | 3 |  |
| CLA/CST | $0800-4999$ |  | $\mathbf{1 5}$ |  |
| Subtotal |  |  |  |  |

Junior Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| CLA/CST | $2000+$ | One 2000+ Humanities/CST Course | 3 |  |
| Political Science | $3501-3599$ | Capstone Preparation Course | 3 |  |
| Political Science | $2000+$ | One 2000+ Political Science Course | 3 |  |
| CLA/CST | $2000+$ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |
| Subtotal |  | $\mathbf{1 5}$ |  |  |
|  |  |  |  |  |
| Senior Year $\boldsymbol{-}$ 1st Semester |  |  |  |  |


| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Political Science | $3501-3599$ | Capstone Preparation Course | 3 |  |
| CLA/CST | $2000+$ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |
| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |
| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year -2nd Semester | Course \# | Course Title | Hours | Attribute |
| Subject | Capstone Seminar in Political Science | 3 | WI |  |
| Political Science | 4896 | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | $2000+$ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | $2000+$ | Any CLA/CST Elective | 3 |  |
| CLA/CST | $0800-4999$ | One Elective in Any School or College | 3 |  |
| Any | $0800-4999$ |  | 15 |  |
| Subtotal |  |  |  |  |


|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Degree Total |  | 123 |  |  |

## Psychology

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The Temple University Undergraduate Psychology program provides a modern curriculum covering a breadth of content, ranging from biological bases of cognition and behavior to sociocultural influences on human interactions and psychological disorders. The curriculum is designed to develop students' critical thinking skills through emphasis of the scientific basis of Psychology and courses in statistics and research methodology. The program also emphasizes the integration and synthesis of information across courses and activities through the stepwise progression of the curriculum from the introductory, foundational, and advanced classes up to the final capstone course that is taken in the senior year. Students are strongly encouraged to develop applied skills through rigorous and highly focused experiential learning in research laboratories and community-based internships. The curriculum is designed to be sufficiently flexible to satisfy the diversity of needs among undergraduates. As such an individually tailored curriculum may be selected for the purpose of preparing students for employment or further study in psychology, neuroscience, medicine, law, business, or other fields.

Psychology identifies several learning goals for each level of instruction in the program. At the introductory level (1001, 1002, 1003, 1004), goals include familiarity with the scientific grounding of the discipline (1001), basic statistics (1003) and scientific methods (1004), as well as information on how to prepare for a career in psychology or a related discipline (1004). At the Foundation level (2000-level courses), students develop deeper knowledge of the fascinating content areas in the discipline, which are broadly organized in two groups:
Developmental/Clinical/Social (DCS) and Brain and Cognitive Sciences (BCS). Students are required to choose at least two courses from each of these two general areas, and this ensures familiarity with the breadth of the discipline. These courses cover a wide range of topics from the functions of the neuron to the development of moral thought. At the Advanced level (3000level courses), students continue to develop critical thinking skills to dispassionately examine conflicting claims, analyze data, organize research papers, and become more proficient with the scientific process in a writing intensive course (3096). Students also are required to select four courses with the option of continuing to develop breadth or choosing to delve into greater depth in one area, such as clinical psychology. Finally, at the 4000 level, Capstone is the only course offered. This writing-intensive course is designed to help students integrate their knowledge base, to refine their critical and writing skills, and generally to synthesize their knowledge of the discipline.

## Special Opportunities

## Psychology 3791, 3891, 4791, and 4891 Collaborative Research

One to four terms of Psychology 3791-4891 (Collaborative Research) may be taken as elective psychology credit that counts toward the CLA upper-level course requirement. Enrolling in Collaborative Research allows students to work alongside faculty members and their graduate students in a research laboratory. To find research labs, go to www.temple.edu/psychology/undergraduate/Informationforcurrentundergraduatestudents.htm

You must contact the faculty member with whom you would like to work and receive their approval prior to registration. Working with a faculty member on a research project can be a very valuable experience, and this course is an important one to have on your record when making application to graduate school. The maximum credit permissible for 3791-4891 is 16 s.h.; a maximum of 4 credits each in 3791, 3891, 4791 and 4891.

## Psychology 3785-3787 Internship

Designed for those who want to experience psychology in the workplace, the internship allows students to apply theory to real-life situations, build an employment record, and complement future applications for graduate work in psychology or social work. Work placements are available in a number of different applications in psychology, including, but not limited to: organizational, applied behavior analysis; education; clinical and counseling psychology; autism research; probation officers; and a variety of other placements. Each setting offers students a range of employment options that link classroom learning with practical experience. Students who enroll in internships will gain on-the-job experience as well as recommendations and job
performance evaluations so that they can move easily from their undergraduate studies into psychology-related job opportunities or into graduate schools with an applied focus. To find out more, go to
www.temple.edu/psychology/undergraduate/Informationforcurrentundergraduatestudents.htm or contact Dr. Peter James (215-204-3409 or pjames@temple.edu).

## Summary of Degree Requirements

## 1. University Requirements:

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. See below for a list of the specific courses required for your major.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section of the Undergraduate Bulletin for more details.


## 2. College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999). For Social Science majors, 6 upper level credits must be taken in the Humanities Departments (English, French, German, Greek and Roman Classics, Hebrew, Italian, Japanese (only available at our Japan campus), Philosophy, Religion, Russian, and Spanish), Art History, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.


## 3. Foreign Language/Global Studies Requirements:

1) All students must complete the second level of a foreign language;
2) All students must complete at least one course from the GenEd Global/World Society category; and
3) All students must complete one of the following options:

- Third level of a foreign language;
- Demonstrated proficiency in a foreign language;
- A second General Education Global/World Society course;
- Study Abroad at an approved program; or
- Take one Global Studies course from the list on the CLA College Graduation Requirements page.

4. Major Requirements: 44-45 credits (40-41 are in Psychology)

Specifically Required courses: Psychology 1001, 1002, 1003, 1004, 3096

## Other Requirements

- One lab science course selected from: Biology 1001; or Biology 1011; or Chemistry 1021 AND 1023; or Chemistry 1027; or Chemistry 1031 AND 1033; or Physics 1021.
- Four Foundations courses as listed below. Two courses designated as "Brain and Cognitive Sciences" (BCS) and two courses designated in the "Developmental/Counseling/Social" (DCS) category. See full listings below under "Foundations".
- Three courses selected from Psychology courses numbered 3000-3620.
- One elective in Psychology numbered 2000-3620 (may not duplicate with another requirement).
- One Capstone in Psychology selected from Psychology 4496, 4596, 4696, 4796, or 4996


## Requirements for the Major

40 Credit Hours in Psychology plus 4 credits in a designated science area.
All Temple students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed below and are identified by "WI" in the Attribute column.

Introductory Courses Required:

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Psychology | 1001 <br> or <br> 1901 | Introduction to Psychology <br> or <br> Honors Introduction to Psychology | 3 |  |
| Psychology | 1002 | Careers in Psychology | 1 |  |
| Psychology | 1003 | Statistics for Psychology | 3 |  |
| Psychology | 1004 | Critical Thinking in Psychology | 3 |  |
| Subtotal |  |  | $\mathbf{1 0}$ |  |

## Psychology Science Requirement:

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Select one from list: |  | 4 |  |  |
| Biology | 1001 | Human Biology |  |  |
| Biology | 1011 | General Biology I |  |  |
| Chemistry | $1021 / 1023$ | Introduction to Chemistry I and Lab |  |  |
| Chemistry | 1027 | Applications of Chemistry |  |  |
| Chemistry | $1031 / 1033$ | General Chemistry I and Lab |  |  |
| Physics | 1021 | College Physics I |  |  |
| Earth \& Environmental Science | 1001 | Introductory Geology |  |  |
| Earth \& Environmental Science | 1021 | Catastrophic Geology |  |  |
| Earth \& Environmental Science | 2001 | Physical Geology | 4 |  |
| Subtotal |  |  |  |  |

## Foundation Courses (2000 Level):

Four courses are required - at least two from each area. Brain and Cognitive Sciences (2101, 2103, 2104, 2501, 2502) and Developmental/Clinical/Social (2201, 2301, 2401, 2402). Psychology 1001 is the prerequisite for all courses at this level. Foundation courses are prerequisites for the advanced (3000-level) areas.

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Select two courses from the DCS area: | 3 |  |  |  |
| Psychology | 2201 | Foundations of Psychopathology |  |  |
| Psychology | 2301 | Foundations of Developmental Psychology |  |  |
| Psychology | 2401 | Foundations of Social Psychology |  |  |
| Psychology | 2402 | Foundations of Industrial \& Organizational Psychology |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Select two courses from the BCS area: |  |  |  |  |
| Psychology | 2101 | Foundations of Cognitive Psychology | 3 |  |
| Psychology | 2103 | Foundations of Learning \& Behavior Analysis |  |  |
| Psychology | 2104 | Foundations of Sensation \& Perception |  |  |
| Psychology | 2501 | Foundations of Behavioral Neuroscience |  |  |
| Psychology | 2502 | Foundations of Cognitive Neuroscience |  |  |
|  |  |  |  |  |
| Subtotal |  |  | $\mathbf{1 2}$ |  |

Required Methods Course

| Subject | Course \#Course Title | Hours | Attribute |  |
| :--- | :--- | :--- | :---: | :---: |
| Psychology | 3096 | Conducting Psychological Research <br> (Prerequisites: Psychology 1001, 1003, 1004, and two courses <br> numbered 2000-4999) | 3 |  |
| Subtotal |  |  | $\mathbf{3}$ |  |

## Advanced Courses (3000-3620):

Choose three from any of the advanced courses (3000-3620) for which you have completed the prerequisite foundation course. These courses cover specialty areas within particular fields of psychology.
(Note: Psychology 3096 does not count toward this requirement.)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Advanced Courses - Select three: | 9 |  |  |  |
| Psychology | 3141 | Neurobiology \& Evolution of Social Behavior |  |  |
| Psychology | 3151 | Direct Application of Behavioral Principles |  |  |
| Psychology | 3152 | Experimental Psychopathology |  |  |
| Psychology | 3161 | Research Methods in Perception |  |  |
| Psychology | 3162 | Visual Recognition |  |  |
| Psychology | 3221 | Clinical Psychology: Research \& Practice |  |  |
| Psychology | 3223 | Child Psychopathology \& Treatment |  |  |
| Psychology | 3301 | Phases of Development: Infancy |  |  |
| Psychology | 3304 | Personality, Social \& Emotional Development |  |  |


| Psychology | 3305 | Cognitive \& Language Development |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Psychology | 3306 | Neuroscience of Development \& Aging |  |  |
| Psychology | 3307 | Theories of Development |  |  |
| Psychology | 3411 | Social Cognition |  |  |
| Psychology | 3412 | Psychological Studies of Social Issues |  |  |
| Psychology | 3417 | Personnel Psychology |  |  |
| Psychology | 3418 | Human Performance Improvement |  |  |
| Psychology | 3561 | Psychopharmacology |  |  |
| Psychology | 3566 | Neurobiology of Learning \& Memory |  |  |
| Subtotal of Advanced Courses | $\mathbf{9}$ |  |  |  |

## Psychology Elective: One Additional Course at the Foundation Level or the Advanced

 Level.| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Psychology | $2000-3620$ |  | 3 |  |
| Subtotal |  |  | 3 |  |

## Capstone Courses - One 4000-level course required:

(Seniors only - minimum of 90 credits completed and completion Psychology 3096)

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Psychology | 4496 | Capstone: History of Psychology | 4 | WI |
| Psychology | 4596 | Capstone: Fields of Psychology | 4 | WI |
| Psychology | 4696 | Capstone in Psychology | 3 | WI |
| Psychology | 4796 | Capstone: Research | 4 | WI |
| Psychology | 4996 | Honors Capstone | 4 | WI |
| Subtotal |  |  | $\mathbf{3 - 4}$ |  |


| Major Total | 44-45 |
| :--- | :--- |

## Individual Study Courses:

(Permission of the instructor required.)

| For all Psychology majors and minors |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Subject | Course \# | Course Title | Hours | Attribute |
| Psychology | $4182 / 4282$ | Independent Study In Cognitive Neuroscience I \& II <br> (Prerequisite: Psychology 1167, Psychology 2168 AND <br> Psychology 2196) | $3 / 3$ |  |
| Psychology | $3791 / 3891 / 4791 / 4891$ | Collaborative Research (Prerequisite: Psychology 1071, <br> Psychology 2168, Psychology 2196) | $1-4$ |  |
| Psychology | 3785 | Psychology Internship (Prerequisite: Junior/Senior <br> Psychology Major) | 3 |  |
| Psychology | 3787 | Practicum (Prerequisite: Junior/Senior Psychology Major) | 3 |  |

## Distinction in Major

Students earn Distinction in Major upon completion of the Psychology Honors program.

## The Psychology Honors Program:

A main goal of the Psychology Honors program is to provide each student with an individualized experience that will prepare them for psychological research in the future. This program is designed as a two-year study that begins with critical thinking, writing, and the study of methodology. Grade requirement is a 3.5 GPA across all courses. Upon completion of this program, students will have produced a senior thesis as well as a student poster session. Some students present research at regional or national meetings. For more information, go to www.temple.edu/psychology/undergraduate/PsychologyHonorsProgram.htm

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Psychology | 2991 | Honors Research I | 4 |  |
| Psychology | 3991 | Honors Research II | 3 |  |
| Psychology | 4991 | Honors Research III | 3 |  |
| Psychology | 4996 | Honors Capstone | 4 |  |
| Psychology | 4998 | Honors Research Problems | 4 |  |

## The Undergraduate Psychology Majors' Association

The Psychology Majors' Association (PMA) offers a variety of opportunities to undergraduate students, including volunteer work, field trips, workshops on graduate school and current topics in psychology, and career development. The goal of PMA is to provide opportunities for students to apply their appreciation of psychology through activities outside of the classroom. PMA also promotes networking between students and faculty members within the psychology department. For more information visit www.temple.edu/psychology/undergraduate/PMA.htm

## Psi Chi - The National Honor Society in Psychology

Psi Chi, the National Honor Society in Psychology, has an active chapter at Temple University. The minimum requirements for membership in Psi Chi are a 3.20 cumulative GPA and a 3.50 GPA in Psychology courses. Psi Chi members are given opportunities for growth and development within the field of psychology. Psi Chi encourages students to engage in research opportunities within psychology as well as continue their education in graduate studies. For more information, go to www.temple.edu/psychology/psichi.

## Phi Beta Kappa

See Opportunities: Honor Societies.

## Minor in Psychology

The Minor in Psychology introduces the student to a representative array of Psychology courses, prepares the student for the minimal course requirements for acceptance to most Psychology graduate schools, and results in formal university recognition on the student's official transcript.

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Psychology | $\begin{gathered} 1001 \\ \text { or } \\ 1901 \end{gathered}$ | Introduction to Psychology <br> or <br> Honors Introduction to Psychology | 3 |  |
| Psychology | 1003 | Statistics for Psychology | 3 |  |
| Psychology | 1004 | Critical Thinking in Psychology | 3 |  |
|  |  |  |  |  |
| Brain and Cognitive Sciences - Select one: |  |  | 3 |  |
| Psychology | 2101 | Foundations of Cognitive Psychology |  |  |
| Psychology | 2103 | Foundations of Learning \& Behavior Analysis |  |  |
| Psychology | 2104 | Foundations of Sensation \& Perception |  |  |
| Psychology | 2501 | Foundations of Behavioral Neuroscience |  |  |
| Psychology | 2502 | Foundations of Cognitive Neuroscience |  |  |
|  |  |  |  |  |
| Developmental/Clinical/Social - Select one: |  |  | 3 |  |
| Psychology | 2201 | Foundations of Psychopathology |  |  |
| Psychology | 2301 | Foundations of Developmental Psychology |  |  |
| Psychology | 2401 | Foundations of Social Psychology |  |  |
| Psychology | 2402 | Foundations of Industrial \& Organizational Psychology |  |  |
|  |  |  |  |  |
| Advanced Courses - Select two: |  |  |  |  |
| Psychology | 3000-3620 |  | 3 |  |
| Psychology | 3000-3620 |  | 3 |  |
| Total |  |  | 21 |  |

## Cognitive Neuroscience Minor

Students in the College of Liberal Arts (including Psychology majors) as well as students in other colleges, schools, and departments may choose to minor in Cognitive Neuroscience. No more than two courses can be double-counted for the Psychology major and the Cognitive Neuroscience minor. Cognitive Neuroscience is an interdisciplinary field with a focus on a fundamental mystery of science: how the mind arises from the brain. A minor in Cognitive Neuroscience will strengthen the academic record of students who plan to apply for graduate programs. For example, in Psychology this minor will strengthen applicants' records for specializations such as Behavioral Neuroscience, Clinical Neuropsychology, Cognitive Psychology, or Psychophysiology. Students might also go into General Neuroscience or Cognitive Science. Pre-med students with a Cognitive Neuroscience minor would present distinctive profiles to medical school admissions offices.

Students must complete successfully the following courses with a grade of C- or better:

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Psychology | 2101 | Foundations of Cognitive Psychology* | 3 |  |


| Psychology | 2502 | Foundations of Cognitive Neuroscience* | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Communication Sciences \& Disorders | 3235 | Human Neuroscience* | 4 |  |
|  |  |  |  |  |
| Select three cognitive neu | oscience elec | e courses from the following listing: | 9 |  |
| Biology | 3352 | Systems Neuroscience* |  |  |
| Biology | 3356 | Organization \& Development of the Nervous System* |  |  |
| Communication Sciences \& Disorders | 2049 | Language and the Brain* |  |  |
| Neuroscience | 1051 | Fundamentals of Neuroscience |  |  |
| Neuroscience | 2121 | Development/Plasticity/Repair* |  |  |
| Neuroscience | 2122 | Cellular Neuroscience* |  |  |
| Neuroscience | 2222 | Neurobiology of Disease* |  |  |
| Philosophy | 2144 or 4244 | Philosophy of the Mind* |  |  |
| Psychology | 2501 | Foundations of Behavioral Neuroscience* |  |  |
| Psychology | 3141 | Neurobiology and Evolution of Social Behavior* |  |  |
| Psychology | 3305 | Cognitive and Language Development* |  |  |
| Psychology | 3306 | Neuroscience of Development \& Aging* |  |  |
| Psychology | 3561 | Psychopharmacology* |  |  |
| Psychology | 3566 | Neurobiology of Learning \& Memory* |  |  |
| Psychology | 4182/4282 | Independent Study in Cognitive Neuroscience* |  |  |
|  |  |  |  |  |
| Total |  |  | 19 |  |

* check for prerequisites


## Suggested Semester-by-Semester Plan

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Foreign Language | 1001 | Foreign Language (first level) | 4 |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Foreign Language | 1002 | Foreign Language (second level) | 4 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Psychology | $\begin{gathered} 1001 \\ \text { or } \\ 1901 \end{gathered}$ | Introduction to Psychology or <br> Honors Introduction to Psychology | 3 |  |
| Subtotal |  |  | 16 |  |

## Sophomore Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Foreign Language/ GenEd | 0800+ | Foreign Language (third level) or GenEd Global/World Society course or Internationally Focused Course From Approved List | 3 | GG |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Psychology | 1002 | Careers in Psychology | 1 |  |
| Psychology | 1003 | Statistics for Psychology | 3 |  |
| Subtotal |  |  | 16 |  |

Sophomore Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| GenEd | 08 xx or 09xx | Arts | $3-4$ | GA |
| GenEd | 08 xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08 xx or 09xx | Human Behavior | 3 | GB |
| CLA/CST | $2000+$ | One 2000+ CLA/CST Course | 3 |  |
| Psychology | 1004 | Critical Thinking in Psychology | 3 |  |
| Subtotal |  |  | $\mathbf{1 5 - 1 6}$ |  |

Junior Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| CLA/CST | $2000+$ | One 2000+ Humanities/CST Course | 3 |  |
| Required Science | $1000+$ | Select one Psychology Science course from list above. | 4 |  |
| Psychology | $2000-l e v e l ~$ | One BCS Area Foundation Course | 3 |  |
| Psychology | $2000-l e v e l ~$ | One DCS Area Foundation Course | 3 |  |
| Psychology | $2000-l e v e l ~$ | One DCS or BCS Area Foundation Course | 3 |  |
| Subtotal |  |  | $\mathbf{1 6}$ |  |

Junior Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| CLA/CST | $2000+$ | One 2000+ Humanities/CST Course | 3 |  |
| Psychology | 3096 | Conducting Psychological Research | 3 | WI |
| Psychology | $2000-l e v e l ~$ | One DCS or BCS Area Foundation Course | 3 |  |
| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |
| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

Senior Year - 1st Semester

| Subject | Course \# | Course Title | Hours |
| :--- | :--- | :--- | :--- |
| Attribute |  |  |  |
| Ssychology | $3000-3620$ | One Advanced Course | 3 |


| Psychology | $3000-3620$ | One Advanced Course | 3 |  |
| :--- | :--- | :--- | :--- | :--- |
| Psychology | $2000-3620$ | One Foundation or Advanced Course | 3 |  |
| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |
| CLA/CST | $2000+$ | One 2000+ CLA/CST Course | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester | Course \# | Course Title | Hours | Attribute |
| Subject | $4496 / 4596 / 4696 / 4796$ | One Capstone Course | $3-4$ | WI |
| Psychology | $3000-3620$ | One Advanced Course | 3 |  |
| Psychology | One 2000+ CLA/CST Course | 3 |  |  |
| CLA/CST | $0000+$ | One Elective in Any School or College | 3 |  |
| Any | One Elective in Any School or College | 3 |  |  |
| Any |  | $15-16$ |  |  |
| Subtotal |  |  | 123 |  |
|  |  |  |  |  |
| Degree Total |  |  |  |  |

## Religion

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Religion is a pervasive, powerful, multifaceted, and enduring dimension of human experience. Religions have shaped complex cultures and countless individual lives. They are influential in the world today and will continue to be so in the future. The academic study of religion is multidisciplinary, drawing upon approaches from history, literary studies, philosophy, and the social sciences. It is multicultural, exploring the beliefs, practices, and development of particular religious communities in many different cultures.

The Bachelor of Arts in Religion is a solid Liberal Arts degree, providing graduates with the knowledge base and the intellectual, analytical, communication, and interpersonal skills essential to succeed in any career. The faculty and course offerings provide an introduction to the major religions of the world, with an emphasis upon the comparison of traditions and their encounter with one another. Instruction is offered in African and African American religions, Buddhism, Christianity, Confucianism, Hinduism, Judaism, and Daoism. Employment Prospects after graduation with the Bachelor's degree include the fields of Journalism and Communications, Social Work, Ministry/Chaplaincy, Pre-Law, Pre-Med/Health Services, Government/FBI, NGO's, Hospice/End-of-Life Care, International Enterprise, Education, Academic Research, Human Resources, Tourism and Hospitality.

## Summary of Degree Requirements

## 1. University Requirements:

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. See below for a list of the specific courses required for your major.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section of the Undergraduate Bulletin for more details.


## 2. College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999). For Humanities majors, 6 upper level credits must be earned in the Social Sciences: African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Geography and Urban Studies, History, Jewish Studies, Latin American Studies, Mathematical Economics, Neuroscience: Systems, Behavior and Plasticity, Political Science, Psychology, Sociology, Women's Studies, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in all CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.


## 3. Foreign Language/Global Studies Requirements:

1) All students must complete the second level of a foreign language;
2) All students must complete at least one course from the GenEd Global/World Society category; and
3) All students must complete one of the following options:

- Third level of a foreign language;
- Demonstrated proficiency in a foreign language;
- A second General Education Global/World Society course;
- Study Abroad at an approved program; or
- Take one Global Studies course from the list on the CLA College Graduation Requirements page.


## 4. Major Requirements: Ten courses in Religion (30-31 s.h.)

- Specifically required courses: Religion 1001 and 4096
- Select one writing-intensive course from: Religion 2496 or 2596
- Select two non-Western courses from: Religion 2101, 2102, 2201, 2702, 3101, 3201, 3301, 3302, 3701, and 3702
- Electives in Religion (may not double-count with any of the above requirements):
- Two electives at any level, 0800-4999;
- Three upper-level electives numbered 2000-4999.

5. General electives vary according to a student's individual program of study. Consult your academic advisor for more information.

## Requirements for the Major

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Religion | 1001 | Religion and Society | 3 |  |
|  |  |  |  |  |
| Select one of these writing-intensive courses below: |  |  | 3 |  |
| Religion | 2496 | Introduction to the Bible |  | WI |
| Religion | 2596 | What is Christianity? |  | WI |
|  |  |  |  |  |
| Select two of these non-Western courses below: |  |  | 6 |  |
| Religion | 2101 | Religions of India |  |  |
| Religion | 2102 | Introduction to Buddhism |  |  |
| Religion | 2201 | Chinese Religions - Confucius to Mao |  |  |
| Religion | 2702 | Religion in Contemporary Africa |  |  |
| Religion | 3101 | Yoga and Tantric Mysticism |  |  |
| Religion | 3201 | I-Ching, Tao, and Ch'an/Zen |  |  |
| Religion | 3301 | Japanese Religions |  |  |
| Religion | 3302 | Japanese Buddhism |  |  |
| Religion | 3701 | Traditional Religions of Africa |  |  |
| Religion | 3702 | African Religion and New World Culture |  |  |
|  |  |  |  |  |
| Additional Requirements of the Major: |  |  |  |  |
| Religion |  | Five elective courses (up to two may be from courses numbered 0800-1999, and at least three must be from courses numbered 2000 and above) | 15-16 |  |
| Religion | 4096* | Capstone Seminar in Religion | 3 | WI |
| Total |  |  | 30-31 |  |

*Restricted to Religion majors only and minors with permission of instructor. Students must have completed at least five courses in the major prior to taking the capstone.

All Temple students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed above and are identified by "WI" in the Attribute column.

Transfer students: No more than five religion courses taken at other institutions may be accepted for the major. The director of undergraduate studies must determine that these meet the standards of the Religion major.

## Requirements for the Minor

A minor in Religion has the same objectives and offers the same kinds of opportunities for learning as the major, in a program designed for students concentrating in another academic field. It consists of:

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Religion | 1001 | Religion and Society | 3 | IN |
| Religion |  | An additional lower-level course (numbered below 2000) | 3 |  |
| Religion |  | Four Religion courses (no more than one below 2000) | 12 |  |
| Total |  |  | $\mathbf{1 8}$ |  |

## Distinction in Major in Religion

For graduation with Distinction in Major, an overall GPA of 3.25 is required with 3.5 in Religion courses.

## Suggested Semester-by-Semester Plan

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Foreign Language | 1001 | Foreign Language (first level) | 4 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Foreign Language | 1002 | Foreign Language (second level) | 4 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Religion | 1001 | Religion and Society | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |


| Foreign Language/ GenEd | 0800+ | Foreign Language (third level) or GenEd Global/World Society course or an Internationally Focused Course From Approved List | 3 | GG |
| :---: | :---: | :---: | :---: | :---: |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 2 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Religion | 2000+ | One Religion Writing-Intensive Course From Approved List | 3 | WI |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Social Science/CST Course | 3 |  |
| Religion | 2000+ | One Religion Non-Western Course From Approved List | 3 |  |
| Religion | 0800+ | One Religion Course at Any Level | 3 |  |
| Religion | 2000+ | One 2000+ Religion Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Social Science/CST Course | 3 |  |
| Religion | 2000+ | One Religion Non-Western Course From Approved List | 3 |  |
| Religion | 0800+ | One Religion Course at Any Level | 3 |  |
| Religion | 2000+ | One 2000+ Religion Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Religion | 2000+ | One 2000+ Religion Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |


| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Religion | $4096^{*}$ | Capstone Seminar in Religion | 3 | WI |
| CLA/CST | $2000+$ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | $2000+$ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |
| Any | $0800-4999$ | One Elective in Any School or College | 3 |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |
|  |  |  |  |  |
| Degree Total |  | $\mathbf{1 2 3}$ |  |  |
| *Typically offered only in the spring semester. |  |  |  |  |

## Sociology

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Sociology is the study of human behavior in the context of the groups, organizations, institutions, and societies in which it occurs. The sociology department offers courses covering a wide range of topics, including: contemporary social issues, race and racism, sexuality and gender, health and health care, education, urban life, housing, organizations, family, political life, popular culture, immigration, law, international development and globalization. The sociological perspective pays close attention to diversity in culture, values, and human experience.

Majoring in sociology prepares students for many careers and graduate programs by providing both a broad sociological perspective and specific research, statistical and analytic skills. Students gain experience in fieldwork and interviewing; they develop, administer and analyze surveys and statistics; and they write research reports. Sociology provides an excellent background for students planning to begin their careers upon graduation as well as those planning to pursue graduate education. Recent graduates have gone to work and graduate school
in the areas of law, medicine, business, non-profits, community planning, social work, market research, and education. Students who are interested in a career in the health field can pursue a special sociology major focused on health-related coursework. The Health Track in Sociology prepares students for graduate studies in leading medical, dental, nursing, public health, and physical and occupational therapy programs as well as graduate programs in sociology and related fields.

## Student Organizations and Opportunities

Sociology majors and minors are encouraged to participate in the Sociology Organization for Undergraduate Leadership (SOUL), which hosts academic, community service, and social events throughout the year. The department sponsors the Annual Student Research Conference in which students can present their work.

## Awards

Awards available to sociology majors include the Robert K. Merton Award, the Sociology Prize, the Benjamin and Irma Robboy Award, and the Othella Vaughn Award.

## Distinction in the Major

Sociology majors graduate with distinction in the major if they have a GPA of 3.5 or higher in the major and a minimum cumulative GPA of 3.25 .

## Summary of Degree Requirements

## 1. University Requirements:

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. Sociology 3396 and 4096 fulfill this requirement for this major.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section of the Undergraduate Bulletin for more details.


## 2. College of Liberal Arts Requirements:

- Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999).
- For Social Science majors, 6 upper level credits must be taken in the Humanities Departments (English, French, German, Greek and Roman Classics, Hebrew, Italian, Japanese (only available at our Japan campus), Philosophy, Religion, Russian, and Spanish), Art History, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.


## 3. Foreign Language/Global Studies Requirements:

1) All students must complete the second level of a foreign language;
2) All students must complete at least one course from the GenEd Global/World Society category; and
3) All students must complete one of the following options:

- Third level of a foreign language;
- Demonstrated proficiency in a foreign language;
- A second General Education Global/World Society course;
- Study Abroad at an approved program; or
- Take one Global Studies course from the list on the CLA College Graduation Requirements page.


## 4. Major Options: Sociology or Health Track in Sociology (42 s.h.)

Sociology Major Requirements:

- Eleven courses in Sociology
- Specifically required courses: Sociology 1176, 3201, 3261, 3396, \& 4096
- Sociology 4001 OR 4002
- Sociology electives:
o Two Sociology electives numbered 2000-4999
o Three Sociology electives numbered 3000-4999
- Two courses at the 2000 level or higher selected from the following cognate disciplines: African American Studies, American Studies, Anthropology, Asian Studies, Criminal Justice, Economics, Environmental Studies, Geography and Urban Studies, History, Jewish Studies, Latin American Studies, Political Science, Psychology, and Women's Studies

Health Track in the Sociology Major Requirements:

- Eleven courses in Sociology
- Specifically required courses: Sociology 1176, 3201, 3261, 3396, \& 4096
- Sociology 4001 OR 4002
- Sociology electives:
o Three Sociology electives at the 3000 level, two of which must be health-related courses selected from Sociology 3511, 3521, 3530, 3546, 3559, 3582
o Two courses numbered 2000 or higher, one of which must be a health-related course selected from Sociology 2522, 2530, 2552, 2553, 2572 (or an additional health-related course as noted above)
- Two health-related courses in cognate disciplines selected in consultation with a faculty advisor

5. General electives vary according to a student's individual program of study. Consult your academic advisor for more information.

## Requirements for the Major in Sociology

The major requires a minimum of eleven Sociology courses, including Introduction to Sociology, a sequence of 3 statistics and research methods courses, a sociological theory course, the writing capstone, and five electives at various levels.

All Temple students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed below and are identified by "WI" in the Attribute column.

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Sociology | 1176 | Introduction to Sociology | 3 |  |
| Sociology | 3201 | Statistical Methods in Sociology** | 4 |  |
| Sociology | 3396 | Development of Sociological Thought | 3 | WI |
| Sociology | 3261 | Research Design and Methods** | 4 |  |
| Sociology | 4096 | Senior Seminar* | 3 | WI |
| Sociology | electives | Two courses at the 2000 level or above | 6 |  |
| Sociology | electives | Three courses at the 3000 level or above | 9 |  |
| Social <br> Science | electives | Two cognate courses at the 2000+ level selected from the following: African American Studies, Anthropology, American Studies, Asian Studies, Criminal Justice, Economics, Environmental Studies, Geography \& Urban Studies, History, Jewish Studies, Latin American Studies, Political Science, Psychology, Women's Studies | 6 |  |
|  |  |  |  |  |
| Select one | dvanced M | Methods course: | 4 |  |
| Sociology | $\begin{aligned} & 4001 \\ & 4002 \end{aligned}$ | $\begin{aligned} & \text { Qualitative Research^ } \\ & \text { or } \\ & \text { Data Analysis^ } \\ & \hline \end{aligned}$ |  |  |
|  |  |  |  |  |
| Total |  |  | 42 |  |
|  |  |  |  |  |
| *Indicates writing capstone for major. |  |  |  |  |
| **Students must take 3201 prior to or concurrently with 3261. |  |  |  |  |
| Students must complete 3201 and 3261 before taking either of the advanced methods courses, 4001 or 4002. |  |  |  |  |

## Requirements for the Health Track in Sociology

The health track in Sociology requires a minimum of eleven Sociology courses, including Introduction to Sociology, a sequence of statistics and research methods courses, a sociological theory course, the writing capstone, and five electives at various levels, three of which are designated as health-related. Additionally, two 2000+-level electives from outside Sociology and designated as health-related electives must be taken. All Temple students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are listed below and are identified by "WI" in the Attribute column.

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Sociology | 1176 | Introduction to Sociology | 3 |  |
| Sociology | 3201 | Statistical Methods in Sociology** | 4 |  |
| Sociology | 3396 | Development of Sociological Thought | 3 | WI |


| Sociology | 3261 | Research Design and Methods** | 4 |  |
| :---: | :---: | :---: | :---: | :---: |
| Sociology | 4096 | Senior Seminar* | 3 | WI |
| Sociology | electives | Two courses at the 2000 level or above. One must be selected from 2522, 2530, 2552, 2553, 2572, 3511, 3521, 3530, 3546, 3559, or 3582 | 6 |  |
| Sociology | electives | Three courses at the 3000 level or above. <br> Two must be selected from 3511, 3521, 3530, 3546, 3559, 3582 | 9 |  |
| Health-Related Cognate Courses: |  |  | 6 |  |
| Electives | 2000+ | Two health-related courses. See advisor for approved list. |  |  |
| Select one Advanced Methods course: |  |  | 4 |  |
| Sociology | $\begin{aligned} & 4001 \\ & 4002 \\ & \hline \end{aligned}$ | Qualitative Research ^ or <br> Data Analysis ^ |  |  |
| Total |  |  | 42 |  |
| Health-related courses: |  |  |  |  |
| Three courses required, at least two must be numbered 3000 or higher: |  |  |  |  |
| Sociology | 2522 | Sociology of Self |  |  |
| Sociology | 2530 | Selected Topics in Medical Sociology |  |  |
| Sociology | 2552 | Health and Disease in American Society |  |  |
| Sociology | 2553 | Sociology of Aging |  |  |
| Sociology | 2572 | Sex and Society |  |  |
| Sociology | 3511 | Sociology of the Environment |  |  |
| Sociology | 3521 | International Health |  |  |
| Sociology | 3525 | Urban Health |  |  |
| Sociology | 3530 | Selected Topics in Medical Sociology |  |  |
| Sociology | 3546 | Sexuality and Gender |  |  |
| Sociology | 3559 | Health and Reproduction |  |  |
| Sociology | 3582 | Independent Study in Medical Sociology |  |  |
|  |  |  |  |  |
| *Indicates writing capstone for major |  |  |  |  |
| **Students must take 3201 prior to or concurrently with 3261. |  |  |  |  |
| ¢ Students must complete 3201 and 3261 before taking either of the advanced methods courses, 4001 or 4002 |  |  |  |  |

## Requirements for the Minor in Sociology

The minor in sociology requires a minimum of six courses.

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Sociology | 1176 | Introduction to Sociology | 3 |  |
| Sociology |  | Two courses at the 2000 level or above | 6 |  |
| Sociology |  | Three courses at the 3000 level or above | 9 |  |
| Minor Total |  |  | $\mathbf{1 8}$ |  |

## Requirements for the Minor in the Sociology of Health

The minor in the sociology of health requires a minimum of six courses, three of which are health-related. This program is not open to Sociology majors or Health Track in Sociology majors.

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Sociology | 1176 | Introduction to Sociology | 3 |  |
| Sociology |  | Two courses at the 2000 level or above | 6 |  |
| Sociology |  | Three courses at the 3000 level or above | $9-10$ |  |
|  |  |  |  |  |
|  |  |  |  |  |

Health-related courses - Select three as part of the above requirements:

| Sociology | 2522 | Sociology of Self |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Sociology | 2530 | Selected Topics in Medical Sociology |  |  |
| Sociology | 2552 | Health and Disease in American Society |  |  |
| Sociology | 2553 | Sociology of Aging |  |  |
| Sociology | 2572 | Sex and Society |  |  |
| Sociology | 3511 | Sociology of the Environment |  |  |
| Sociology | 3521 | International Health |  |  |
| Sociology | 3530 | Selected Topics in Medical Sociology |  |  |
| Sociology | 3546 | Sexuality and Gender |  |  |
| Sociology | 3559 | Health and Reproduction |  |  |
| Sociology | 3582 | Independent Study in Medical Sociology |  |  |
|  |  |  |  |  |
| Minor Total |  |  | $\mathbf{1 8 - 1 9}$ |  |

## Requirements for the Certificate in Health Research

The certificate in health research requires five courses, including a health-related sequence and research methods. This program is not open to Sociology majors or Health Track in Sociology majors.

| Subject | Course \# | Course Title | Hours | Attribute |  |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sociology | 2552 | Health and Disease in American Society | 3 |  |  |  |  |  |  |
| Sociology | 3201 | Statistical Methods in Sociology* | 4 |  |  |  |  |  |  |
| Sociology | 3261 | Research Design and Methods* | 4 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Select one from the following list: |  | 4 |  |  |  |  |  |  |  |
| Sociology | 4001 | Qualitative Research** |  |  |  |  |  |  |  |
| Sociology | 4002 | Data Analysis** |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Health-related courses - Select one: | -4 |  |  |  |  |  |  |  |  |
| Sociology | 2522 | Sociology of Self |  |  |  |  |  |  |  |
| Sociology | 2530 | Selected Topics in Medical Sociology |  |  |  |  |  |  |  |
| Sociology | 2553 | Sociology of Aging |  |  |  |  |  |  |  |
| Sociology | 2572 | Sex and Society |  |  |  |  |  |  |  |
| Sociology | 3511 | Sociology of the Environment |  |  |  |  |  |  |  |
| Sociology | 3521 | International Health |  |  |  |  |  |  |  |
| Sociology | 3530 | Selected Topics in Medical Sociology |  |  |  |  |  |  |  |


| Sociology | 3546 | Sexuality and Gender |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Sociology | 3559 | Health and Reproduction |  |  |
| Sociology | 3582 | Independent Study in Medical Sociology |  |  |
|  |  |  |  |  |
| Certificate Total |  |  | $\mathbf{1 8 - 1 9}$ |  |
| *Students must take 3201 prior to or concurrently with 3261. |  |  |  |  |
| **Students must complete 3201 and 3261 before taking either of the advanced methods courses, 4001 or 4002. |  |  |  |  |

## Suggested Semester-by-Semester Plan for the Sociology Major

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Foreign Language | 1001 | Foreign Language (first level) | 4 |  |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Foreign Language | 1001 | Foreign Language (second level) | 4 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Sociology | 1176 | Introduction to Sociology | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Foreign Language/ GenEd | 0800+ | Foreign Language (third level) or GenEd Global/World Society course or an Internationally Focused Course From Approved List | 3 | GG |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Sociology | 2000+ | One 2000+ Sociology Course | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Sociology | 3201 | Statistical Methods in Sociology | 4 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| Subtotal |  |  | 16-17 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Humanities/CST Course | 3 |  |


| Sociology | 3396 | Development of Sociological Thought | 3 | WI |
| :---: | :---: | :---: | :---: | :---: |
| Sociology | 3261 | Research Design and Methods | 4 |  |
| Sociology | 2000+ | One 2000+ Sociology Course | 3 |  |
| Social Science | 2000+ | One 2000+ Cognate Course | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Humanities/CST Course | 3 |  |
| Sociology | 3000+ | One 3000+ Sociology Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Sociology | 3000+ | One 3000+ Sociology Course | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Sociology | 4001/4002** | Qualitative Research/Data Analysis** | 4 |  |
| Sociology | 3000+ | One 3000+ Sociology Course | 3 |  |
| Social Science | 2000+ | One 2000+ Cognate Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Sociology | 4096 | Senior Seminar | 3 | WI |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 2-3 |  |
| Subtotal |  |  | 14-15 |  |
|  |  |  |  |  |
| Degree Total |  |  | 123 |  |
| *Please check prerequisites for all Sociology courses. <br> **Sociology 4001 is only offered in the spring and 4002 only in the fall; plan to take prior to Sociology 4096. See advisor for course selection. |  |  |  |  |

## Suggested Semester-by-Semester Plan for the Health Track in Sociology

| Freshman Year - 1st Semester | Course Title | Hours | Attribute |  |
| :--- | :--- | :--- | :--- | :---: |
| Subject | Course \# | C | 4 | GW |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GQ |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 |  |
| Foreign Language | 1001 | Foreign Language (first level) | 3 | GB |
| GenEd | 08xx or 09xx | Human Behavior | $\mathbf{1 5}$ |  |
| Subtotal |  |  |  |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester | Course $\#$ | Course Title | Hours | Attribute |
| Subject |  |  |  |  |


| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| :---: | :---: | :---: | :---: | :---: |
| Foreign Language | 1001 | Foreign Language (second level) | 4 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Sociology | 1176 | Introduction to Sociology | 3 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Foreign Language/ GenEd | 0800+ | Foreign Language (third level) or GenEd Global/World Society course or an Internationally Focused Course From Approved List | 3 | GG |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Sociology | 2000+ | One 2000+ Sociology Course | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Sociology | 3201 | Statistical Methods in Sociology | 4 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| Subtotal |  |  | 16-17 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Humanities/CST Course | 3 |  |
| Sociology | 3396 | Development of Sociological Thought | 3 | WI |
| Sociology | 2000-2999 | One 2000-Level Health-Related Sociology Course | 3 |  |
| Sociology | 3261 | Research Design and Methods | 4 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Humanities/CST Course | 3 |  |
| Elective | 2000+ | One 2000+ Health-Related Cognate Course From Approved List | 3 |  |
| Sociology | 3000-3999 | One 3000-Level Health-Related Sociology Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Sociology | 4001/4002** | Qualitative Research/Data Analysis | 4 |  |



## Spanish \& Portuguese

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The Department of Spanish and Portuguese provides instruction in the languages, cultures, and literatures of Spain, Spanish America, and the Luso-Brazilian world. It also teaches specialized courses in Business, Legal and Medical Spanish, including their translation. Coursework at the undergraduate level in Spanish, Catalan, or Portuguese develops proficiency of the four basic skills: speaking, listening, reading, and writing. Opportunities are also available for the in-depth study of Hispanic and Luso-Brazilian culture. Students may participate in special programs, including an intensive immersion program in Spanish and Latin American Studies; service learning and internships in areas of business, social service, and education in Philadelphia; and diverse programs abroad. Temple's computer language center, the special learning environment for the foreign languages, is available to students of all proficiency levels.

Spanish and Portuguese organizations and activities include, for instance, the scholarly publications of the Society of Spanish and Spanish-American Studies and the recognition of outstanding students as they are inducted into Sigma Delta Pi, the National Hispanic Honor Society. Moreover, the department faculty remains very active in research.

Graduates of the Department of Spanish and Portuguese find careers in a wide range of areas, including education, business, government, and social service.

## Requirements for the Major

Students selecting the Spanish major must achieve competence in Spanish language skills in conjunction with qualifications outlined in major options I, II, or III listed below. Spanish 3096 (the capstone course) is a requirement of all majors and a prerequisite for most 4000-level courses. Spanish 2096 (Composition), or permission of instructor, is a prerequisite for most 3000-level courses. All Temple students must take a minimum of two writing-intensive courses.

The specific writing-intensive courses required for this major are listed below and are identified by "WI" in the Attribute column.

## Major Option I: (Language, Literature, and/or Linguistics)

This option is designed for students who wish to develop advanced language skills in the study of (1) Latin American Literature, (2) Peninsular Literature, and/or (3) Linguistics. A total of ten courses are required.

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Prerequisite: Spanish | 1003 | Intermediate | 3 | LB |
| Spanish | 2000+ | A maximum of two electives may be selected at the 2000 level | 0-6 |  |
| Spanish | 2096 | Composition (prerequisite for most 3000-level courses) | 3 | WI |
| Spanish | 3096 | Advanced Analysis \& Writing Skills | 3 | WI* |
| Spanish | 3000+ | A maximum of three electives may be selected at the 3000 level** | 0-9 |  |
| Spanish | 4000+ | A minimum of three electives must be selected at the 4000 level | 9 |  |
| Total |  |  | 30 |  |
| *Indicates writing capstone for the major. |  |  |  |  |

**A maximum of seven required and elective courses may be selected at the 2000 and 3000 levels, depending on proficiency.

Note: Up to two Catalan or Portuguese courses may be taken in place of two Spanish 2000/3000-level courses.

## Major Option II: Language and Professional Studies

This option is designed for students who wish to develop language and professional skills as well as an awareness of Hispanic culture. A total of ten courses is required.

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Prerequisite: Spanish | 1003 | Intermediate | 3 | LB |
| Spanish | 2096 | Composition | 3 | WI |
| Spanish | 2000+ | A maximum of two courses may be selected at the 2000 level | 0-6 |  |
| Spanish | 3000-4000 level | Three Business/Medical/Legal/Translation courses | 9 |  |
| Spanish | 3096 | Advanced Analysis \& Writing Skills | 3 | WI* |
|  |  |  |  |  |
| Select one Literature course from: |  |  | 3 |  |
| Spanish | $\begin{gathered} \hline 3121 \\ \text { or } \\ 3141 \\ \hline \end{gathered}$ | Masterpieces of Spanish Literature <br> or <br> Masterpieces of Spanish American Literature |  |  |
|  |  |  |  |  |
| Select at least two Advanced Spanish courses: |  |  | 6+ |  |
| Spanish | 4000+ | Minimum of two courses required at the 4000-level |  |  |
|  |  |  |  |  |
| Total |  |  | 30 |  |


| $*$ Writing capstone for the major. |  |  |
| :--- | :--- | :--- |
|  |  |  |
| Note: Up to two Portuguese or Catalan courses may be taken in place of two Spanish 2000/3000-level courses. |  |  |

## Major Option III: Spanish for Education

This option includes the Spanish-language courses required for certification in Spanish for Secondary Education in the College of Education at Temple and satisfies the requirements for the Spanish major in the College of Liberal Arts. A total of ten courses is required.



## Distinction in Major

Distinction in Spanish is awarded to majors who graduate with a 3.75 in their Spanish courses and an overall GPA of at least 3.25.

## Minor in Spanish

A total of six courses is required.

| Subject | Course \#Course Title | Hours | Attribute |  |
| :--- | :--- | :--- | :---: | :---: |
| Spanish | 1003 | Intermediate (or equivalent as prerequisite) | $0-3$ | LB |
| Spanish | $2000+$ | A maximum of three courses at the 2000 level | $0-9$ |  |
| Spanish | $3000+$ | A minimum of three courses. All literature and linguistics courses <br> at the 3000 level may be used. | $0-18$ |  |
| Spanish | $4000+$ | All literature and linguistics courses may be used to satisfy the minor* | $0-18$ |  |
| Total |  |  | $\mathbf{1 8}$ |  |
| *Depending on the level of proficiency. |  |  |  |  |

Minor in Portuguese

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Portuguese 1001 | Basic I* | 4 |  |  |
| Portuguese 1002 | Basic II* | 4 | LA |  |
| Portuguese | $3000-4000$ level | Select courses from the 3000 and 4000 level offerings, with a |  |  |
| minimum of two 4000-level courses |  |  |  |  |

## Certificate of Specialization in Multilingual Business and Government Studies

The department offers a 54-hour program leading to a B.A. degree with an additional specialization in Multilingual Business and Government Studies. The program is designed for students who plan careers as interpreters and translators, employment in government agencies, or a career in business with firms that have import/export activities in Latin America. It consists of courses in the Spanish language, Business Spanish, Translation Skills, Business Administration and Economics, Political Science, and Latin American Studies.

The program is open to all students, applicants need not be Spanish majors, and no background in business subjects is required. While these courses are normally taken within the 123 hours required for the B.A. degree in the College of Liberal Arts, the program is open to students in all colleges of the university. Students from most colleges who have the proper background can usually complete the program with careful schedule planning and use of electives.

A maximum of 20 hours of transfer equivalency will be accepted. Students interested in the program should contact Carolyn Phipps, Associate Chair, 426 Anderson Hall (215-204-1707).

## Certificate of Specialization in Spanish

A Certificate of Specialization in Spanish is also available. The certificate requires completion of six courses, beginning with Basic Spanish and advancing to more specialized study of Spanish designed to enhance career opportunities in business, communication, government, and social service. See your advisor or contact the department for more information.

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Spanish | 1001 | Basic I | 4 | LA |
| Spanish | 1002 | Basic II | 4 | LA |
| Spanish | 1003 | Intermediate | 3 | LB |
| Spanish | 2001 | Conversational Review | 3 |  |
| Spanish | 2096 | Composition | 3 | WI |
| Spanish | $3000+$ | Select one 3000-level course | 3 |  |
| Total |  |  | $\mathbf{2 0}$ |  |

## Certificate of Specialization in Spanish and Latin American Studies for Business

This interdisciplinary certificate is designed to allow Temple students in business-related programs to develop skills and knowledge in two complementary areas so that they may compete more successfully in this growing job market.

Course Requirements for the Business Certificate:

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Select three of the following courses: |  |  | 9-11 |  |
| Spanish | 1001 | Basic I |  | LA |
| Spanish | 1002 | Basic II |  | LA |
| Spanish | 1003 | Intermediate |  | LB |
| Spanish | 2001 | Conversational Review |  |  |
| Spanish | 2096 | Composition |  | WI |
| Spanish | 2002 | Hispanic Readings |  |  |
| Spanish | 3002 | Hispanic Readings II |  |  |
| Spanish | 1076/2076 | Intensive Practice/Advanced Intensive Practice in the Four Skills* |  |  |
|  |  | Note: Students participating in Spanish 1076 must also complete Spanish 2002. |  |  |
|  |  |  |  |  |
| Select one course in Spanish for Business Professions: |  |  | 3 |  |
| Spanish | 3501 | Spanish for Business Professions |  |  |
| Spanish | 3502 | Business Spanish I |  |  |
| Spanish | 3503 | Business Spanish II |  |  |
| Spanish | 3504 | Advanced Business Translation \& Interpretation |  |  |
|  |  |  |  |  |
| Latin American Studies | 1001 | ```Perspectives on Latin America or Completion of Latin American Studies Semester**``` | 3 | IS |
|  |  |  |  |  |
| Select one course in Business: |  |  | 3 |  |
| International Business <br> Administration | 2502 | Fundamentals of Latin American Business |  |  |
| Latin American Studies | 2502 | Fundamentals of Latin American Business |  |  |
|  |  |  |  |  |
| Total |  |  | 18-20 |  |

* Spanish 1076 or 2076 count as two of these three courses; each is 9 s.h. and taught in connection with the Latin American Studies Semester (LASS), an immersion program offered every spring.
** LASS is an integration of several courses totaling 17 s.h.: 9 credits are assigned to language instruction, 6 credits to culture and society, taught under Latin American Studies 2101 and Sociology 2163, and 2 credits to the LASS Seminar. All instruction in LASS is in Spanish.


## Certificate of Specialization in Spanish and Latino Studies for the Health and Human Services Professions

The combination of courses in this certificate program is designed to make participants especially qualified to provide health and human services to members of the Latino community.

Course Requirements for the Health and Human Services Certificate:

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Select three of the following courses: |  |  | 9-11 |  |
| Spanish | 1001 | Basic I |  | LA |
| Spanish | 1002 | Basic II |  | LA |
| Spanish | 1003 | Intermediate |  | LB |
| Spanish | 2001 | Conversational Review |  |  |
| Spanish | 2096 | Composition |  | WI |
| Spanish | 2002 | Hispanic Readings |  |  |
| Spanish | 1076/2076 | Intensive Practice/Advanced Intensive Practice in the Four Skills (LASS)* |  |  |
| Spanish | 2011 | Advanced Skills for Spanish Speakers |  |  |
|  |  |  |  |  |
| Select one of the following: |  |  | 3 |  |
| Spanish Spanish | $\left\lvert\, \begin{aligned} & 3601 \\ & 3602 \end{aligned}\right.$ | Spanish for Health \& Human Services or <br> Medical Spanish |  |  |
|  |  |  |  |  |
| Select one of the following: |  |  | 3 |  |
| Latin American Studies | $\left[\begin{array}{l} 1001 \\ 2101 \end{array}\right.$ | ```Perspectives on Latin America or Latin America through Film \& Fiction**``` |  | IS |
|  |  |  |  |  |
| Select one of the following: |  |  | 3 |  |
| Latin American Studies | $\left[\begin{array}{l} 2072 \\ 3020 \\ 3101 \end{array}\right.$ | ```Puerto Ricans in Philadelphia or Topics in Latino Studies or Latino Identity in the U.S.``` |  | RS |
| Total |  |  | 18-20 |  |

*Spanish 1076 or 2076 count as two courses; each is 9 s.h. and taught in connection with the Latin American Studies Semester (LASS), an immersion program offered every spring.
${ }^{* *}$ LASS is an integration of several courses totaling 17 s.h.: 9 credits are assigned to language instruction, 6 credits to culture and society, taught under Latin American Studies 2101 and Sociology 2163, and 2 credits to the LASS Seminar. All instruction in LASS is in Spanish.

## Latin American Studies Semester Certificate and Program

Each spring semester, the Spanish and Portuguese Department offers a 17-credit immersion program in Latin American Studies and Spanish. The program (LASS) combines 9 hours of intensive Spanish with 6 hours of study focusing on geography, history, and culture in Latin America, 2 hours of the LASS Seminar, and a three-week trip to Costa Rica. Successful completion of the program is awarded with a certificate of participation. Applications for LASS are received during October and November for the following spring. For information, contact Dr. Hiram Aldarondo, Program Director (215-204-1706; haldaron@temple.edu) or Dr. Patricia Moore-Martinez (215-204-1705).

## Spring in Spain Program

The Temple Semester in Spain Program takes place over the spring semester in Oviedo, Spain. The 15 -credit program combines coursework with faculty from the International Program at the University of Oviedo and with a Temple faculty member, who directs the program. All courses are pre-approved for Temple University credit. Courses focus on aspects of Spanish language, Spanish culture, and Spanish literature. The program develops Spanish skills over a semester of intensive study in a Spanish-speaking environment; it also provides the opportunity to complete a number of Spanish courses that may be used to satisfy the requirements for the Temple minor or major in Spanish. It includes an initial orientation week in Madrid. In Oviedo, lodging and meals are with Spanish families. For information, contact the Office of Education Abroad and Overseas Campuses or Dr. Jaime Duran (jduran@temple.edu), the Program Director, in the Department of Spanish and Portuguese.

## Summer Abroad in Spain: Spanish Language and Culture

Temple University's summer program in Oviedo, Spain, provides students with the opportunity to learn the Spanish language while being immersed in that country's unique and diverse culture. The duration of the program is five weeks; students may enroll for a total of 6 credits. For further information, contact the Department of Spanish and Portuguese or the Office of Education Abroad and Overseas Campuses.

## Summer Abroad in Brazil: Portuguese Language and Brazilian Culture

Temple University offers a six-week summer program in Salvador, Bahia, Brazil; students may enroll for a total of 6 credits. The program offers Portuguese language studied both at the elementary and more advanced levels. It also offers an intensive examination of culture in the state of Bahia; this aspect of the program focuses on history, politics, music, and dance, and it spotlights African origins and Afro-Brazilian influences on regional culture. For further information, contact the Department of Spanish and Portuguese or the Office of Education Abroad and Overseas Campuses.

## Junior Year and/or Summer School Abroad

Students declaring a concentration in the department may, under certain conditions, spend their junior year studying abroad. Application for permission to study abroad may be made during the second semester of the sophomore year. Only well-qualified students may be granted credit from Temple University after submitting proper credentials for established foreign study programs at institutions approved by the department. Students interested in a junior year abroad, or a summer school abroad, should discuss their plans early with their faculty advisor and the chair of the department.

## Service Learning and Internships

Students of Spanish and Portuguese may participate in courses providing service learning opportunities through project SHINE (Students Helping in the Naturalization of Elders) as a part of their coursework. For students of Business Spanish, service learning opportunities are available through the Small Business Development Center at Temple. Spanish majors are encouraged to participate in a Spanish internship combining study and work opportunities in a variety of contexts in the Philadelphia area.

## Suggested Semester-by-Semester Plans for Spanish Major Options

Suggested Semester-by-Semester Plan for Major Option I: Language, Literature, and/or Linguistics

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812, or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Spanish | 1001* | Basic I | 4 | LA |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Spanish | 1002 | Basic II | 4 | LA |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Spanish | 1003 | Intermediate | 3 | LB |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |


| Any | 0800-4999 | One Elective in Any School or College | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Subtotal |  |  | 15 |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Spanish | 2001 | Conversational Review | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Social Science/CST Course | 3 |  |
| Spanish | 2096 | Composition | 3 | WI |
| Spanish | 2002 | Hispanic Readings | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 2 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Junior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Social Science/CST Course | 3 |  |
| Spanish | 3001 | Advanced Composition \& Conversation | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Spanish | 3096 | Advanced Analysis \& Writing Skills | 3 | WI |
| Spanish | 3000+ | One 3000+ Spanish Course | 3 |  |
| Spanish | 3000+ | One 3000+ Spanish Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Spanish | 4000+ | One 4000+ Spanish Course | 3 |  |
| Spanish | 4000+ | One 4000+ Spanish Course | 3 |  |
| Spanish | 4000+ | One 4000+ Spanish Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |


| Degree Total |  | 123 |  |
| :--- | :--- | :--- | :--- |
| *Please check prerequisites for all Spanish courses. |  |  |  |

## Suggested Semester-by-Semester Plan for Major Option II: Language and

 Professional Studies| Freshman Year - 1st Semester |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812, or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | $08 x x$ or 09xx | Quantitative Literacy | 4 | GQ |
| Spanish | 1001* | Basic I | 4 | LA |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

Freshman Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Spanish | 1002 | Basic II | 4 | LA |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | $\mathbf{1 6}$ |  |
|  |  |  |  |  |

Sophomore Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Spanish | 1003 | Intermediate | 3 | LB |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | $08 x x$ or 09xx | Science \& Technology II | 3 | GS |
| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |
| Any | $0800-4999$ | One Elective in Any School or College | 3 |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

Sophomore Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| GenEd | 08xx or 09xx | Arts | $3-4$ | GA |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Spanish | 2001 | Conversational Review | 3 |  |
| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | $\mathbf{1 5 - 1 6}$ |  |

Junior Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| CLA/CST | $2000+$ | One 2000+ Social Science/CST Course | 3 |  |
| Spanish | 2096 | Composition | 3 | WI |
| Spanish | 2002 | Hispanic Readings | 3 |  |
| CLA/CST | $2000+$ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |
| Any | $0800-4999$ | One Elective in Any School or College | 2 |  |
| Subtotal |  |  | $\mathbf{1 7}$ |  |


| Junior Year - 2nd Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Social Science/CST Course | 3 |  |
| Spanish | 3001 | Advanced Composition \& Conversation | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Spanish | 3096 | Advanced Analysis \& Writing Skills | 3 | WI |
| Spanish | 3000-4999 | One Business/Medical/Legal/Translation course | 3 |  |
| Spanish | 3000-4999 | One Business/Medical/Legal/Translation course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Spanish | $\begin{gathered} 3121 \\ \text { or } \\ 3141 \end{gathered}$ | Masterpieces of Spanish Literature <br> or <br> Masterpieces of Spanish American Literature | 3 |  |
| Spanish | 4000+ | One 4000+ Spanish Course | 3 |  |
| Spanish | 4000+ | One 4000+ Spanish Course | 3 |  |
| Spanish | 3000-4999 | One Business/Medical/Legal/Translation course | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Degree Total |  |  | 123 |  |
| *Please check prerequisites for all Spanish courses. |  |  |  |  |

## Suggested Semester-by-Semester Plan for Major Option III: Spanish for Education

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812, or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Spanish | 1001* | Basic I | 4 | LA |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Spanish | 1002 | Basic II | 4 | LA |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |


| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| :--- | :--- | :--- | :---: | :---: |
| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | $\mathbf{1 6}$ |  |

## Sophomore Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Spanish | 1003 | Intermediate | 3 | LB |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | $08 x x$ or 09xx | Science \& Technology II | 3 | GS |
| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |
| Any | $0800-4999$ | One Elective in Any School or College | 3 |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

Sophomore Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| GenEd | 08xx or 09xx | Arts | $3-4$ | GA |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Spanish | Conversational Review (One Comp. \& Conv. <br> Course) | 3 |  |  |
| CLA/CST | 2001 | Any CLA/CST Elective |  |  |
| Subtotal |  |  | $\mathbf{1 5 - 1 6}$ |  |

Junior Year - 1st Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| CLA/CST | $2000+$ | One 2000+ Social Science/CST Course | 3 |  |
| Spanish | 2096 | Composition | 3 | WI |
| Spanish | 2002 | Hispanic Readings (Elective) | 3 |  |
| CLA/CST | $2000+$ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |
| Any | $0800-4999$ | One Elective in Any School or College | 2 |  |
| Subtotal |  |  | $\mathbf{1 7}$ |  |

Junior Year - 2nd Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| CLA/CST | $2000+$ | One 2000+ Social Science/CST Course | 3 |  |
| Spanish | 3001 | Advanced Composition \& Conversation (Elective) | 3 |  |
| CLA/CST | $2000+$ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | $2000+$ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | $0800-4999$ | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |
|  |  |  |  |  |


| Senior Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Spanish | 3096 | Advanced Analysis \& Writing Skills | 3 | WI |
| Spanish | 3204-3261 | One Culture \& Civilization Course From Approved List | 3 |  |
| Spanish | 3003 | Advanced Grammar \& Linguistic Concepts (Elective) | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Spanish | 4301-4306 | One Linguistics Course From Approved List | 3 |  |
| Spanish | 4132-4148 | One Contemporary Literature Course From Approved List | 3 |  |
| Spanish | 3121-4401 | One Additional Literature Course From Approved List | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Degree Total |  |  | 123 |  |
| *Please check prerequisites for all Spanish courses. <br> Note: Secondary Education majors should see the suggested semester-by-semester plan for that major. |  |  |  |  |

## Women's Studies

## 8th floor, Anderson Hall

www.temple.edu/womenstu

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Women's Studies offers a cohesive framework of inquiry for the examination of women, gender, and sexuality in the U.S. and around the world, as they relate to other social categories, such as race, class, disability, nationality, and ethnicity. As an interdisciplinary field, Women's Studies takes into account social, historical, and cultural variables in its study of women's material and cultural experiences as a social group; the examination of the workings of gender as an analytical category, identity, and social force; and the social, political, and cultural functioning of sexuality. Women's Studies also seeks to transform traditional fields of study by incorporating new methodologies, data, theories, and frameworks developed by feminist scholars.

Temple University's Women's Studies Program is part of the College of Liberal Arts. It offers an undergraduate major and minor, as well as a certificate for students outside the College of Liberal Arts. In preparation for graduate school, Women's Studies majors have the opportunity to graduate with distinction in the major after completing an honors thesis.

The Women's Studies Program offers students the opportunity to study women, gender, and sexuality through an interdisciplinary curriculum taught by faculty from various departments across the university. Students learn to apply the methods and theories of social scientists, historians, philosophers, literary critics, etc., to the study of women's experiences, as well as gender and sexual identities. They explore a growing body of feminist theories that revise our understanding of gender, society, and culture. We encourage students not only to understand intellectually the importance of class, race, sexuality, physical ability, and gender to people's lives but also to learn actively through fieldwork (community internship). After graduation, Women's Studies students enter professional schools in law, medicine and business; take graduate degrees in the humanities and social sciences; and pursue careers in health, counseling, teaching, and public advocacy.

## Summary of Degree Requirements

## 1. University Requirements

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses as part of the major. See below for a list of the specific courses required for your major.
- Students must complete requirements of the General Education (GenEd) Program. See the General Education section of the Undergraduate Bulletin for more details.


## 2. College of Liberal Arts Requirements

- Completion of a minimum of 123 credits, including: 90 credits in CLA/CST courses, 45 credits of which must be at the upper level (numbered 2000-4999). For Social Science majors, 6 upper level credits must be taken in the Humanities Departments (English, French, German, Greek and Roman Classics, Hebrew, Italian, Japanese (only available at
our Japan campus), Philosophy, Religion, Russian, and Spanish), Art History, or any department in the College of Science and Technology.
- A minimum GPA of 2.0, cumulatively, in CLA/CST coursework, and in the major.
- Only courses in which a student receives a grade of at least C- can satisfy GenEd, major, minor, or CLA Foreign Language and Global Studies requirements.


## 3. Foreign Language/Global Studies Requirements

1) All students must complete the second level of a foreign language;
2) All students must complete at least one course from the GenEd Global/World Society category; and
3) All students must complete one of the following options:
o Third level of a foreign language;
o Demonstrated proficiency in a foreign language;
o A second General Education Global/World Society course;
o Study Abroad at an approved program; or
o Take one Global Studies course from the list on the CLA College Graduation Requirements page.

## 4. Major Requirements (36 s.h.)

- Specifically Required courses:
o Women's Studies 1301
o Women's Studies 4389
o Women's Studies 4396
- Other Requirements:
o One Women's Studies 1000-level course
- Electives in Major
o Eight Women's Studies electives, of which at least six must be upper-level, and one must be Writing Intensive

5. General electives vary according to a student's individual program of study. Consult your academic advisor for more information.

Major Requirements

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Two introductory Women's Studies courses: | 6 |  |  |  |
| Women's Studies | 1301 | Foundations in Women's Studies |  |  |
| Women's Studies | 1000-level |  |  |  |
|  |  |  |  |  |
|  | Eight Women's Studies electives, of which at least six must be upper-level (over 2000)* | 24 |  |  |
| At least one of the electives above (at any level) must be <br> writing-intensive, ending in -96, -97, or -98. |  | WI |  |  |


|  |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
| Two-course sequence: ${ }^{* *}$ |  |  |  |  |
| Women's Studies | 4389 | Field Work in Women's Studies | 3 |  |
| Women's Studies | 4396 | Research Seminar in Women's Studies (Capstone Course) | 3 | WI |
|  |  |  |  |  |
| Total |  |  | $\mathbf{3 6}$ |  |

*Majors will be permitted to take two of these eight courses outside Women's Studies (courses that are not cross listed) with the written permission of the advising coordinator. These courses must support the student's academic or professional growth in conjunction with the major (e.g. a research methods course in another discipline for which the student will write on a subject related to gender or courses taken in a study abroad program).
**The final requirement for the major is a two-course sequence. This sequence should be taken during the major's last three semesters of enrollment. Students will select a field assignment (internship) with the assistance of the advising coordinator. This sequence is designed for students to learn how to write a research paper.

## Distinction in Major

Women's Studies students may graduate with a distinction in the major if they have a GPA of 3.5 or better in the major, a cumulative GPA of 3.0 or better, and successfully complete an honors thesis (minimum 3 credits) under the supervision of a faculty member from Women's Studies.

## Minor Requirements

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Women's Studies | Electives | Six electives in Women's Studies. At least three of these six are at the <br> upper level (above 2000). See major requirements for examples. | 18 |  |
|  |  |  |  |  |
| Women's Studies | 1301 | Foundations in Women's Studies | 3 |  |
|  |  |  |  |  |
| Total |  |  | $\mathbf{2 1}$ |  |

## Certificate in Women's Studies

Designed for students whose major is outside the College of Liberal Arts who want to pursue a Women's Studies-oriented career.

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Women's Studies | 1076 <br> or <br> 1096 | Introduction to Women's Studies | 3 |  |
| Women's Studies | 4389 | Field Work in Women's Studies | 3 |  |
| Women's Studies | Two <br> Electives | Two electives in Women's Studies. At least one of these two <br> courses must be at the upper level. | 6 |  |
|  |  |  | WI |  |
| Total |  |  | $\mathbf{1 2}$ |  |

## Suggested Semester-by-Semester Plan

| Freshman Year - 1st Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| Foreign Language | 1001 | Foreign Language (first level) | 4 |  |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Freshman Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Foreign Language | 1002 | Foreign Language (second level) | 4 |  |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Women's Studies | 1301 | Foundations in Women's Studies | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Sophomore Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Foreign Language/ GenEd | 0800+ | Foreign Language (third level) or <br> a GenEd Global/World Society course or <br> an Internationally-Focused Course from Approved List | 3 | GG |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Women's Studies | 1000+ | One 1000+ Women's Studies Elective | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 2 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Women's Studies | 1000-1999 | One 1000-Level Women's Studies Elective | 3 |  |
| Women's Studies | 1000+ | One 1000+ Women's Studies Elective | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Junior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Humanities/CST Course | 3 |  |
| Women's Studies | 2000+ | One 2000+ Women's Studies Elective | 3 |  |
| Women's Studies | 2000+ | One 2000+ Women's Studies Elective | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |


| Junior Year - 2nd Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| CLA/CST | 2000+ | One 2000+ Humanities/CST Course | 3 |  |
| Women's Studies | 2000+ | One 2000+ Writing Intensive Women's Studies Course | 3 | WI |
| Women's Studies | 2000+ | One 2000+ Women's Studies Elective | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 1st Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Women's Studies | 2000+ | One 2000+ Women's Studies Elective | 3 |  |
| Women's Studies | 4389* | Field Work in Women's Studies | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Senior Year - 2nd Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Women's Studies | 2000+ | One 2000+ Women's Studies Elective | 3 |  |
| Women's Studies | 4396* | Research Seminar in Women's Studies (Capstone Course) | 3 | WI |
| CLA/CST | 2000+ | One 2000+ CLA/CST Course | 3 |  |
| CLA/CST | 0800-4999 | Any CLA/CST Elective | 3 |  |
| Any | 0800-4999 | One Elective in Any School or College | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Degree Total |  |  | 123 |  |
| *These courses may not be offered every semester. Please see advisor for offerings. |  |  |  |  |

## SCHOOL OF MEDIA \& COMMUNICATION

Founded 1967
David Boardman, Dean
2020 N. 13th Street, Philadelphia, PA 19122
215-204-8421
www.temple.edu/smc

## Goals and Objectives

The mission of the School of Media and Communication (SMC) is to provide leadership in advancing the role of communication in public life. This mission is pursued through the training
of students for leadership careers in media and communications, through advancing research and creative activity in these fields, and through serving the public need for free and open communication. The school is concerned not only with high standards of professional work but also with encouraging the next generation of teachers and media managers to develop an intellectual background and a sense of social responsibility. Toward this end, SMC students are encouraged to take coursework in disciplines outside the school. For some, history and political science are related areas of interest; others choose literature and the arts; still others choose business, economics, or the social sciences. In this way, the school participates in providing not only professional training but also a broad humanistic education for its students.

The faculty of the school comes from diverse backgrounds. Some have extensive professional experience as journalists, television producers, speech writers, advertising executives, and public relations practitioners. Others have come to Media and Communication through academic study, doing graduate work and continuing the practice of research and scholarship while teaching at Temple.

Renowned for their professional experience, research, and teaching, our faculty prepare our graduates for a wide range of careers in communication industries, as well as lead graduate students towards Ph.D., M.F.A., M.A., and M.J. degrees.

## History

The study of communication began formally at Temple University with the founding of the Department of Journalism in 1927. It was the first such department in the Commonwealth.

Theater was an extracurricular activity at Temple until 1931, when formal courses were developed.

Radio-Television became an instructional division in 1947, and extensive film offerings were added in 1967. That year, Journalism and Radio-Television-Film joined Theater to form the School of Communications and Theater. In 1987 the highly-respected Department of Speech moved to the school from the College of Arts and Sciences. A year later, Speech became two departments: Rhetoric and Communication, and Speech-Language-Hearing.

The school was restructured in 1995. Radio-Television-Film became the Department of Film and Media Arts and the Department of Broadcasting, Telecommunications, and Mass Media; Journalism became Journalism, Public Relations, and Advertising; Rhetoric and Communication became Speech Communication. In 1998, the Department of Communication Sciences (Speech-Language-Hearing) moved to the College of Health Professions.

Effective Fall 2004, a change occurred with the Departments of Journalism, Public Relations and Advertising, and Speech Communication. Advertising became a separate department. The Department of Speech Communication changed its name to Strategic and Organizational Communication and includes Public Relations as one of three concentrations: Public Communication (formerly Speech Communication), Public Relations, and Organizational

Leadership. In 2010, the Department of Strategic and Organizational Communication changed its name to the Department of Strategic Communication.

A new major, Communication Studies, replaced the former Communications major as of fall 2011. For information about the newly designed Communication Studies major, please visit: http://smc.temple.edu/commstudies/.

On July 1, 2012, the School of Communications and Theater was renamed the School of Media and Communication. It houses the departments of Advertising; Journalism; Media Studies and Production (formerly Broadcasting, Telecommunications, and Mass Media); and Strategic Communication. The Communication Studies program remains a part of the School of Media and Communication. The Departments of Theater and Film and Media Arts comprise the Division of Theater, Film and Media Arts and join Boyer School of Music and Dance and the Tyler School of Art to form the Center for the Arts.

Also in 2012, the Department of Broadcasting, Telecommunications, and Mass Media changed its name to Media Studies and Production while the Department of Strategic Communication renamed the Public Communication concentration to Rhetoric and Public Advocacy.

## Special Facilities

The School of Media and Communication is housed in buildings designed for teaching, research, and production.

The primary location of the School is Annenberg Hall, which houses the Departments of Advertising; Journalism; and Media Studies and Production. Television and film production areas (studios and editing, graphics, and film labs) occupy the first floor. The building also includes extensive video and film editing areas, a 75 -seat multimedia screening room, photographic labs, two news writing labs and smart classrooms.

The Department of Strategic Communication is housed in Weiss Hall.
The Joe First Media Center, SMC's newest addition, is located on the first floor, linking Annenberg and Tomlinson Halls. The center is a communications and media hub for the school and includes a cyber-café, a multimedia information center, and a venue for displaying student work.

## Special Programs

## TUTV - Temple University Television

In Fall 2010, the university launched TUTV, a new regional cable television channel with associated new media platforms, which will showcase the innovative work done by Temple students, faculty, and alumni.

TUTV offices and master control are located on the first floor of Annenberg Hall and is a part of the Kal \& Lucille Rudman Media Production Center. The Rudman Center also features a broadcast studio and a computer-equipped classroom. The station features news, sports, music, comedy, and documentary programs. TUTV presents content from many of the university's other professional schools, plus programs produced in association with community cultural groups and professional broadcasters. Student volunteers are also accepted. For more information, contact the TUTV General Manager at paul.gluck@temple.edu.

## Temple Update

Temple Update is a production course in which students can gain experience producing, reporting, and editing for a half-hour weekly news magazine format. The program airs on a cable outlet. The course gives students the opportunity to produce material for a résumé tape and provides students with valuable experience in field work, news writing, video editing, and the pressure of a live program.

## Center for Student Professional Development (CSPD)

The Student Affairs Office within the School of Media and Communication launched a new Center for Student Professional Development (CSPD) during the Fall 2010 semester. The CSPD offers professional development programming in a newly renovated space, which includes computers for job searching, résumé writing, cover letter writing, and job-related research; reference books; and a space for small group professional development workshops. The CSPD partners with the Career Center to offer specialized programming for School of Media and Communication students. Programming will include a variety of offerings related to job search preparation, the graduate school application process, and undergraduate research opportunities. For more information, please contact the manager of the CSPD, Patrick Gordon, at pgordon@temple.edu.

## Internship Program

Although the requirements may vary, internships are available to junior and senior students of every department in the school. Internships are for academic credit and must involve professional activity related to the student's course of study. The internships must be approved by the administrator or faculty member charged with supervising internships.

## Study Away

The School of Media and Communication offers several programs for students who are interested in studying away and strongly encourages students to participate in these programs.

The school offers a semester program in London for undergraduate and graduate students. Students spend either the fall or spring semester in London studying British theater and media as well as journalism, strategic communication, and advertising with an international faculty. An
optional, guaranteed internship placement in a student's field of study is a popular component of the program.

Enrollment in the London program is also open to qualified students from other universities and colleges to foster an intellectual exchange among students of varied collegiate backgrounds. Courses are designed to make the best use of the uniqueness of London and the United Kingdom.

Summer Study Away programs are also an important feature of the school's special programs. Realizing the inestimable value of direct contact with professionals and other experts, the School of Media and Communication offers an annual summer seminar in London on British Mass Media. These seminars are offered for graduate and undergraduate credit and can be an integral part of a student's coursework.

Temple Dublin is a five to six week-long program offered by the School of Media and Communication which allows students to experience the old and the new Dublin within a challenging academic experience.

Temple South Africa is a new 6-week program as of summer 2011. This program offers students an opportunity to produce journalistic and documentary narrative, a body of photographic work, or to conduct media research. The journalism production option allows students to experience what it would be like to work as a foreign correspondent in South Africa. The photography track offers students an opportunity to work alongside South African photography students and receive training and mentoring from experienced South African photographers, and then work on a project related to a social issue, all organized through the Market Photo Workshop in Johannesburg. The research option offers students an opportunity to conduct research on topics related to mass media, communication technologies, politics, culture, and economics in southern Africa.

Temple New York City is a new program as of summer 2012. This program investigates the communicative components of New York City by focusing on its neighborhoods, organizations, and institutions. Students must also undertake an internship or academic experience component as part of this study-away experience and attend regular events and excursions.

The International Internship Program is a new program as of summer 2013. This program offers students the opportunity to participate in guaranteed, full-time international internship opportunities in either Barcelona, Hong Kong, or Costa Rica. All students, regardless of their international internship location, spend time together on Temple's Main Campus studying Intercultural Communications in the Workplace as a group before they depart for their chosen destination. Students work one-on-one with an industry expert so as to secure an internship in their desired field. Each of the programs is a unique combination that includes travel, learning, and exciting events, with a resume building internship. Knowledge of a foreign language is not required for Barcelona or Hong Kong, however, an intermediate level in Spanish is strongly recommended for the Costa Rica internship option.

The summer programs, like the academic year programs, are open to qualified students from other universities and colleges and to others who choose to continue their education in a less formal manner than in a prescribed program of study, although in the South Africa program, preference may be given to Temple students.

SMC is also in the process of developing new Study Away programs. Check with the Study Away advisor for information on these developments. Current information on the SMC programs listed here is available from SMC Study Away at 215-204-2677 or 215-204-6535.

See Education Abroad for more information about University Study Abroad options.

## Advising

SMC Student Affairs/Advising
9 Annenberg Hall
2020 N. 13th Street
Philadelphia, PA 19122
215-204-5273
http://smc.temple.edu/undergraduate/advising/
advise@temple.edu

Students in the School of Media and Communication are advised by professional academic advisors and faculty advisors. New students (up to 30 credits), transfer students in their first semester, interdepartmental majors, undeclared students, and students on academic probation make advising appointments in SMC Student Affairs/Advising, located on the ground floor of Annenberg Hall. All other students are advised by faculty in their respective departments. Consult your departmental office for assignment to the appropriate faculty advisor.

Academic advisors attempt to avoid errors when advising students about their program requirements, but schools and colleges cannot assume liability for errors in advising. Therefore, students must assume primary responsibility for knowing the requirements for their degree and for acquiring current information about their academic status.

Most students will be eligible to register for classes online via Self Service Banner through the TU Portal. However, all students should meet with an advisor prior to the eligible registration period.

Students preparing to graduate must file the necessary paperwork one semester prior to the graduation date. At that time, an appointment should be made in SMC Student Affairs/Advising to complete a graduation review and application for graduation.

## Academic Policies \& Regulations

Please see the Undergraduate Academic Policies section of this Bulletin. Students are responsible for complying with all university-wide academic policies as well as those of the School of Media and Communication that appear below.

## Academic Standing

A matriculated undergraduate student in the university is in Academic Good Standing if enrolled in a baccalaureate degree-seeking program.

Please see the University's policy on Academic Standing for detailed information about Academic Warning, Academic Probation, and Academic Dismissal.

## Credits Not Applied Toward the Degree

Credits earned in the following courses are not applied toward a degree in the School of Media and Communication: lower-level courses in Military Science, Topical Studies, RCC, ELECT, and Mathematics 0015.

## Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List policy for specific GPA and credit-hour requirements.

## Re-enrollment

Students returning to the School of Media and Communication after an absence of one semester (unless an approved Leave of Absence form was filed prior to the leave) must use the Undergraduate Bulletin in effect at the time of readmission or any subsequent Undergraduate Bulletin. Credits more than 10 years old may not be applied toward a degree in the school. For application deadlines and the re-enrollment form, please
visit: www.temple.edu/vpus/documents/request_to_reenroll.pdf.

## Transfer Students

Refer to the Undergraduate Admissions section of this Bulletin for general information on transferring courses to Temple. In addition to these criteria, each department in the School of Media and Communication will evaluate any credit to be transferred into a major. This evaluation generally is done at the first meeting with a faculty advisor during the first semester. The maximum number of credit hours allowed to transfer in the major are: 12 hours in Advertising; 20 hours in Media Studies and Production; 24 hours in Communication Studies; 12 hours in Journalism; and 12 hours in Strategic Communication.

## School Requirements for Graduation

The School of Media and Communication requires 124 credits to graduate; completion of the university General Education (GenEd) requirements; completion of departmental requirements, including two writing-intensive courses in the major; a minimum of 2.00 GPA, both cumulative and in the major; and completion of a maximum of 78 credits within the school and a minimum of 46 credits outside of the school.

Minimum and maximum credit requirements within each major are listed with the departmental requirements.

Students who are planning to graduate must schedule an official graduation review with an academic advisor and complete the application for graduation one semester prior to the anticipated graduation date. Appointments may be made in SMC Student Affairs/Advising, Annenberg Hall Room 9.

## Program Descriptions

1. The total number of credit hours at graduation may be greater for some students based on initial placement exams, transfer evaluations, individual curricular choices, and academic progress.
2. Students must fulfill the necessary prerequisites for any given course or course sequence. See the Prerequisites and Co-requisites Policy in the university-wide Academic Policies section of this Bulletin.

## Student Contact

For information about the School of Media and Communication, please contact the SMC Student Affairs at 215-204-5273.

## Faculty

## Advertising

Brooke Duffy, Assistant Professor
James Marra, Professor
Michael Maynard, Associate Professor and Chair

## Journalism

David Boardman, Dean
Meredith Broussard, Assistant Professor
Brian Creech, Assistant Professor
Fabienne Darling-Wolf, Associate Professor

Christopher Harper, Professor<br>Carolyn Kitch, Professor<br>Andrew Mendelson, Associate Professor and Chair<br>Lori Tharps, Assistant Professor<br>Edward Trayes, Professor<br>Karen Turner, Associate Professor<br>Linn Washington, Associate Professor<br>\section*{Media Studies \& Production}<br>Undrahbuyan Baasanjav, Assistant Professor<br>John Campbell, Assistant Professor<br>Jan Fernback, Associate Professor<br>Thomas Jacobson, Professor<br>Elizabeth Leebron Tutelman, Professor<br>Matthew Lombard, Associate Professor<br>Nancy Morris, Professor and Chair<br>Patrick Murphy, Associate Professor<br>Howard Myrick, Professor<br>Wazhmah Osman, Assistant Professor<br>Hector Postigo, Associate Professor<br>Adrienne Shaw, Assistant Professor<br>\section*{Strategic Communication}<br>Deborah Cai, Professor<br>Heather LaMarre, Assistant Professor<br>Donnalynn Pompper, Associate Professor<br>Cornelius Pratt, Professor and Chair<br>Kaibin Xu, Assistant Professor

## Advertising

Michael Maynard, Ph.D., Chair
215-204-4268
maynard@temple.edu
Department Office:
Annenberg Hall, Room 300
215-204-4268
http://smc.temple.edu/advertising/

The Department of Advertising offers students professionally-oriented courses focused on preparing them for a wide variety of careers, rooted in marketing communications in a mediadefined global society.

Advertising is a major industry, serving major businesses at the intersection of media and society. Students in a professional department dedicated to the study of advertising will learn, and graduates will be well grounded in the art of marketing communications in a modern, high tech, media intense, interconnected world. They must comprehend the nexus of economic communications and social communications. They must be positioned to succeed in professional careers and to respond wisely as citizens, consumers, and community leaders.

Based on the evidence from over 5,000 survey questionnaires, full-time advertising students at Temple University fall into clearly-defined groups:

- Students energetically interested in advertising as a career
- Students who have creative talent and wish to express it
- Students who are broadly interested in media and the power and mystery of advertising
- Students interested in marketing, sales, or business, but who do not wish to major in business or finance
- Students who think advertising will be a fun way to get a job-oriented college degree


## - Students in the Department of Advertising will learn:

- How to identify appropriate research designs for understanding consumer wants, needs, and communication behavior, and be able to interpret the results for developing brand and advertising strategies
- How to conceive, write, design and produce advertising in all media formats which can be measured against marketing objectives and strategies
- How to establish strategies and to negotiate executions for the investment of advertising dollars in all media vehicles and how to evaluate the results
- How to manage client relations and the process of producing advertising from strategy through production at a profit


## The Advertising Department consists of three major tracks:

## 1. Creative - Copywriting or Art Direction

Students following the Creative Track will take three advanced courses in either copywriting or art direction. These advanced courses prepare students for the competitive world of creative writing and creative art direction in the field of advertising. The Portfolio class provides students the opportunity to work in teams and to work on the production of a professional-grade portfolio. Students following the Creative Copywriting track take Advertising 3022, 3023 and 4064. Students following the Creative Art Direction track take Advertising 3052, 3053 and 4064. Note: Students concentrating in Art Direction must demonstrate competency in computer software, such as the Adobe Suite. Students are advised to see an Art Direction faculty member prior to enrolling in ADV 3052.

## 2. Management

This track provides instruction for the advertising generalist, the account executive, and the media expert. In the three advanced management courses (Advertising 3032, 3033 and 4034), students follow the leadership path in organization, command, and control of the advertising function. Advanced Media prepares students for the complex, fragmented media landscape of today's world. Note: Students in the Management concentration may substitute ADV 1004 for ADV 2151 and ADV 3031 for ADV 3032.

## 3. Research

Students following this track will receive training that guides them in conducting surveys, analyzing data, testing copy, studying America’s changing demographics, and attempting to get ahead of the fashion trend curve. Ways of tracking the success of traditional as well as alternative advertising vehicles and the mass media in general are studied. Students following the Research track take Advertising 3042, 3043 and 4044.

## Internships or Diamond Edge Communications

All majors are required to take either an internship or be involved with Diamond Edge Communications (DEC), our student-run ad agency. Both offer students valuable hands-on experience in actual production: ads, logos, surveys, brochures, etc. DEC works with local Philadelphia clients and sometimes, working in groups, takes on a national advertising competition. In terms of internships, students will be directed to a number of quality situations where they will have the opportunity to work in relevant professional ways for course credit.

## Requirements for the Degree of Bachelor of Arts

## Summary of Requirements:

1. University requirements:

- New students starting in the 2013-2014 academic year are required to complete the General Education (GenEd) curriculum.
- All students must take a minimum of two writing-intensive courses. The specific writingintensive courses required for this major are listed below and identified with the code "WI" in the Attribute column.

2. Maximum of 78 credits in the School of Media and Communication.
3. Minimum of 48 credits in Advertising courses, maximum of 54 credits in Advertising courses.
4. A grade of C or higher must be attained in all required Advertising courses.
5. An overall GPA of 2.0 must be attained in the major.
6. 1000-level Advertising courses are prerequisites to 2000-level Advertising courses; 2000-level Advertising courses are prerequisites to 3000-level

Advertising courses; 3000-level Advertising courses are prerequisites to 4000-level Advertising courses.
7. No more than 12 semester hours of transfer credits may be applied to Advertising major
requirements.
8. No more than 8 credits may be taken in Kinesiology and Dance activities courses.

Suggested Semester By Semester Plan
Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

## Bachelor of Arts in Advertising

## Requirements for New Students starting in the 2013-2014 Academic Year

| Year 1 - Fall | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Subject | 1101 | Introduction to Media \& Society | 3 |  |
| Advertising | 1102 | Introduction to Advertising | 3 |  |
| Advertising | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| English | $08 x x$ or 09xx | Quantitative Literacy | 4 | GQ |
| GenEd | Freshman Seminar | 1 |  |  |
| Communicatoins \& Theater | 1001 |  | $\mathbf{1 5}$ |  |
| Semester Total |  |  |  |  |

Year 1 - Spring

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :---: |
| Advertising | 1196 | Persuasive Writing | 3 | WI |
| Advertising | 1141 | Introduction to Advertising Research | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08 xx or 09xx | Human Behavior | 3 | GB |
| GenEd | 08 xx or 09xx | Arts | $3-4$ | GA |
| Semester Total |  |  | $\mathbf{1 5 - 1 6}$ |  |

Year 2 - Fall

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Advertising | 2101 | Advertising Strategy \& Positioning | 3 |  |
| Advertising | 2121 | Copywriting: Introduction | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08 xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08 xx or 09xx | U.S. Society | 3 | GU |
| Semester Total |  |  | $\mathbf{1 5}$ |  |

Year 2 - Spring

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :---: |
| Advertising | 2131 | Advertising Media Planning I | 3 |  |
| Advertising | $2151^{*}$ | Visual Communication | 3 |  |
| GenEd | $08 \times x$ or 09xx | Global/World Society | 3 | GG |
| GenEd | $08 \times x$ or 09xx | Science \& Technology II | 3 | GS |
| GenEd | $08 \times x$ or 09xx | Race \& Diversity | 3 | GD |
| Semester Total |  |  | $\mathbf{1 5}$ |  |
|  |  |  |  |  |
| Year 3 - Fall |  |  |  |  |


| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Advertising | 3101 | Creative Thinking for Advertising | 3 |  |
| Advertising or Advertising or Advertising or Advertising | 3022 <br> or <br> 3052 <br> or <br> $3032 * *$ <br> or <br> 3042 | ```Copywriting: Print or Art Direction I: Concept \& Layout or Advertising Media Planning II or Quantitative Advertising Research``` | 3 |  |
| Electives |  |  | 10 |  |
| Semester Total |  |  | 16 |  |
| Year 3 - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| $\begin{aligned} & \hline \text { Advertising } \\ & \text { or } \\ & \text { Advertising } \\ & \hline \end{aligned}$ | $\begin{gathered} 3171 \\ \text { or } \\ 3185 \end{gathered}$ | Diamond Edge Communications or <br> Advertising Internship | 3 |  |
| Advertising or <br> Advertising or <br> Advertising or <br> Advertising | 3023 or 3053 or 3033 or 3043 | ```Copywriting: Broadcast or Art Direction II: Narrative \& Multiple Media or Marketing Media Products or Qualitative Advertising Research``` | 3 |  |
| Electives |  |  | 10 |  |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Year 4 - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Advertising | 4101 | Interactive Media, Marketing \& Advertising | 3 |  |
| Advertising | 4196 | Morality, Law \& Advertising | 3 | WI |
| Electives |  |  | 10 |  |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Year 4 - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| $\begin{aligned} & \hline \text { Advertising } \\ & \text { or } \\ & \text { Advertising } \\ & \hline \end{aligned}$ | $\begin{gathered} 4102 \\ \text { or } \\ 4103 \end{gathered}$ | Advertising Campaigns <br> or <br> American Advertising Federation Contest | 3 |  |
| Advertising or Advertising or Advertising | $\begin{array}{\|c} \hline 4064 \\ \text { or } \\ 4034 \\ \text { or } \\ 4044 \\ \hline \end{array}$ | Advertising Portfolio <br> or <br> Advertising Account Management or <br> Advertising Account Planning | 3 |  |
| Electives |  |  | 10 |  |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Total Hours for Advertising: |  |  | 124 (minimum) |  |

[^5]** Students following the Management track may take Advertising 3031: Interactive Media Planning for credit, in place of Advertising 3032: Advertising Media Planning II.

## Communication Studies

Scott Gratson, Ph.D., Program Director
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215-204-6434
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http://smc.temple.edu/commstudies/
Communication Studies is a studies-based interdisciplinary major. It features the academic (aesthetic, analytical, critical, historical, theoretical) and interdisciplinary study of communication as represented by the departments included within the School of Media and Communication.

Designed to ensure flexibility and choice, Communications Studies allows students a chance to fully investigate multiple fields in the communications discipline. Emphasis is placed on providing an overview of Communication while also accentuating personal academic growth. Personal choice and options allow students a chance to complete the degree in a timely manner. In this interdisciplinary program, Communication Studies students will select Policy, Regulation and Advocacy; Contemporary Media Environments; Global Civil Society; or Arts in the Public Sphere as a distinctive area of investigation. A Major of Distinction track is also available for advanced scholars. The flexibility of the Communications Studies program offers students access to the field experiences, internships, and study away experiences vital to a comprehensive education. Students with a number of skill sets and academic interest areas are often drawn to this innovative program and graduates are poised for a number of professional and academic possibilities, such as graduate, law, or professional school. Graduates of this program will be well-suited to pursue a variety of positions across numerous aspects of the Communications field.

Students receive cross-curricular expertise through foundation and core courses. Academic rigor and student choice are at the very core of the program. Choices allow a student flexibility and curricular oversight ensures a solid, academically robust education. Courses are designed to allow student progress to be monitored at yearly intervals. Experiential learning is promoted, particularly during the junior and senior years. Cross cultural exchanges and experiences are integral aspects of the program's design. Advanced scholars have a distinct and individualized track.

## Program Requirements

The Bachelor of Arts degree requires completion of all University requirements:

- New students starting in the 2013-2014 academic year are required to complete the General Education (GenEd) curriculum;
- All students must take a minimum of two writing-intensive courses. The specific writingintensive courses required for this major are identified with the code "WI" in the Attribute column; and School requirements, with a minimum of 124 semester hours. There is a maximum of 78 s.h. allowed in SMC. Students must earn a "C" or better in all courses required for the major, including selected courses to fulfill major core (\#2 below) and tracks (\#3 below), and a minimum 2.0 GPA in the major.

The major requires completion of 42 s.h. in the Communication Studies major:

1) All Communication Studies majors must take the following two foundation courses (6 credits):

Foundation Courses

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Communication Studies | 1111 | Communication and Public Life | 3 |  |
| Media Studies \& Production | 1021 | Media \& Society | 3 |  |

2) All majors will take five additional core courses. Students will select one course each from the categories below (15 credits). Students should plan to meet the prerequisites for courses in their selected tracks (see below) by taking appropriate core courses.

| Core Courses |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Communication Studies | 2111 | Communications Seminar | 3 |  |
|  |  |  |  |  |
| Communication Theory (select one from list below): |  |  | 3 |  |
| Advertising | 1101 | Introduction to Media and Society |  |  |
| Advertising | 1102 | Introduction to Advertising |  |  |
| Media Studies \& Production | 1011 | Introduction to Media Theory |  |  |
| Journalism | 1111 | Journalism and Society |  |  |
|  |  |  |  |  |
| Research Methods (select one from list below): |  |  | 3 |  |
| Advertising | 1141 | Introduction to Advertising Research |  |  |
| Media Studies \& Production | 2141 | Media Research (Prerequisite: Media Studies \& Production 1011) |  |  |
| Journalism | 2101 | Journalism Research (Prerequisite: Journalism 1111 \& 1196) |  |  |
|  |  |  |  |  |
| Analysis (select one from list below): |  |  | 3 |  |
| Advertising | 2151 | Visual Communication |  |  |
| Media Studies \& Production | 2421 | Media Popular Culture (Prerequisite: Media Studies \& Production 1021) |  |  |
| Theater | 1002 | Theater: The Collaborative Art |  |  |
| Theater | 1096 | Introduction to Theater Process |  | WI |
|  |  |  |  |  |
| Cross-Cultural Perspectives (select one from list below): |  |  | 3 |  |
| Film \& Media Arts | 1171 | Media and Culture |  |  |


| Strategic Communication | 3801 | Intercultural Communication |  |  |
| :--- | :--- | :--- | :--- | :--- |

3) After completing the Foundational and Core Courses, students may continue with the major (A) or apply for the Major of Distinction (B, described below).

## A) Major

In consultation with a faculty advisor, a student must take seven courses from those listed under each of the tracks below. Within the track, a student must take at least one course from at least three different departments.

At least four courses in the track must be taken at the 3000 or 4000 level. At least one of these four must be taken at the 4000 level.

Students must have met the prerequisites for courses in their selected tracks by taking the appropriate core courses (see above).

## 1) Policy, Regulation and Advocacy Track

This track focuses on citizen advocacy in the field of communication as related to and shaped by communication policy and regulation. Students are introduced to historical and recent examples of citizen advocacy in communication policy through the examination of social movements, civic journalism, art and performance, and special interest groups tied to issues of race, gender, ethnicity, sexual orientation, and the environment.

| Policy, Regulation and Advocacy Track | Hours | Attribute |  |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course \# | Course Title | 3 | WI |
| Advertising | 4196 | Morality, Law \& Advertising (Prerequisite: <br> Communication Studies 2111) | 3 |  |
|  <br> Production | 3471 | Media \& Cultural Differences <br> (Prerequisite: Media Studies \& Production 1011 or <br> Communication Studies 2111) |  |  |
|  <br> Production | 4226 | Public Media <br> (Prerequisite: Media Studies \& Production 1021) | 3 |  |
|  <br> Production | 4454 | Public Information Media Campaigns <br> (Prerequisite: Media Studies \& Production 1011 or <br> Communication Studies 2111) | 3 |  |
| Journalism | 3101 | Journalism and the Law <br> (Prerequisite: Communication Studies 2111) | 3 |  |
| Strategic <br> Communication | 2112 | Strategy \& Tactics of Persuasion | 3 |  |
| Strategic <br> Communication | 2296 | Rhetoric of Social Movements | 3 | WI |
| Strategic <br> Communication | 3323 | Rhetoric and Political Culture | 3 |  |
| Strategic <br> Communication | 3333 | Rhetorical Theory | 3 |  |
| Strategic <br> Communication | 3336 | Argumentation | 3 |  |


| Strategic <br> Communication | 3396 | Rhetorical Criticism | 3 | WI |
| :--- | :--- | :--- | :---: | :---: |
| Theater | 3052 | Theater of Protest | 3 |  |
| Theater | 3057 | Queer Theater | 3 |  |

## 2) Contemporary Media Environments Track

This track provides an historical overview of communication technologies - from papyrus to moveable type, from the rotary press to broadcasting and the Internet - and the ways that they shape public life. It will introduce theories on the relationship between technology and society, focusing on the intersection between communication technologies and the public sphere.

| Contemporary Media Environments Track |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Media Studies \& Production | 4296 | History of Electronic Media <br> (Prerequisite: Media Studies \& Production 1021) | 3 | WI |
| Media Studies \& Production | 4445 | Media Images \& Analysis (Prerequisite: Media Studies \& Production 1021) | 3 |  |
| Media Studies \& Production | 4453 | Information Society (Prerequisite: Media Studies \& Production 1021) | 3 |  |
| Film \& Media Arts | 3671 | Theory \& Practice of Media Culture (Prerequisite: Communication Studies 2111) | 3 |  |
| Film \& Media Arts | 4674 | Anthropological Film/Media | 3 |  |
| Film \& Media Arts | 4675 | Women Film/Video Artists | 4 |  |
| Film \& Media Arts | 3677 | American Film | 4 |  |
| Film \& Media Arts | 4673 | International Cinema | 4 |  |
| Journalism | 2301 | Introduction to Magazines <br> (Prerequisite: Communication Studies 2111) | 3 |  |
| Journalism | 3701 | Contemporary Media Issues (Prerequisite: Communication Studies 2111) | 3 |  |
| Journalism | 3702 | Race and Racism in the News <br> (Prerequisite: Communication Studies 2111) | 3 |  |
| Journalism | 3703 | History of Journalism <br> (Prerequisite: Communication Studies 2111) | 3 |  |
| Journalism | 3704 | Ethical Issues in Journalism <br> (Prerequisite: Communication Studies 2111) | 3 |  |
| Journalism | 3705 | Gender and American Mass Media <br> (Prerequisite: Communication Studies 2111) | 3 |  |
| Journalism | 3707 | Visual Communication <br> (Prerequisite: Communication Studies 2111) | 3 |  |
| Journalism | 3708 | Newsroom Management (Prerequisite: Communication Studies 2111) | 3 |  |
| Theater | 3052 | Theater of Protest | 3 |  |

## 3) Global Civil Society Track

This track will survey evidence on the emergence of global civil society including social movements, historical development, and the growing international public sphere. Courses will address such topics as public diplomacy, global mediascapes, international and
public opinion.

| Global Civil Society Track |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Media Studies \& Production | 3296 | Travel Writing (Permission of SMC Study Away Director or Assistant Director) | 3 | WI |
| Media Studies \& Production | 3473 | Media \& the Environment <br> (Prerequisite: Media Studies \& Production 1021) | 3 |  |
| Media Studies \& Production | 3572 | Communication \& Development <br> (Prerequisite: Media Studies \& Production 1011 or Communication Studies 2111) | 3 |  |
| Media Studies \& Production | 4496 | Global Media (Prerequisites: Media Studies \& Production 1011 \& 1021) | 3 | WI |
| Media Studies \& Production | 4571 | Foreign Studies in BTMM (Permission of SMC Study Away Director or Assistant Director) | 3 |  |
| Media Studies \& Production | 4572 | British Media \& Telecommunication (Permission of SMC Study Away Director or Assistant Director) | 3 |  |
| Film \& Media Arts | 4673 | International Cinema (Prerequisite: Communication Studies 2111) | 3 |  |
| Film \& Media Arts | 4674 | Anthropological Film/Media | 3 |  |
| Journalism | 3706 | International News Communication (Prerequisite: Communication Studies 2111) | 3 |  |
| Journalism | 3751 | Foreign Studies in Journalism | 3 or 6 |  |
| Strategic <br> Communication | 2672 | Global Communication \& Leadership | 3 |  |
| Strategic <br> Communication | 4696 | Diverse Communication and Leadership | 3 | WI |
| Theater | 3053 | Women in Theater | 3 |  |
| Theater | 3054 | African American Theater | 3 |  |
| Theater | 3057 | Queer Theater |  |  |
| Theater | 3611 | Visual History I | 3 |  |
| Theater | 3612 | Visual History II | 3 |  |

## 4) Arts in the Public Sphere Track

This track will examine the history and theory of the performative and media-based arts, with a focus on the interplay between aesthetic expression, cultural context, and social change. Study will include courses on both artistic works that address explicit social issues and those that use innovative formal elements to suggest change.

## Arts in the Public Sphere Track

| Subject | Course $\#$ | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Media Studies \& Production | 3196 | Writing Workshop | 3 | WI |
| Film \& Media Arts | 2670 | Topics in Film Study | 4 |  |
| Film \& Media Arts | 2674 | History of Photography | 4 |  |
| Film \& Media Arts | 3670 | Topics in Media Culture | 4 |  |
| Film \& Media Arts | 3671 | Theory \& Practice of Media Culture <br> (Prerequisite: Communication Studies 2111) | 4 |  |
| Film \& Media Arts | 3770 | Topics in Film Study | 4 |  |
| Film \& Media Arts | 4670 | Topics in Film Study | 4 |  |
| Film \& Media Arts | 4674 | Anthropological Film/Media | 3 |  |


| Journalism | 3707 | Visual Communication <br> (Prerequisite: Communication Studies 2111) | 3 |  |
| :--- | :--- | :--- | :---: | :---: |
| Theater | 2210 | Special Topics | $2-3$ |  |
| Theater | 3001 | History of Theater I | 3 |  |
| Theater | 3002 | History of Theater II | 3 |  |
| Theater | 3051 | Modern Directions | 3 |  |
| Theater | 3052 | Theater of Protest | 3 |  |
| Theater | 3053 | Women in Theater | 3 |  |
| Theater | 3054 | African American Theater | 3 |  |
| Theater | 3057 | Queer Theater | 3 |  |
| Theater | 3070 | Seminar in Drama | 3 |  |
| Theater | 3080 | Special Topics | $2-4$ |  |
| Theater | 3082 | General Study | $1-3$ |  |
| Theater | 3191 | Research | $1-3$ |  |
| Theater | 3611 | Visual History I | 3 |  |
| Theater | 3612 | Visual History II | 3 |  |
| Theater | 4003 | Production Dramaturgy | $2-4$ |  |
| Theater | 4097 | World of the Play | 3 | WI |

## B) Major of Distinction (Communication Studies Thesis Track)

The Major of Distinction is an academically rigorous program for students who wish to construct an interdisciplinary curriculum that meets their individual interests across the SCT departments. In the Major of Distinction, each student works individually with a faculty advisor from a relevant SCT department to build a curriculum that goes beyond that offered by the tracks above. The student completes five courses, four of which must be at the 3000 or 4000 level, and in the senior year completes a two-semester thesis. A student in the Major of Distinction must have completed three semesters of a foreign language (or equivalent with the approval of the Director of Communication Studies) by the time of graduation. If appropriate to the student's research, an advanced methods or theory course may be required by the student's faculty advisor.

Students apply for a Major of Distinction in the second semester of their sophomore year. To be considered, students must be on schedule to complete their Foundational and Core Communications courses by the end of their sophomore year. Also, students must have earned at least a 3.5 cumulative grade point average (GPA) in their Foundational and Core Communications courses along with a 3.25 overall GPA. Students must submit an application to the Director of Communication Studies that includes a statement of student's interest, a proposed curriculum, and a support letter from a full-time SCT faculty member willing to act as student's faculty advisor.

Once accepted into the Major of Distinction and in consultation with his or her faculty advisor and the Director of Communication Studies, each student constructs his or her own curriculum. The curriculum must contain five courses, four of which must be at the 3000 or 4000 level, and include courses from at least three of the SCT majors. Courses selected should be designed to lead to the senior-year thesis.

- No more than 8 s.h. in Kinesiology (physical education activity) may be credited toward the degree.
- Students may participate in study away programs.
- Transfer students are required to complete a minimum of 24 s.h. of major courses at Temple.
- A maximum of 4 s.h. of Internship credit may be counted toward the degree.
- A maximum of 8 s.h. combined of Independent Study and/or Special Projects may be counted toward the degree.
- A maximum of 27 s.h. in any one department may be counted toward the degree.

Communication Studies majors may minor in established SCT minors subject to the policies of the individual department. The Communication Studies student who declares a minor must complete the entire program requirements for both the major and the minor, with only the Communication Studies Major introductory required courses listed above fulfilling both the major and minor requirements. Courses in a minor department above the minimum minor requirement may be used to fulfill Communication Studies Major degree requirements.

## Suggested Semester By Semester Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

## Bachelor of Arts in Communication Studies

Requirements for New Students starting in the 2013-2014 Academic Year

| Year 1-Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Communication Studies | 1111 | Communication and Public Life | 3 |  |
| Select one of the following Communication Theory courses: |  |  | 3 |  |
| Advertising Advertising Media Studies \& Production Journalism | $\begin{aligned} & 1101 \\ & 1102 \\ & 1011 \\ & 1111 \end{aligned}$ | Introduction to Media and Society Introduction to Advertising Introduction to Media Theory Journalism and Society |  |  |
| English | $\begin{aligned} & 0802,0812 \text { or } \\ & 0902 \end{aligned}$ | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| COMM | 1001 | Freshman Seminar | 1 |  |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Year 1 - Spring |  |  |  |  |
| Media Studies \& Production | 1021 | Media and Society | 3 |  |
| Select one of the following Research Methods courses: |  |  | 3 |  |
| Advertising Media Studies \& Production Journalism | $\begin{aligned} & 1141 \\ & 2141 \\ & 2101 \end{aligned}$ | Introduction to Advertising Research <br>  <br> Production 1011) <br> Journalism Research |  |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |


| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| :---: | :---: | :---: | :---: | :---: |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Year 2 - Fall |  |  |  |  |
| Communication Studies | 2111 | Communications Seminar | 3 |  |
| Select one of the following Analysis courses: |  |  | 3 |  |
| Advertising Media Studies \& Production <br> Theater Theater | $\begin{aligned} & 2151 \\ & 2421 \\ & 1002 \\ & 1096 \\ & \hline \end{aligned}$ | Visual Communication <br> Media Popular Culture (prerequisite: Media Studies <br> \& Production 1021) <br> Theater: The Collaborative Art <br> Introduction to Theater Process |  |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Semester Total |  |  | 15-16 |  |
|  |  |  |  |  |
| Year 2 - Spring |  |  |  |  |
| Select one of the following Cross-Cultural Perspectives courses: |  |  | 3 |  |
| Film \& Media Arts Strategic Communication | $\begin{aligned} & 1171 \\ & 3801 \\ & \hline \end{aligned}$ | Media \& Culture Intercultural Communication |  |  |
| Track Course | any level | Select One | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Year 3-Fall |  |  |  |  |
| Track Course | any level | Select One | 3 |  |
| Track Course | any level | Select One Writing-Intensive Track Course | 3 | WI |
| Electives |  |  | 10 |  |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Year 3 - Spring |  |  |  |  |
| Track Course | 3000-4999 | Select One | 3 |  |
| Track Course | 3000-4999 | Select One | 3 |  |
| Electives |  |  | 10 |  |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Year 4 - Fall |  |  |  |  |
| Track Course | 3000-4999 | Select One Writing-Intensive Track Course | 3 | WI |
| Electives |  |  | 13 |  |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Year 4 - Spring |  |  |  |  |
| Track Course | 4000-4999 | Select One | 3 |  |
| Electives |  |  | 12-13 |  |
| Semester Total |  |  | 15-16 |  |
|  |  |  |  |  |
| Total Hours for Communication Studies: |  |  | 124 (minimum) |  |

# Journalism 

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The curriculum for Journalism is based on developing critical thinking in students for a multimedia, urban, journalistic environment. This requires a broad educational background coupled with rigorous professional training. The curriculum emphasizes subject matter from other disciplines, particularly those in the liberal arts. The department also believes that effective writing is central to communication and is, therefore, integral to the department curriculum.

Graduates of the program will develop:

1. Strong skills in reporting, writing, photography, audio/video newsgathering, print and web editing and design.
2. The ability to analyze critically past and present trends of journalism and to help craft alternative forms of journalism for the future.
3. A strong sense of ethical responsibility and the knowledge necessary for ethical decisionmaking.
4. An understanding of digital and interactive media technologies.
5. The ability to provide information in multimedia formats.
6. A culture of collaboration through team reporting....
7. ...in order to tell stories emanating from a diverse urban environment.
8. A keen understanding of the increasingly-global nature of today's journalistic environment.
9. An appreciation of free expression and awareness of legal constraints guiding responsible journalism.

Students need to meet the department's nine required courses as well as 18 credits of journalism electives, forming an area of emphasis. A capstone experience, Journalism 4196, combines urban community journalism with multimedia storytelling. This capstone produces the online news site, PhiladelphiaNeighborhoods.com.

Students who major in Journalism enter a variety of careers, including those as web reporters and producers, newspaper reporters and editors, still and video photographers, radio and television reporters and producers, and magazine writers and editors.

Although students must ultimately be responsible for their own academic programs, freshmen and first-semester transfer students will first meet with a School of Media and Communication (SMC) academic advisor. During the sophomore and junior years, a student must meet at least once each year with a faculty advisor who is knowledgeable about the area of study the student is following.

Temple's Journalism Department is one of only two programs in Pennsylvania accredited by the Accrediting Council on Education in Journalism and Mass Communication (ACEJMC). The department has a chapter of the national journalism and mass communication honor society, Kappa Tau Alpha. Additionally, every spring the department awards thousands of dollars in scholarships to deserving majors.

## Degree Requirements

The degree of Bachelor of Arts may be conferred upon a student majoring in Journalism by recommendation of the faculty and upon satisfactory completion of a minimum of 124 semester hours of credit with a cumulative average of 2.0 overall and in the major.

## Students must meet:

## 1. University requirements:

- New students starting in the 2013-2014 academic year are required to complete the General Education (GenEd) curriculum.
- All students must take a minimum of two writing-intensive courses. The specific writingintensive courses required for this major are listed below with a "WI" in the Attribute column, and are identified in their course descriptions in Self Service Banner, accessible through the TU Portal.


## 2. School of Media and Communication requirements

3. Major requirements in the department

## Requirements for the Major

The following liberal arts courses are required of Journalism majors:


| Economics | 1103 | Global Economic Issues |  |  |
| :--- | :--- | :--- | :--- | :---: |
|  |  |  |  |  |
| Plus one of the following: | 1013 | Elements of Statistics | $3-4$ |  |
| Mathematics | 1167 | Foundations in Statistical Methods |  |  |
| Psychology | 1167 | Social Statistics |  |  |
| Sociology | 0826 | Statistics \& the News |  |  |
| Statistics |  |  |  | GQ |
| Total |  | $\mathbf{2 1 - 2 2}$ |  |  |

Of the 124 semester hours required for graduation, at least 72 semester hours must be in courses outside Journalism including a minimum of 46 credits taken outside the School of Media and Communication.

Coursework taken in Business Education, lower-level credits in Military Science, and the Extern Program are not applicable towards graduation.

Only 8 semester hours will be accepted from Kinesiology and Dance activity courses. No more than 30 hours may be taken in any single CLA department or other SMC department without special written permission from the Department of Journalism. These requirements are to ensure a broad-based liberal arts education for each major.

Students required to take English 0701 must complete that requirement before enrolling in Journalism 1196.

## Specific Major Requirements

To receive the degree of Bachelor of Arts, students must satisfactorily complete a minimum of 124 credit hours in the university, with at least 45 credits in Journalism but no more than 52 credits in Journalism. Students are cautioned to plan their program so they do not exceed the 52credit hour limit that is set by our accrediting body.

It is the student's responsibility to meet all course prerequisite requirements.
Journalism-related coursework must be evaluated for transfer (including courses taken through study abroad programs after enrolling at Temple University) by the Department Chair. No more than 12 credits in total will be accepted for transfer from an accredited journalism/mass communication program; nine from a non-accredited program. Under no circumstances will credit be allowed for duplicate courses.

The department does not award credit for academic or life experience. Students with extensive experience may present evidence and petition for a waiver of department course requirements.

Journalism majors must receive a grade of C or higher in all required department courses and electives for them to count for the major and must maintain a minimum GPA of 2.0 in the department as well as the 2.0 overall average required by the university to qualify for graduation.

## Departmental Requirements for the Major


*Completion of Journalism 1101, 1111 and 1196 with grades of C or better is required before students enroll in any Journalism classes numbered higher than 1111.

A maximum of 6 credits may be earned for internships and a maximum of 3 credits for independent studies. If students plan to take multiple internships, please keep in mind the sixcredit maximum. Internships may be taken for 1-3 credits.

Please take notice of all prerequisites.

## Suggested Semester By Semester Plan

Please note that these are suggested academic plans. Depending on your situation, your academic plan may look different.

## Bachelor of Arts in Journalism

Requirements for New Students starting in the 2013-2014 Academic Year

| Year 1- Fall | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Subject | 1101 | Elements of Writing | 2 |  |
| Journalism | 1111 | Journalism and Society | 3 |  |
| Journalism |  |  |  |  |


| English | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| :--- | :--- | :--- | :---: | :---: |
| GenEd | 08 xx or 09xx | Quantitative Literacy | 4 | GQ |
| Political Science | 1101 | The American Political System | 3 |  |
| Communications \& Theater | 1001 | Freshman Seminar | 1 |  |
| Semester Total |  | $\mathbf{1 7}$ |  |  |

## Year 1 - Spring

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Journalism | 1196 | Writing for Journalism | 3 | WI |
| History | 1101 | U.S. History to 1877 | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | $08 \times x$ or 09xx | Human Behavior | 3 | GB |
| GenEd | $08 \times x$ or 09xx | Arts | $3-4$ | GA |
| Semester Total |  | $\mathbf{1 5 - 1 6}$ |  |  |

## Year 2 - Fall

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Journalism | 1113 | Audio-Visual Newsgathering | 3 |  |
| Journalism |  | Journalism Area of Specialization | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Political Science | 2102 | American State \& Local Politics | 3 |  |
| GenEd | $08 x x$ or 09xx | Science \& Technology I | 3 | GS |
| Semester Total |  |  | $\mathbf{1 5}$ |  |

Year 2 - Spring

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Journalism | 1114 | Design for Journalists | 3 |  |
| Journalism |  | Journalism Area of Specialization | 3 |  |
| History | 1102 | U.S. History since 1877 | 3 |  |
| GenEd | 08 xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08 xx or 09xx | Science \& Technology II | 3 | GS |
| Semester Total |  |  | $\mathbf{1 5}$ |  |

Year 3 - Fall

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Journalism | 2101 | Journalism Research | 3 |  |
| Journalism |  | Journalism Area of Specialization | 3 |  |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Electives |  | Non-Journalism Elective | 3 |  |
|  |  |  |  |  |
| Select one of the following courses: |  |  | 3 |  |
| Geography \& Urban Studies | 0861 | Urban Dynamics: Global, Regional \& Local Connections |  | GU |
| Geography \& Urban Studies | 1021 | Urban Society: Race, Class \& Community |  |  |
| Geography \& Urban Studies | 1025 | World Urban Patterns |  |  |
| Sociology | 1176 | Introduction to Sociology |  |  |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Year 3 - Spring |  |  |  |  |


| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Journalism | 3101 | Journalism and the Law | 3 |  |
| Journalism |  | Journalism Area of Specialization | 3 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
|  |  |  |  |  |
| Select one of the following courses: |  |  | 3 |  |
| Economics | 0858 | The American Economy |  | GU |
| Economics | 1001 | Introduction to Economics |  |  |
| Economics | 1101 | Macroeconomic Principles |  |  |
| Economics | 1102 | Microeconomic Principles |  |  |
| Economics | 1103 | Global Economic Issues |  |  |
|  |  |  |  |  |
| Select one of the following courses: |  |  | 3-4 |  |
| Mathematics | 1013 | Elements of Statistics |  |  |
| Psychology | 1167 | Foundations in Statistical Methods |  |  |
| Sociology | 1167 | Social Statistics |  |  |
| Statistics* | 0826 | Statistics \& the News |  | GQ |
| Semester Total |  |  | 15-16 |  |
|  |  |  |  |  |
| Year 4 - Fall |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Journalism | 3601 | Multimedia Storytelling | 3 |  |
| Journalism |  | Journalism Area of Specialization | 3 |  |
| Journalism |  | Journalism Area of Specialization | 3 |  |
| Electives |  | Non-Journalism Electives | 6 |  |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Year 4 - Spring |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Journalism | 4196 | PhiladelphiaNeighborhoods.com | 4 | WI |
| Electives |  | Non-Journalism Electives | 11-12 |  |
| Semester Total |  |  | 15-16 |  |
|  |  |  |  |  |
| Total Hours for B.A. in Journalism: |  |  | 124 (m | minimum) |
|  |  |  |  |  |
| * If Statistics 0826 not taken as GenEd Quantitative Literacy (GQ) Requirement. |  |  |  |  |

## Media Studies \& Production

## Department Office:

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## http://smc.temple.edu/msp

The Department of Media Studies and Production expands students' knowledge and skills to create, evaluate, and manage media content and organizations. With the urban and global communities as their living laboratories, students draw on their creativity, entrepreneurship, intellectual curiosity and analytical abilities to navigate digital media in our global society.

Theory and practice are integrated into all areas of study in the major. Media Studies \& Production students learn how to produce, evaluate and manage media content for traditional and emerging media in a variety of genres, including information (news and documentary), music, comedy, sports, drama, and commercial and noncommercial persuasion campaigns. They study institutions that create, distribute and investigate media products (e.g., production studios, television and radio networks and audience measurement companies) and learn how to create and operate successful media businesses. Media Studies \& Production students learn to think purposefully and critically about media, and examine media roles in history, culture and society from many perspectives. They also learn how to act ethically as they interact with the world both in careers in media institutions and as media consuming and producing citizens.

The Media Studies \& Production curriculum features Professional Options in four areas:

1) Media Production Professional Option: This option introduces students to conceptual and technical tools employed to create media content for the digital world. Students who study in this option develop strong professional skills as well as critical and analytical abilities that enable them to evaluate content for various media. They seek career opportunities as producers, writers, videographers, editors, recording engineers, web site designers, and talent in traditional and emerging media.
2) Media Business \& Entrepreneurship Professional Option: The practical and ethical ways to start, operate or participate in an enterprise that creates, produces, and/or distributes media content. Students who follow this option seek career opportunities as media entrepreneurs, media production freelancers, owners/operators of production companies or recording studios, web site developers, or founders/owners of a station, channel or network.
3) Media Analysis Professional Option: Critical understanding of the roles of media in contemporary life, including media technology as a cultural force; the nature of media institutions, audiences, and texts; and the media as a source of shared social identities. Students who select this option are prepared for careers as media consultants, editorial or technical
writers, community activists, corporate communication producers, media scholars, and market research analysts.
4) Emergent Media Professional Option: Focuses on critical analysis and production in new digital media, specifically in mobile media, the web, and video games. Students who study this option develop an understanding of the global nature of the new digital media environment and its business practices, and production processes. Students follow this option will be prepared for careers as digital media consultants, web designers, and marketing professionals in the converged media environment.

## Program Requirements:

| Introductory Core Foundation Requirements (9 credit hours) | Hours | Attribute |  |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course \# | Course Title | 3 |  |
| Media Studies \& Production | 1011 | Introduction to Media Theory | 3 |  |
| Media Studies \& Production | 1021 | Media \& Society | 3 |  |
| Media Studies \& Production | 1701 | Introduction to Media Technology |  |  |


| Advanced Core (6-7 credit hours) | Course Title | Hours | Attribute |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course \# | Senior Seminar | 3 |  |
| Media Studies \& Production | 4039 | Internship | $3-4$ |  |
| Media Studies \& Production | 4785 | or |  |  |
| Media Studies \& Production | $4487,4596,4597,4687,4787,4887$ | Practicum | $3-4$ |  |


| Media Policy \& Ethics Requirement (choose one course, $\mathbf{3}$ credits minimum) | Hours | Attribute |  |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course \# | Course Title | 3 |  |
| Media Studies \& Production | 4221 | Information Technology Policy | 4 |  |
| Media Studies \& Production | 4252 | Law \& Ethics of Digital Media | 3 | WI |
| Media Studies \& Production | 4296 | History of Electronic Media | 3 |  |
| Media Studies \& Production | 4454 | Public Information Media Campaigns |  |  |


| Media \& Critical Topics Requirement (choose one course, 3 credits minimum) | Hours | Attribute |  |  |
| :--- | :--- | :--- | :--- | :---: |
| Subject | Course \# | Course Title | 3 |  |
| Media Studies \& Production | 3421 | Technology \& Culture | 3 |  |
| Media Studies \& Production | 4153 | Media Criticism | 3 |  |
| Media Studies \& Production | 4445 | Media Images \& Analysis | 3 |  |
| Media Studies \& Production | 4446 | Psychological Processing of Media | 3 |  |
| Media Studies \& Production | 4453 | Information Society | 3 | WI |
| Media Studies \& Production | 4497 | Media \& Children |  |  |


| International/Intercultural | Course \# | Cos Requirement (choose one course |  | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Media Studies \& Production | 3471 | Media \& Cultural Differences | 3 |  |
| Media Studies \& Production | 3473 | Media \& the Environment | 3 |  |
| Media Studies \& Production | 3572 | Communication \& Development | 3 |  |
| Media Studies \& Production | 4496 | Global Media | 3 | WI |
| Media Studies \& Production | 4571 | Foreign Studies in BTMM | 3 |  |
| Media Studies \& Production | 4572 | British Media \& Telecommunication | 3 |  |

## PLUS Completion of a track (Media Production, Media Business \& Entrepreneurship, Media Analysis, or Emergent Media) <br> *courses in various categories can only be counted once.

| Media Production (minimum of 18 credit hours) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Media Studies \& Production | $\begin{gathered} 2701 \\ \text { or } \\ 2751 \end{gathered}$ | ```Introduction to Media Production or Audio for Media``` | $4$ |  |
| Plus 4 courses chosen in consultation with Media Studies \& Production Faculty Advisor |  |  |  |  |
| Media Studies \& Production | 2721 | Voice-Over Techniques for Media | 4 |  |
| Media Studies \& Production | 3196 | Writing Workshop | 3 | WI |
| Media Studies \& Production | 3631 | Media Sales | 3 |  |
| Media Studies \& Production | 3701 | Genres of Media Production | 4 |  |
| Media Studies \& Production | 3709 | Advanced Editing | 4 |  |
| Media Studies \& Production | 3721 | Media Performance | 4 |  |
| Media Studies \& Production | 3751 | Studio Music Recording Techniques | 4 |  |
| Media Studies \& Production | 3771 | Radio | 4 |  |
| Media Studies \& Production | 4541 | Mobile Media | 3 |  |
| Media Studies \& Production | 4641 | Programming for Multiplatform Media | 3 |  |
| Media Studies \& Production | 4663 | Art \& Business of Record Production | 3 |  |
| Media Studies \& Production | 4701 | Producing \& Directing | 4 |  |
| Media Studies \& Production | 4728 | Advanced Scriptwriting | 3 |  |
| Media Studies \& Production | 4751 | Audio Mixing and Mastering | 4 |  |


| Media Business \& Entrepreneurship (minimum of 18 credit hours) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Subject | Course \# | Course Title | Hours | Attribute |
| Media Studies \& Production | 1655 | The Business of Media | 3 |  |
| Media Studies \& Production | 3225 | Educational Multimedia Production | 3 |  |
| Media Studies \& Production | 3611 | Media Advertising | 3 |  |
| Media Studies \& Production | 3631 | Media Sales | 3 |  |
| Media Studies \& Production | 3663 | Marketing Music and Media | 3 |  |
| Media Studies \& Production | 3701 | Genres of Media Production | 4 |  |
| Media Studies \& Production | 4226 | Public Media | 3 |  |
| Media Studies \& Production | 4453 | Information Society | 3 |  |


| Media Studies \& Production | 4614 | Creating a Media Business | 4 |  |
| :--- | :--- | :--- | :---: | :---: |
| Media Studies \& Production | 4641 | Programming for Multiplatform Media | 3 |  |
| Media Studies \& Production | 4657 | Current Issues in Media Management | 3 |  |
| Media Studies \& Production | 4663 | Art \& Business of Record Production | 3 |  |
| Media Studies \& Production | 4696 | Communication in Media Organizations | 4 | WI |
| Media Studies \& Production | 4703 | Multimedia Production for Corporations \& Non-Profits | 4 |  |


| Media Analysis (minimum of $\mathbf{1 8}$ credit hours) | Hours | Attribute |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Subject | Course \# | Course Title | 3 |  |
| Media Studies \& Production | 2141 | Media Research | 3 |  |
| Media Studies \& Production | 2421 | Media Popular Culture | 3 |  |
| Media Studies \& Production | 2741 | Introduction to Internet Studies \& Web Authoring | 3 |  |
| Media Studies \& Production | 2889 | Field Experience in Youth Media \& Media Literacy | 3 | WI |
| Media Studies \& Production | 3196 | Writing Workshop | 3 |  |
| Media Studies \& Production | 4226 | Public Media | 3 | WI |
| Media Studies \& Production | 4296 | History of Electronic Media | 3 |  |
| Media Studies \& Production | 4445 | Media Images \& Analysis | 3 |  |
| Media Studies \& Production | 4446 | Psychological Processing of Media | 3 |  |
| Media Studies \& Production | 4453 | Information Society | 3 |  |
| Media Studies \& Production | 4454 | Public Information Media Campaigns | 3 | WI |
| Media Studies \& Production | 4497 | Media \& Children | 3 |  |
| Media Studies \& Production | 4541 | Mobile Media | 4 | WI |
| Media Studies \& Production | 4696 | Communication in Media Organizations | 4 |  |


| Emergent Media (minimum of $\mathbf{1 8}$ credit hours) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Subject | Course \# | Course Title | Hours | Attribute |
| Minimum of 3 courses taken from one sub-focus, and 2 from the other sub-focus |  |  |  |  |
| Emergent Media Studies |  |  |  |  |
| Media Studies \& Production | 2741 | Introduction to Internet Studies \& Web Authoring | 3 |  |
| Media Studies \& Production | 2421 | Media Popular Culture | 3 |  |
| Media Studies \& Production | 4324 | The Video Game Industry and Game Culture | 3 |  |
| Media Studies \& Production | 4446 | Psychological Processing of Media | 3 |  |
| Media Studies \& Production | 4541 | Mobile Media | 3 |  |
| Emergent Media Production |  |  |  |  |
| Media Studies \& Production | 2751 | Audio for Media | 4 |  |
| Media Studies \& Production | 3709 | Advanced Editing | 4 |  |
| Media Studies \& Production | 3751 | Studio Music Recording Techniques | 4 |  |
| Media Studies \& Production | 4614 | Creating a Media Business | 4 |  |
| Media Studies \& Production | 4703 | Multimedia Production for Corporations \& Non-Profits | 4 |  |
| Media Studies \& Production | 4741 | Cybermedia Workshop | 4 |  |
| Media Studies \& Production | 4751 | Audio Mixing \& Mastering | 4 |  |

## Requirements for the Degree of Bachelor of Arts

## Summary of Requirements:

## - University requirements:

- New students starting in the 2013-2014 academic year are required to complete the General Education (GenEd) curriculum.
- All students must take a minimum of two writing-intensive courses in the major, one of which must be at the 3000+ level. Writing-intensive courses are listed below with a "WI" in the Attribute column and are identified as Writing Intensive in their course descriptions in Self Service Banner, accessible through the TUportal.


## - School of Media and Communication requirements.

## General Requirements:

- Minimum of 42 credits in Media Studies \& Production / maximum of 58 credits in Media Studies \& Production
- Maximum of 78 credits in the School of Media and Communication
- Each course that fulfills a requirement for the major must be passed with a C- or better
- All prerequisites must be met unless exempted in writing
- No more than 20 transfer credits may be applied to the Media Studies \& Production major
- Minimum GPA of 2.0 in the major
- No more than 8 credits in Kinesiology and Dance activities courses
- No more than 12 credits total for internship, practicum, and independent study courses


## Course Requirements:

- Media Studies \& Production Foundation Courses: 1011 (Introduction to Media Theory), 1021 (Media and Society) and 1701 (Introduction to Media Technology) must be completed within the first 45 credits at Temple University. Students transferring in to Temple need to complete at least one Media Studies \& Production foundation course at Temple, unless exempted by the chair of the department.
- Media Studies \& Production 4785 (Internship) or Practicum: Media Studies \& Production majors can choose between Internship or Practica. All majors must have 2.75 GPA or greater to enroll in the Internship (3-4 credit hours); all other majors with a lower GPA must complete at least one Practicum (Media Studies \& Production 4487, 4596, 4597, 4687, 4787, 4887).
- Media Studies \& Production 4039: Senior Seminar taken during final 30 credits
- Professional Option selections (minimum 18 credit hours)
- Media Policy \& Ethics requirement (minimum 3 credits): Complete a minimum of one course from the following: Media Studies \& Production 4221, 4252, 4296, 4454.
- Media \& Critical Topics requirement (minimum 3 credits): Complete a minimum of one course from the following: Media Studies \& Production 3421, 4153, 4445, 4446, 4453, 4497.
- International/Intercultural Media Issues Requirement (minimum 3 credits): Complete a minimum of one course from the following: Media Studies \& Production 3471, 3473, 3572, 4496, 4571, 4572.
- Electives (up to 16 credits)


## Internships and Senior Seminar:

The academic experience for all Media Studies \& Production majors culminates with the Media Studies \& Production 4039: Senior Seminar and Media Studies \& Production 4785: Internship for 3 or 4 credit hours (NOTE: To qualify for an internship, students must have Junior or Senior standing, a minimum of 2.75 GPA in the major, and passing grades (C-) in the Media Studies \& Production requirement courses. For students with a GPA lower than 2.75, a Practicum must be completed in place of the Internship). Together, these courses provide students the opportunity to explore their potential professional futures. Internship opportunities exist locally (at virtually every media-oriented organization in the greater Philadelphia region), nationally (in New York City, Los Angeles, Chicago, and other U.S. media markets), and internationally (in London, England and Tokyo, Japan, through the School of Media and Communication's Study Away Program and Temple's Education Abroad Office). Students who wish to enroll in a second internship as an elective can take Media Studies \& Production 4786 for 1 to 3 credit hours.

## Practica

There are six (6) practica options: 4487: TUTV Practicum; 4596: TV News Production Practicum - Temple Update; 4597: Sports Production Practicum; 4687: Recording Industry Practicum; 4787: TV Production Workshop; and 4887: Radio Production Practicum. Students enrolled in TUTV Practicum (Media Studies \& Production 4487) play a key role in the operation of Temple University Television (TUTV) and will work with the course instructor, engineering staffers and others to schedule the station and produce original content. In the TV News Production Practicum - Temple Update (Media Studies \& Production 4596), students produce a weekly live-to-tape TV newsmagazine that airs on local cable TV. The Sports Production Practicum (Media Studies \& Production 4597) is a weekly sports program produced by students. Recording Industry Practicum (Media Studies \& Production 4687) is an intensive, practical course that engages students in the day-to-day operation of our student-run record label. TV Production Workshop (Media Studies \& Production 4787), also fulfills the requirement of a practicum and involves the production of various content also for broadcast on local cable. The Radio Production Practicum (Media Studies \& Production 4887) takes place at the WRFT 1610 AM radio station, located on Temple University's Ambler campus.

Media Studies \& Production courses designated a "Practicum" can be taken as either Media Studies \& Production electives or in place of Media Studies \& Production 4785: Internship.

## Suggested Semester By Semester Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

## Bachelor of Arts in Media Studies \& Production

## Requirements for New Students starting in the 2013-2014 Academic Year



| Year 3 - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Media Studies \& Production |  | Media Studies \& Production Professional Option Course | 3-4 | WI |
| Select one of the following International/Intercultural Media Issues Requirement courses: |  |  | 3-4 |  |
| Media Studies \& Production | 3471 3473 3572 4496 4571 4572 | Media and Cultural Differences <br> Media and the Environment <br> Communication and Development <br> Global Media <br> Foreign Studies in BTMM <br> British Media and Telecommunication |  |  |
| Electives |  | Electives | 9-11 |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Year 3 - Spring |  |  |  |  |
| Media Studies \& Production |  | Media Studies \& Production Professional Option Course | 3-4 | WI |
| Media Studies \& Production |  | Media Studies \& Production Professional Option Course | 3-4 |  |
| Electives |  | Electives | 9-11 |  |
| Semester Total |  |  | 17 |  |
|  |  |  |  |  |
| Year 4 - Fall |  |  |  |  |
| Media Studies \& Production | 4039 | Senior Seminar | 3 |  |
| Media Studies \& Production |  | Media Studies \& Production Elective (if needed) or Electives | 9-12 |  |
| Semester Total  12-15 |  |  |  |  |
|  |  |  |  |  |
| Year 4 - Spring |  |  |  |  |
| Select at least one of the following Internship or Practica: |  |  | 3-4 |  |
| Media Studies \& Production | 4785 4487 4596 4597 4687 4787 4887 | Internship <br> TUTV Practicum <br> TV News Production Practicum - Temple Update <br> Sports Production Practicum <br> Recording Industry Practicum <br> Television Production Workshop <br> Radio Production Practicum |  | $\begin{aligned} & \text { WI } \\ & \text { WI } \end{aligned}$ |
| Electives |  | Electives | 8-14 |  |
| Semester Total |  |  | 12-15 |  |
|  |  |  |  |  |
| Total Hours for Media Studies \& Production: |  |  | 124 (minimum) |  |

## Strategic Communication

Cornelius Pratt, Ph.D., APR, Chair<br>Weiss Hall 215<br>215-204-3214<br>cbpratt@temple.edu<br>http://smc.temple.edu/strc/

The Department of Strategic Communication educates students in the theory and practice of public communication and leadership, with the primary emphasis on communication and social influence or advocacy. The department offers a bachelor's degree in four concentrations that focus on a general sequence, as well as on persuasion and political culture, communication in organizations, and communication strategies. Their overarching goal is to influence internal and external audiences.

## Summary of Requirements

The degree of Bachelor of Arts may be conferred upon a student majoring in Strategic Communication by the recommendation of the faculty and upon satisfactory completion of a minimum of 124 semester hours of credit with a cumulative average of 2.0 overall and in the major. Students must meet:

1. University requirements:

- New students starting in the 2013-2014 academic year are required to complete the General Education (GenEd) curriculum.
- All students must take a minimum of two writing-intensive courses. The specific writingintensive courses required for this major are listed below and identified with the code "WI" in the Attribute column.

2. School of Media and Communication requirements
3. Major requirements in the department

- No more than 12 Strategic Communication credits can be transferred to the major.


## Department Requirements

All majors must complete at least 36 credit hours in Strategic Communication, including the department's four core courses (12 hours). Students must earn a "C" or better in the department's four core courses and in all other courses required for the major. Until students choose a concentration within Strategic Communication, they are deemed enrolled in the general sequence of Strategic Communication.

| Strategic Communication Major Requirements |  |  |  |
| :--- | :--- | :--- | :---: |
| Department Core Requirements | (12 s.h.) |  |  |
| Subject | Course \# | Course Title | Hours |
| Strategic Communication | 1111 | Public Speaking | 3 |
| Strategic Communication | 1112 | Communicating Leadership | 3 |
| Strategic Communication | 2111 | Introduction to Communication Theory | 3 |
| Strategic Communication | 2112 | Strategies \& Tactics of Persuasion | 3 |

## Department Concentrations

The department offers the general sequence and three optional concentrations: Organizational Leadership, Public Relations, and Rhetoric and Public Advocacy. In addition to completing the department core, students may select and fulfill the requirements of a concentration. Students are also required to complete courses outside the school.

## Strategic Communication General Sequence

Requirements for the general sequence in Strategic Communication include the following courses in addition to the Department Core requirements.

| General Strategic Communication Degree | (36 credits) |  |  |
| :--- | :--- | :--- | :---: |
| Department Core Requirements | (12 s.h.) |  |  |
| General Sequence Requirements | (24 s.h.) |  |  |
|  |  |  |  |
| Subject | Course \# | Course Title |  |
| Strategic Communication | $2000+$ | Writing Intensive course | Hours |
| Attribute |  |  |  |
| Strategic Communication | $2000+$ | Three courses at 2000-level or above | 9 |
| Strategic Communication | $3000+$ | Three courses at $3000-l e v e l ~ o r ~ a b o v e ~$ | 9 |
| Total credits required for the general sequence (includes department core courses) | $\mathbf{3 6}$ |  |  |

Organizational Leadership Concentration

The concentration in Organizational Leadership provides students with a thorough grounding in organizational and small-group communication. Students' coursework in these areas will incorporate a special focus on both the theories and skills needed for the creation and maintenance of fruitful leader-follower relationships.

| Organizational Leadership Concentration | (36 credits) |  |  |
| :--- | :--- | :---: | :---: |
| Department Core Requirements | (12 s.h.) |  |  |
| Concentration Core Requirements | (15 s.h.) |  |  |
|  | Course \# | Course Title |  |
| Subject | Introduction to Organizational <br> Communication | Hours | Attribute |
| Strategic Communication | 2661 | 3 |  |
| Strategic Communication | 2662 | Leading Groups and Team Building | 3 |


| Strategic Communication | 3663 | Research Methods for Organizational Communication (Prereq: Strategic Communication 1112) | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Strategic Communication | 4696 | Diverse Communication and Leadership (capstone, prerequisite: Strategic Communication 3663) | 3 | WI |
| Strategic Communication | 4774 | Communicating Organizational Change (Prereq: Strategic Communication 2661) | 3 |  |
| Organizational Leadership Concentration Electives |  |  | (9 s.h.) |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Select three courses from the following, 1 of which must be WI: |  |  |  |  |
| Strategic Communication | 2296 | Rhetoric of Social Movements | 3 | WI |
| Strategic Communication | 2496 | News Writing and Media Relations | 3 | WI |
| Strategic Communication | 2552 | Introduction to Public Relations | 3 |  |
| Strategic Communication | 2672 | Global Communication \& Leadership | 3 |  |
| Strategic Communication | 3396 | Rhetorical Criticism | 3 | WI |
| Strategic Communication | 3670 | Special Topics in Organizational Leadership | 3 |  |
| Strategic Communication | 3685 | Internship in Organizational Leadership (Prereq: see http://smc.temple.edu/strc/careerresources/internships1/) | 3 |  |
| Strategic Communication | 3801 | Intercultural Communication | 3 |  |
| Strategic Communication | 4670 | Special Topics in Organizational Leadership | 3 |  |
| Strategic Communication | 4775 | Health Communication | 3 |  |
| Strategic Communication | 4879 | Collaborative Advocacy | 3 |  |
|  |  |  |  |  |
| Ideas for electives outside the department: |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Adult \& Organizational Development | 1166 | Interpersonal Communication Through the Life Span | 3 |  |
| Adult \& Organizational Development | 2214 | Conflict \& Communication | 3 |  |
| American Studies | 1042 | Work in America | 3 |  |
| History | 3811 | World Economy Since 1945 | 3 |  |
| Human Resource Management | 2501 | Introduction to Human Resource Management | 3 |  |
| Management Information Systems | 2101 | Information Systems in Organizations | 3 |  |
| Philosophy | 1001 | Philosophical Challenges to the Individual | 3 |  |
| Political Science | 3155 | Business \& Public Policy | 3 |  |
| Psychology | 2402 | Foundations of Industrial \& Organizational Psychology | 3 |  |

## Rhetoric and Public Advocacy Concentration

The Rhetoric and Public Advocacy Concentration provides students with theory and practice in social influence. Students learn theories of advocacy in a variety of settings, gain experience in critical analysis of persuasive messages, and develop skills in creating strategic communications.

| Rhetoric and Public Advocacy Concentration |  |  | (36 credits) |  |
| :---: | :---: | :---: | :---: | :---: |
| Department Core Requirements |  |  | (12 s.h.) |  |
| Concentration Core Requirements |  |  | (18 s.h.) |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Strategic Communication | 2221 | Public Advocacy (Prereq: Strategic <br> Communication 1111; Strategic <br> Communication 2111 which may be taken prior to or concurrently) | 3 |  |
| Strategic Communication | 2296 | Rhetoric of Social Movements | 3 | WI |
| Strategic Communication | 3333 | Rhetorical Theory <br> (Prereq: Strategic Communication 2221) | 3 |  |
| Strategic Communication | 3336 | (Prereq: Strategic Communication 2221) | 3 |  |
| Strategic Communication | 3396 | Rhetorical Criticism | 3 | WI |
| Strategic Communication | 4839 | Seminar in Rhetoric and Public Advocacy (capstone) (Prereq: Strategic Communication 2221 \& 2296) | 3 |  |
|  |  |  |  |  |
| Elective Courses in Rhetoric and Public Advocacy Concentrations |  |  | (6 s.h.) |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Choose two courses from the following: |  |  |  |  |
| Strategic Communication | 3234 | Speech Writing | 3 |  |
| Strategic Communication | 3236 | Rhetoric and Identity <br> (Prereq: Strategic Communication 2221) | 3 |  |
| Strategic Communication | 3323 | Rhetoric and Political Culture | 3 |  |
| Strategic Communication | 2552 | Introduction to Public Relations | 3 |  |
| Strategic Communication | 2661 | Introduction to Organizational Communication | 3 |  |
| Strategic Communication | 2662 | Leading Groups and Team Building | 3 |  |
| Strategic Communication | 2440 | Special Topics in Public Relations | 3 |  |
| Strategic Communication | 3440 | Special Topics in Public Relations | 3 |  |
| Strategic Communication | 3801 | Intercultural Communication | 3 |  |
| Strategic Communication | 4440 | Special Topics in Public Relations | 3 |  |
|  |  |  |  |  |
| Special Topics, Independent Study, and Internships |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |


| Strategic Communication | 3220 | Special Topics in Rhetoric and Public Advocacy <br> (Prereq: Strategic Communication 2221) | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Strategic Communication | 3282 | Independent Study in Public Communication | 1-4 |  |
| Strategic Communication | 3382 | Independent Study in Rhetoric \& Public Advocacy <br> (Prereq: Strategic Communication 2221) | 1-3 |  |
| Strategic Communication | 3385 | Internship in Rhetoric and Public Advocacy (Prereq: see http://smc.temple.edu/strc/careerresources/internships1/) | 3 |  |
| Strategic Communication | 4220 | Special Topics in Rhetoric \& Public Advocacy <br> (Prereq: Strategic Communication 2221) | 3 |  |
| Ideas for electives outside the department: |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Adult \& Organizational Development | 2214 | Conflict \& Communication | 3 |  |
| English | 2012 | Literature \& Criticism | 3 |  |
| English | 3811 | Theories of Language \& Literacy | 3 |  |
| Human Resource Management | 3501 | Power, Influence, \& Negotiation | 3 |  |
| Philosophy | 1062 | Morality \& the Law | 3 |  |
| Political Science | 2103 | U.S. Public Policy Making | 3 |  |
| Political Science | 3151 | Public Policy Analysis | 3 |  |

## Public Relations Concentration

Public Relations is about using communication techniques to influence behavior and attitudes. The concentration combines public relations classes with requirements in public speaking, leadership, persuasion, and communication theory, and is satisfied through completion of 36 semester hours in the major.

| Public Relations Concentration | (36 credits) |  |  |  |
| :--- | :---: | :--- | :---: | :---: |
| Department Core Requirements | (12 s.h.) |  |  |  |
| Concentration Core Requirements | (18 s.h.) |  |  |  |
|  |  |  |  |  |
| Subject | Course | Course Title |  |  |
| Strategic Communication | $2496^{*}$ | News Writing \& Media Relations | 3 | WI |
| Strategic Communication | $2551^{* *}$ | Media Information Gathering \& Evaluation | Attribute |  |
| Strategic Communication | 2552 | Introduction to Public Relations | 3 |  |
| Strategic Communication | 3543 | Fundamentals of Public Relations Writing | 3 |  |
| Strategic Communication | 3596 | Advanced Public Relations Writing | 3 |  |


| Strategic Communication | 4859*** | Public Relations Management \& Case Problems (capstone) | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| *Required course for all PR concentration students. <br> **Students in the PR concentration are strongly urged to take 2552 before taking 2551. |  |  |  |  |
| + May take Strategic Communication 2496 concurrently with either Strategic Communication 2551 and 2552 (butnot both). |  |  |  |  |
| ***Open only to PR concentration and General Sequence students. Prerequisite: successful completion of Strategic Communication 2496, 2551, 2552, and 3543. |  |  |  |  |
| Required Courses in other Strategic Communication Concentrations: |  |  | (6 s.h.) |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Select one course from the following: |  |  |  |  |
| Strategic Communication | 2661 | Introduction to Organizational Communication | 3 |  |
| Strategic Communication | 2662 | Leading Groups and Team Building | 3 |  |
| Strategic Communication | 2672 | Global Communication \& Leadership | 3 |  |
| Strategic Communication | 3801 | Intercultural Communication | 3 |  |
| Strategic Communication | 4774 | Communicating Organizational Change (Prereq: Strategic Communication 2661) | 3 |  |
|  |  |  |  |  |
| Select one course from the following: |  |  |  |  |
| Strategic Communication | 3336 | Argumentation <br> (Prereq: Strategic Communication 2221) | 3 |  |
| Strategic Communication | 2296 | Rhetoric of Social Movements | 3 | WI |
| Strategic Communication | 3323 | Rhetoric and Political Culture | 3 |  |
| Strategic Communication | 3333 | Rhetorical Theory <br> (Prereq: Strategic Communication 2221) | 3 |  |
| Strategic Communication | 3396 | Rhetorical Criticism | 3 | WI |
| Special Topics, Independent Study, and Internships: |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Strategic Communication | 2440 | Special Topics in Public Relations | 3 |  |
| Strategic Communication | 3440 | Special Topics in Public Relations | 3 |  |
| Strategic Communication | 4440 | Special Topics in Public Relations | 3 |  |
| Strategic Communication | 3483 | Directed Readings in Public Relations | 3 |  |
| Strategic Communication | 3582 | Independent Study in Public Relations | 1-3 |  |
| Strategic Communication | 3585 | Internship in Public Relations | 1-3 |  |
|  |  |  |  |  |
| Ideas for electives outside the department: |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Journalism | 3101 | Journalism \& the Law | 3 |  |
| Marketing | 2101 | Marketing Management | 3 |  |
| Political Science | 1101 | The American Political System | 3 |  |
| Psychology | 1061 | Psychology as a Social Science | 3 | IN |

## Requirements for a Minor in Leadership

The Leadership Minor comprises six courses (18 s.h.) that provide students in other Temple University programs the opportunity to better prepare for life after graduation by acquiring the knowledge and skills required to communicate effectively and to lead at the organizational, team, and individual levels.

The goal of the Leadership Minor is to help students to understand that leadership is a communication and relational process, not a position. Viewed that way, leadership requires responsible, thoughtful reflection and action at all societal levels. That also requires competencies in being self-aware, in managing teams, in making ethical decisions, and leading with an intent to engender, positive change.

| Minor in Leadership Requirements |  |  |  |
| :--- | :--- | :--- | :---: |
| Subject | Course \# | Course Title | Hours |
| Strategic Communication | 1111 | Public Speaking | 3 |
| Strategic Communication | 1112 | Communicating Leadership | 3 |
| Strategic Communication | 2661 | Introduction to Organizational Communication | 3 |
| Strategic Communication | 2672 <br> or <br> 4696 | Global Communication and Leadership <br> or <br> Diverse Communication and Leadership | 3 |
| Strategic Communication | 2662 | Leading Groups and Team Building | 3 |
| Strategic Communication | 4879 <br> or <br> 4670 | Collaborative Advocacy <br> or <br> Special Topics in Organizational Leadership | 3 |
| Total credits required for the minor in Leadership: | $\mathbf{1 8}$ |  |  |

The Public Relations minor consists of seven courses (21 s.h.) that provide students in other programs at Temple University the opportunity to better prepare them for life after graduation by gaining the knowledge and skill sets required to communicate effectively and lead at the organizational, team, and individual levels.

The goal of the Public Relations minor is to help students to understand that public relations is a communication and relational process, not a position. Viewed this way, public relations requires responsible, thoughtful reflection and action from all levels of organizations, not just those in leadership positions. This approach requires competencies of self-awareness, oral and written communication skills, ethical decision-making and action, and the ability to understand audiences and generate mutual win-win scenarios using a variety of communication tools to generate a vision and lead with, through, and for others to bring about positive change.

This program will build both knowledge and skills for students to understand true public relations, e.g., "relating" to publics in a meaningful two-way dialogue built on mutual trust and respect, and be able to effectively formulate a position and influence and empower others. They will be able to use the knowledge gained from this program to bridge the divide between the theoretical and practical application in the business they work in and the communities they serve.

This minor will be available in spring 2014.

| Minor in Public Relations Requirements |  |  |  |
| :--- | :--- | :--- | :---: |
| Subject | Course \# | Course Title | Hours |
| Strategic Communication | 1111 | Public Speaking | 3 |
| Strategic Communication | 1112 | Communicating Leadership | 3 |
| Strategic Communication | 2111 | Introduction to Communication Theory | 3 |
| Strategic Communication | 2112 | Strategies \& Tactics of Persuasion | 3 |
| Strategic Communication | 2551 | Media Information Gathering \& Evaluation | 3 |
| Strategic Communication | 2552 | Introduction to Public Relations | 3 |
| Strategic Communication | 3543 | Fundamentals of Public Relations Writing | 3 |
| Total credits required for the minor in Public Relations: | $\mathbf{2 1}$ |  |  |

## Suggested Semester By Semester Plans

Please note that these are suggested academic plans. Depending on your situation, your academic plan may look different.

## Bachelor of Arts in Strategic Communication (General Sequence)

Requirements for New Students starting in the 2013-2014 Academic Year



## Bachelor of Arts in Strategic Communication (Organizational Leadership)

Requirements for New Students starting in the 2013-2014 Academic Year

| Year 1 - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Strategic Communication | 1112 | Communicating Leadership | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Communications \& Theater | 1001 | Freshman Seminar | 1 |  |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Year 1 - Spring |  |  |  |  |
| Strategic Communication | 1111 | Public Speaking | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |


| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| :---: | :---: | :---: | :---: | :---: |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Semester Total |  |  | 15-16 |  |
| Year 2 - Fall |  |  |  |  |
| Strategic Communication | 2661 | Introduction to Organizational Communication | 3 |  |
| Electives |  | Electives | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Semester Total |  |  | 15 |  |
| Year 2 - Spring |  |  |  |  |
| Strategic Communication | 2111 | Introduction to Communication Theory | 3 |  |
| Strategic Communication | 2662 | Leading Groups and Team Building | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| Electives |  | Electives | 6 |  |
| Semester Total |  |  | 15 |  |
| Year 3-Fall |  |  |  |  |
| Strategic Communication | 2112 | Strategies \& Tactics of Persuasion | 3 |  |
| Strategic Communication | 3663 | Research Methods for Organizational Communication | 3 |  |
| Electives |  | Electives | 10 |  |
| Semester Total |  |  | 16 |  |
| Year 3 - Spring |  |  |  |  |
| Electives |  | Electives | 10 |  |
| Select one of the following WI courses: |  |  | 3 |  |
| Strategic Communication | 2296 | Rhetoric of Social Movements |  | WI |
| Strategic Communication | 2496 | News Writing and Media Relations |  | WI |
| Strategic Communication | 3396 | Rhetorical Criticism |  | WI |
| Select one of the following courses: |  |  | 3 |  |
| Strategic Communication | 2552 | Introduction to Public Relations |  |  |
| Strategic Communication | 2672 | Global Communication and Leadership |  |  |
| Strategic Communication | 3670 | Special Topics in Organizational Leadership |  |  |
| Strategic Communication | 3685 | Internship in Organizational Leadership |  |  |
| Strategic Communication | 3801 | Intercultural Communication |  |  |
| Strategic Communication | 4670 | Special Topics in Organizational Leadership |  |  |
| Strategic Communication | 4775 | Health Communication |  |  |
| Strategic Communication | 4879 | Collaborative Advocacy |  |  |
| Semester Total |  |  | 16 |  |
| Year 4 - Fall |  |  |  |  |
| Strategic Communication | 4696 | Diverse Communication and Leadership (Prereq: Strategic Communication 3663) | 3 | WI |
| Electives |  | Electives | 10 |  |
| Select one of the following courses: |  |  | 3 |  |


| Strategic Communication | 2296 | Rhetoric of Social Movements |  | WI |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
| Strategic Communication | 2496 | News Writing and Media Relations |  | WI |  |
| Strategic Communication | 2552 | Introduction to Public Relations |  |  |  |
| Strategic Communication | 2672 | Global Communication and Leadership |  |  |  |
| Strategic Communication | 3396 | Rhetorical Criticism |  | WI |  |
| Strategic Communication | 3670 | Special Topics in Organizational Leadership |  |  |  |
| Strategic Communication | 3685 | Internship in Organizational Leadership |  |  |  |
| Strategic Communication | 3801 | Intercultural Communication |  |  |  |
| Strategic Communication | 4670 | Special Topics in Organizational Leadership |  |  |  |
| Strategic Communication | 4775 | Health Communication |  |  |  |
| Strategic Communication | 4879 | Collaborative Advocacy |  |  |  |
| Semester Total |  | $\mathbf{1 6}$ |  |  |  |
|  |  |  |  |  |  |
| Year 4 - Spring |  |  |  |  |  |
| Strategic Communication | 4774 | Communicating Organizational Change | 3 |  |  |
| Electives | Prereq: Strategic Communication 2661) |  |  |  |  |
| Semester Total | Electives | 13 |  |  |  |

## Bachelor of Arts in Strategic Communication (Rhetoric and Public Advocacy)

Requirements for New Students starting in the 2013-2014 Academic Year

| Year 1-Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Strategic Communication | 1112 | Communicating Leadership | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Communications \& Theater | 1001 | Freshman Seminar | 1 |  |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Year 1-Spring |  |  |  |  |
| Strategic Communication | 1111 | Public Speaking | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Semester Total |  |  | 15-16 |  |
|  |  |  |  |  |
| Year 2 - Fall |  |  |  |  |
| Strategic Communication | 2111 | Introduction to Communication Theory | 3 |  |


| Strategic Communication | 2221 | Public Advocacy (Prereq: Strategic Communication 1111; Strategic Communication 2111, which may be taken prior to or concurrently) | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Semester Total |  |  | 15 |  |
| Year 2 - Spring |  |  |  |  |
| Strategic Communication | 2296 | Rhetoric of Social Movements | 3 | WI |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| Electives |  | Electives | 6 |  |
| Select one of the following courses: |  |  | 3 |  |
| Strategic Communication | 2440 | Special Topics in Public Relations |  |  |
| Strategic Communication | 2552 | Introduction to Public Relations |  |  |
| Strategic Communication | 2661 | Introduction to Organizational Communication |  |  |
| Strategic Communication | 2662 | Leading Groups and Team Building |  |  |
| Strategic Communication | 3234 | Speech Writing |  |  |
| Strategic Communication | 3236 | Rhetoric and Identity <br> (Prereq: Strategic Communication 2221) |  |  |
| Strategic Communication | 3323 | Rhetoric and Political Culture |  |  |
| Strategic Communication | 3440 | Special Topics in Public Relations |  |  |
| Strategic Communication | 3801 | Intercultural Communication |  |  |
| Strategic Communication | 4440 | Special Topics in Public Relations |  |  |
| Semester Total |  |  | 15 |  |
| Year 3 - Fall |  |  |  |  |
| Strategic Communication | 2112 | Strategies \& Tactics of Persuasion | 3 |  |
| Strategic Communication | 3336 | Argumentation <br> (Prereq: Strategic Communication 2221) | 3 |  |
| Electives |  | Electives | 10 |  |
| Semester Total |  |  | 16 |  |
| Year 3 - Spring |  |  |  |  |
| Strategic Communication | 3396 | Rhetorical Criticism | 3 | WI |
| Electives |  | Electives | 10 |  |
| Select one of the following courses: |  |  | 3 |  |
| Strategic Communication | 2440 | Special Topics in Public Relations |  |  |
| Strategic Communication | 2552 | Introduction to Public Relations |  |  |
| Strategic Communication | 2661 | Introduction to Organizational Communication |  |  |
| Strategic Communication | 2662 | Leading Groups and Team Building |  |  |
| Strategic Communication | 3234 | Speech Writing |  |  |
| Strategic Communication | 3236 | Rhetoric and Identity <br> (Prereq: Strategic Communication 2221) |  |  |
| Strategic Communication | 3323 | Rhetoric and Political Culture |  |  |
| Strategic Communication | 3440 | Special Topics in Public Relations |  |  |
| Strategic Communication | 3801 | Intercultural Communication |  |  |
| Strategic Communication | 4440 | Special Topics in Public Relations |  |  |
| Semester Total |  |  | 16 |  |


| Year 4 - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Strategic Communication | 3333 | Rhetorical Theory (Fall Only) | 3 |  |
| Electives |  | Electives | 13 |  |
| Semester Total |  |  | 16 |  |
| Year 4 - Spring |  |  |  |  |
| Strategic Communication | 4839 | Seminar in Rhetoric and Public Advocacy (capstone) (Prereq: Strategic Communication $2221 \& 2296)$ | 3 |  |
| Electives |  | Electives | 13 |  |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Total Hours for B.A. / Rhetoric and Public Advocacy Concentration: |  |  | 124 | minimum) |

## Bachelor of Arts in Strategic Communication (Public Relations)

Requirements for New Students starting in the 2013-2014 Academic Year

| Year 1 - Fall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Strategic Communication | 1112 | Communicating Leadership | 3 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Communications \& Theater | 1001 | Freshman Seminar | 1 |  |
| Semester Total |  |  | 15 |  |
| Year 1 - Spring |  |  |  |  |
| Strategic Communication | 1111 | Public Speaking | 3 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08 xx or 09xx | Arts | 3-4 | GA |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Semester Total |  |  | 15-16 |  |
| Year 2-Fall |  |  |  |  |
| Strategic Communication | 2496 | News Writing \& Media Relations | 3 | WI |
| Strategic Communication | 2552 | Introduction to Public Relations | 3 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| Semester Total |  |  | 15 |  |
| Year 2 - Spring |  |  |  |  |
| Strategic Communication | 2111 | Introduction to Communication Theory | 3 |  |


| Strategic Communication | 2551 | Media Information Gathering \& Evaluation | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| Electives |  | Electives | 6 |  |
| Semester Total |  |  | 15 |  |
|  |  |  |  |  |
| Year 3-Fall |  |  |  |  |
| Strategic Communication | 2112 | Strategies \& Tactics of Persuasion | 3 |  |
| Strategic Communication | 3543 | Fundamentals of Public Relations Writing | 3 |  |
| Electives |  | Electives | 10 |  |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Year 3 - Spring |  |  |  |  |
| Strategic Communication | 3596 | Advanced Public Relations Writing | 3 | WI |
| Electives |  | Electives | 10 |  |
| Select one of the following courses: |  |  | 3 |  |
| Strategic Communication | 2661 | Introduction to Organizational Communication |  |  |
| Strategic Communication | 2662 | Leading Groups and Team Building |  |  |
| Strategic Communication | 2672 | Global Communication \& Leadership |  |  |
| Strategic Communication | 3801 | Intercultural Communication |  |  |
| Strategic Communication | 4774 | Communicating Organizational Change (Prereq: Strategic Communication 2661) |  |  |
| Semester Total |  |  | 16 |  |
| Year 4 - Fall |  |  |  |  |
| Strategic Communication | 4859 | Public Relations Management \& Case Problems | 3 |  |
| Electives |  | Electives | 10 |  |
| Select one of the following courses: |  |  | 3 |  |
| Strategic Communication | 2296 | Rhetoric of Social Movements |  | WI |
| Strategic Communication | 3336 | Argumentation <br> (Prereq: Strategic Communication 2221) |  |  |
| Strategic Communication | 3323 | Rhetoric and Political Culture |  |  |
| Strategic Communication | 3333 | Rhetorical Theory <br> (Prereq: Strategic Communication 2221) |  |  |
| Strategic Communication | 3396 | Rhetorical Criticism |  | WI |
| Semester Total |  |  | 16 |  |
| Year 4 - Spring |  |  |  |  |
| Electives |  | Electives | 16 |  |
| Semester Total |  |  | 16 |  |
|  |  |  |  |  |
| Total Hours for B.A. / Public Relations Concentration: |  |  | 124 (minimum) |  |

## International Communication Concentration

To earn the International Communication Concentration transcript notation, a student must successfully complete a total of 18-20 credits of International / Intercultural studies courses, a maximum 9 credits of which may come from courses transferred into Temple, across 3 areas:

## I. Common Course: Strategic Communication 3801: Intercultural Communication (3 credits)

Course Description: This course considers how culture influences communication processes by examining theories of intercultural communication and looking at many of the different processes that make up cultural difference.

## II. Nine (9) credits of SMC International / Intercultural courses CHOOSE FROM: <br> Advertising

- ADV 3101: Creative Thinking for Advertising (Study Abroad sections only - London)
- ADV 3185: Advertising Internship (International Internship only, through Study Abroad: London, Barcelona, Hong Kong)

Journalism

- JRN 3254: International Reporting
- JRN 3296: Travel Writing (Study Abroad sections only - London / Dublin)
- JRN 3706: International News Communication
- JRN 3751: Foreign Studies in Journalism (Study Abroad - London, Tokyo, Dublin, South Africa)
- JRN 3885: Internship (International Internship only, through Study Abroad: London, Barcelona, Hong Kong)

Media Studies \& Production

- MSP 3296: Travel Writing (Study Abroad sections only - London / Dublin)
- MSP 3471: Media and Cultural Differences
- MSP 3572: Communication \& Development
- MSP 4453: Information Society
- MSP 4496: Global Media
- MSP 4571: Foreign Studies in BTMM (Study Abroad - London / Dublin)
- MSP 4572: British Media and Telecommunication (Study Abroad - London)
- MSP 4575: International Experience [course in development] (International Internship only, through Study Abroad: Barcelona, Hong Kong)
- MSP 4785: Internship (Study Abroad sections only - London)


## Strategic Communication

- STRC 2672: Global Communication and Leadership
- STRC 3385: Internship in Rhetoric and Public Advocacy (International Internship only, through Study Abroad: London, Barcelona, Hong Kong)
- STRC 3585: Internship in Public Relations (International Internship only, through Study Abroad: London, Barcelona, Hong Kong)
- STRC 3685: Internship in Organizational Leadership (International Internship only, through Study Abroad: London, Barcelona, Hong Kong)
- STRC 3670: Special Topics in Organizational Leadership: Intercultural Communication in the Workplace


## III. Six to eight (6-8) credits of International / Intercultural Electives from outside of SMC CHOOSE FROM:

- Two sequential courses (e.g., 1001 and 1002) in any one foreign language
- OR any two of the following:


## Art History

- ARTH 1003: History of Art in Rome (Study Abroad - Rome)
- ARTH 1155: Art Heritage of the Western World I
- ARTH 1156: Art Heritage of the Western World II
- ARTH 1801: Arts of Asia (Study Abroad - Japan)
- ARTH 2001: European Crafts and Decorative Arts
- ARTH 2102: Greek Mythology and Art
- ARTH 2105: Roman Art and Archaeology
- ARTH 2129: Greek \& Roman Sculpture
- ARTH 2135: Art and Culture of Rome (Study Abroad - Rome)
- ARTH 2428: High and Late Baroque Art in Rome (Study Abroad - Rome)
- ARTH 2431: Southern Baroque Art: Italy and Spain
- ARTH 2432: Northern Baroque Art
- ARTH 2622: Galleries and Studios of Rome (Study Abroad - Rome)
- ARTH 2651: Symbolism, Dada, \& Surrealism
- ARTH 2815: Japanese Art (Study Abroad - Japan)

Asian Studies

- ASST 1051: Pre-Modern Asia
- ASST 1052: Modern Asia
- ASST 1801: Chinese and Japanese Literature in Cultural Context
- ASST 2011: Survey of Japanese Literature before 1868
- ASST 2015: Tokyo in Literature and Film
- ASST 2021: Japanese Literature in Film
- ASST 2074: Geography of East and South Asia
- ASST 2097: Asian Diaspora
- ASST 2098: Japanese Popular Culture and its Literature
- ASST 2238: Visual Anthropology of Modern Japan
- ASST 2351: Japan in a Changing World
- ASST 2367: South Asia: Peoples, Culture, Experiences
- ASST 2373: Japanese Culture
- ASST 2374: The Anthropology of Modern China
- ASST 2511: Introduction to Asian Business
- ASST 3011: Monks, Masters, and Magicians: Religion in Premodern Chinese Literature
- ASST 3052: Environmental Problems in Asia
- ASST 3247: Ideology and Social Change in Japan
- ASST 3251: China: State and Society
- ASST 3551: History of Vietnam
- ASST 3696: Asian Women in Transition
- ASST 4268: Indian Philosophy: In Introduction
- ASST 4624: Modern Japan: Empire, War, Society

Film \& Media Arts

- FMA 4673: International Cinema


## Geography \& Urban Studies

- GUS 1025: World Urban Patterns
- GUS 1031: Geography of World Affairs
- GUS 2032: Urban Systems in a Global Economy
- GUS 2073: African Development
- GUS 2074: East and South Asia
- GUS 2121: Russian Cities
- GUS 3076: Metropolitan Tokyo
- GUS 4021: International Urbanization


## History

- HIST 2501: Introduction to East Asia: China
- HIST 2502: Introduction to East Asia: Japan
- HIST 2503: Introduction to Southeast Asia: Insular
- HIST 2504: Introduction to Southeast Asia: Mainland
- HIST 2511: Introduction to African History
- HIST 2514: Introduction to Latin America
- HIST 2515: Civilization and Modernity in the Caribbean
- HIST 2516: Modern Islamic History
- HIST 2611: Third World Issues through Film
- HIST 3321: Irish History
- HIST 3331: History of England
- HIST 3362: Russia: Nationality and Empire
- HIST 3363: Russia: Revolution, State, and Empire
- HIST 3511: Southern Africa: A History
- HIST 3521: The Chinese Revolution
- HIST 3522: Contemporary China
- HIST 3531: Modern India
- HIST 3541: Japan Today
- HIST 3542: Women and Society in Japan
- HIST 3561: History of Brazil
- HIST 3562: Contemporary Mexico
- HIST 3565: Hist Latin Amer to 1930
- HIST 3571: Israel: History, Politics and Society
- HIST 3572: Modern Middle East
- HIST 3675: Third World Women's Lives
- HIST 3696: Asian Women in Transition
- HIST 4698: Revolutionary Mexico
- HIST 4896: Jews, Judaism, and the Modern World

Jewish Studies

- JST 2408: Jewish Secularism/Jewish Civilization I
- JST 2409: Jewish Secularism/Jewish Civilization II
- JST 2706: Jewish Diaspora/Survey of Jewish History
- JST 2797: Jewish Humor Past and Present
- JST 3408: Israel in the Middle East
- JST 3411: The Philosophies of Judaism
- JST 3711: Israelis and Palestinians
- JST 4896: Modern Jewish History


## Latin American Studies

- LAS 1001: Perspectives on Latin America
- LAS 1022: Latin American Social Struggles
- LAS 2101: Latin America through Film and Fiction
- LAS 2231: Democracy in Latin America
- LAS 2232: Politics of Development in Latin America
- LAS 2361: Peoples of Latin America
- LAS 2362: Peoples and Cultures of the Caribbean
- LAS 2502: Fundamentals of Latin American Business
- LAS 2514: Historical Continuity and Social Change in Latin America
- LAS 3267: Sociology of Music: Nation, Race, Class and Gender in Argentina and Brazil
- LAS 3601: "Other Voices" in Latin American Literature
- LAS 3602: Caribbean Literature and Culture
- LAS 3702: African Religions and New World Culture
- LAS 3801: African Culture in Brazil


## Political Science

- POLS 1201: Foreign Governments and Politics
- POLS 1301: International Politics
- POLS 2211: Contemporary Politics of Europe
- POLS 2212: Eastern Europe, Russia and the West
- POLS 2231: Comparative Political Systems in Latin America
- POLS 2321: Politics of the Global Economy
- POLS 2331: International Organization
- POLS 2341: U.S. Foreign Policy
- POLS 3212: British Government and Politics
- POLS 3241: Mideast Politics
- POLS 3252: East Asia and the United States
- POLS 3265: International Environmental Policy
- POLS 3331: Politics of the European Union
- POLS 3332: Globalization: Politics and Political Economy
- POLS 3396: The International Legal Order


## Religion

- REL 2002: Religion and Human Sexuality East \& West
- REL 2101: Religions of India
- REL 2102: Introduction to Buddhism
- REL 2201: Chinese Religions - Confucius to Mao
- REL 2301: Introduction to Zen Buddhism
- REL 2402: Foundations of Judaism
- REL 2403: What is Judaism?
- REL 2447: Kabbalah and Mysticism
- REL 2606: Introduction to Islam
- REL 2702: Religion in Contemporary Africa
- REL 3201: I-Ching, Tao, and Ch'an/Zen
- REL 3301: Japanese Religions
- REL 3302: Japanese Buddhism
- REL 3401: Modern Trends in Judaism
- REL 3601: The Islamic State
- REL 3602: Women in Islam
- REL 3603: Islamic Mysticism
- REL 3701: Traditional Religions of Africa


## COLLEGE OF SCIENCE \& TECHNOLOGY

Founded 1998
Michael Klein, Dean
A411 Barton Hall
1900 N. 13th Street
215-204-2888
www.temple.edu/cst
cst@temple.edu

## Introduction

Science and technology were responsible for a profound transformation of the world in the 20th century and will drive the economy of the 21st century. The objectives of the undergraduate
programs of the College of Science and Technology are to prepare students for careers in these important areas and to graduate informed, responsible citizens.

The college approaches science and technology as a body of knowledge that has an advancing frontier and a complex interface with society. The traditional mandate for a university is to provide undergraduate students with a comprehensive education and the opportunity to focus closely on a particular area of study. The College of Science and Technology embraces this mandate and extends additional opportunities to our students. Science and Technology students are encouraged to participate in faculty research projects and thus experience the advancement of this body of knowledge.

Bachelor of Science programs offer a greater concentration in major coursework, while Bachelor of Arts programs offer a greater variety of coursework. All programs offer undergraduates the opportunity to work with distinguished faculty and a richly-diverse and stimulating student body as they prepare for active roles in society.

## Mission Statement

The mission of the College of Science and Technology is to seek academic excellence by providing outstanding instruction in the sciences, and to foster scientific research of the highest quality. In pursuing its mission the College is committed to meeting the needs of a diverse student body, and is truly dedicated to the founding principles of Temple University in providing a superior education to the prepared student. The educational mission of the College is pursued through offering a current curriculum that incorporates the fundamental principles as well as the latest discoveries in the major scientific disciplines.

Interdisciplinary degree programs and independent research projects allow the student to explore scientific boundaries. The College offers a general education curriculum that provides the opportunity for non-science majors to be better informed of the complex scientific and ethical issues facing society. The College also strives to improve science and mathematics education in the Philadelphia schools. All of these aspects of the educational mission of the College are achieved through the dedicated efforts of the faculty, who are leading scholars in their field.

The research mission of the College is pursued through a sustained effort to recruit the best and brightest new faculty, to aggressively develop promising research initiatives, and to create a modern science campus with facilities fully supportive of cutting-edge research. The College also strives to support the scholarly pursuits and professional activities of its faculty, who in turn advance their respective disciplines. In doing so, the College provides an outstanding environment for graduate and undergraduate research, with the Departments and Centers as focal points for interdisciplinary research initiatives and graduate degree programs. In pursuing its research mission the College of Science and Technology will be a vital participant in establishing Temple University as a recognized center of excellence in scientific research and development.

## Admissions

See Undergraduate Admissions for more details.

## Financial Aid/ Scholarships

See Financial Information: Scholarships \& Grants for more details.

## Special Programs

## Study Abroad

See Education Abroad in the Opportunities section of this Bulletin and Temple University's Study Abroad web site at www.temple.edu/studyabroad for more information about study abroad options.

## University Honors Program

Students in the College of Science and Technology may apply to the University Honors Program. Honors students are eligible to enroll in CST honors courses, provided that they have satisfied the prerequisites and co-requisites. Honors courses are designated with a nine as the second digit in the four-digit number, e.g. Mathematics 1941 is Honors Calculus I. See Academic Opportunities: University Honors Program for more information.

## TUteach Certification for Secondary Education

Seven Bachelor of Science programs enable students to prepare for secondary education certification while mastering the content of their field. The programs are: Biology with Teaching, Chemistry with Teaching, Earth and Space Science with Teaching, General Science with Teaching, Mathematics with Teaching, Mathematics and Computer Science with Teaching, and Physics with Teaching. The programs require that students complete the collegial Bachelor of Science requirements and a total of 124 credits. See the TUteach Programs for more details.

## Accelerated Five-Year Bachelor's/Master's Programs with Teacher Certification

The Biology, Chemistry, Earth \& Environmental Science, Mathematics, and Physics Departments enable talented students to complete both a Bachelor's degree in one of the above departments and a Master's degree in Education in a total of five years. After completing the Bachelor's degree in one of the aforementioned disciplines, students spend an additional year as a graduate student in the College of Education. Students must apply for the five-year Master's program during their sophomore year. If accepted, they will take both undergraduate major courses as well as Master's in Education courses beginning in their junior year. They complete their undergraduate major in their fourth year and their Master's in their fifth year. Students who complete this program earn a Master of Education degree and are certified to teach in Pennsylvania schools. See the College of Education for more details.

## Early Admission to Professional Programs

Students in the College of Science and Technology who have been admitted to one of the following programs: Temple University School of Medicine, Temple University Kornberg School of Dentistry, Temple University School of Podiatry, Temple University School of Pharmacy, or the Doctorate of Physical Therapy, at the end of their third year and have completed 90 semester hours, including all course requirements for the major, College and University, may transfer their first year in professional study toward the completion of the credit requirements for the degree of Bachelor of Arts. Biology and Chemistry majors may also transfer approved courses in their first year of professional study toward the elective courses in their major.

Students in the College of Science and Technology who have been admitted to other healthrelated professional schools at the end of their third year with a cumulative GPA of at least 3.5 and who have completed 90 semester hours, including all course requirements of the major, College and University, may petition the dean for the transfer of their first year of professional study toward the completion of the credit requirements for the degree of Bachelor of Arts. University residency requirements must also be met.

## Awards and Achievements

## Awards

Juniors and seniors are often honored for outstanding performance in a variety of academic areas and for exceptional service to the College and the University. Information about these awards is available in departmental offices or in the Office of Student Services, 1810 Liacouras Walk, Room 203.

## Distinction in Major

Many programs allow exceptional students to receive a Distinction in Major. Please see the Bulletin pages for the specific requirements for any particular major.

## Phi Beta Kappa

See Opportunities: Honor Societies: Phi Beta Kappa.

## Student Associations

## Majors' Associations

Many of the departments within the College of Science and Technology support student interest organizations known as Majors' Associations or Societies. Each department organization provides an opportunity for students to interact with faculty and other students who share similar
interests. It is through these venues that students may influence course offerings, faculty recruitment, and departmental policy.

- Biochemistry Society
- Biology Society
- Chemistry Society
- Association for Computing Machinery (CS and IS\&T)
- Geology Society
- Society for Undergraduate Mathematics
- Physics Society
- Research Society


## Pre-Professional Health Associations

Temple University has many pre-professional health organizations that may interest students in the College of Science and Technology. These organizations allow students to interact with others with similar professional interests and gain more knowledge about admissions requirements and examinations.

- American Medical Student Association
- Pre-Pharmacy Association
- Pre-Dental Health Society
- Pre-Student Osteopathic Medical Association
- Pre-Veterinary Association of Temple


## Academic Advising

The Office of Student Services
1810 Liacouras Walk
Suite 203
215-204-2890
www.temple.edu/cst
cstadv@temple.edu
The Office of Student Services in the College of Science and Technology guides students from New Student Orientation through graduation to assist them in ensuring that they complete all degree requirements and work to their fullest potential. Faculty advisors in each major use their field experience and knowledge of departmental curriculum to help students choose courses consistent with their specific career objectives.

## Specialized Services

- New Student Orientation-Group advising and registration appointments for all newlyadmitted first-semester freshmen and transfer students.
- Advising and Registration Services—Students may want to meet with professional advisors at different times during their academic career to discuss their academic progress, develop educational and career goals, discover academic success strategies and check on their remaining graduation requirements. The express advising and advising-by-appointment schedule is available at www.temple.edu/cst/advising/officehours.html. Registration with an advisor is required for students with a cumulative, last semester attended or major/track GPA below 2.0 and for any students registering for more than 17 credits. Newly-admitted or readmitted students are also required to meet with an advisor for registration.
- Petitions for Exception to Policy—Petitions are reviewed on a rolling basis by the Director and Assistant Director of Student Services. Typical petition requests include those for overload approval, for attending another institution for a semester or summer session, and for curriculum exceptions.
- Progress Report—At 60 credits, students may schedule a progress report with their academic advisor to lay out a semester plan for completing the remaining requirements before graduation.
- Graduation Review-At 90 credits, students are required to schedule an official graduation review with their academic advisor. The advisor will explain the remaining course and credit requirements needed to graduate. Students are expected to be active participants in the review and have equal responsibility for assuring the accuracy and completeness of the review.


## Departmental Advising

After their New Student Orientation advising and registration session, students' major departments will have access to their academic credentials for subsequent advising by faculty advisors. Faculty advising is very important in developing ties between a student's academic program and his or her professional goals. Faculty advisors may assist students in finding research opportunities and professional internships and will help students choose courses that will best prepare them for their field of interest within a particular discipline.

## Academic Advising and Student Responsibility

All academic advisors are trained to read and evaluate information carefully to give students the best possible advice. However, primary responsibility for curriculum completion rests with the student. Every student must be aware of the requirements of his or her degree and should collaborate with an advisor regularly to ensure timely completion of his or her program.

## Student Advisors/Ombudspersons

Each department in the College of Science and Technology has a Student Advisor/Ombudsperson (SA/O) who is a qualified undergraduate student in that department. The SA/O is thoroughly familiar with requirements and curricula of the department and can competently advise fellow students on the courses and faculty members of the
department. He or she also has information about career options for the department's graduates. The SA/O also coordinates the student grievance procedure.

## Student Grievance Procedure

The SA/O is familiar with the College of Science and Technology Grievance Procedure and is the first person to consult in case of an academic grievance. The SA/O will serve as a studentfaculty liaison and attempt to resolve the grievance through mediation. A student must initiate this first stage of the academic grievance procedure no later than thirty days after the beginning of the fall or spring semester immediately following the completion of the course in which the grievance occurred. A copy of the College of Science and Technology grievance procedure can be obtained from the SA/O. Each SA/O has an office in his or her department, and the SA/O program coordinator is located in the Office of Student Services. A list of current SA/Os is available at www.temple.edu/cst/advising/sao/index.html.

## Continuing Student Registration

Continuing student registration is the period during the fall and spring semesters when currentlyenrolled students should register. Degree Audit Reports (DARS) provide a compact summary of a student's progress toward a degree, including a list of requirements yet to be completed. Eligible students obtain their DARS documents via TUportal.

Prior to processing their registrations, freshmen are strongly recommended to meet with advisors to review their DARS documents and discuss course selections for the upcoming semester. New transfer students and continuing students in good academic standing are encouraged to meet with their departmental advisors before processing their schedules via Self-Service Banner. Students ineligible to use Self-Service Banner are required to meet with an advisor.

## Pre-Professional Advising

Knowledge gained in the College of Science and Technology curricula provides the foundation needed in preparing for Professional Health School entrance exams. Many of the courses required by professional programs such as dentistry, medicine, pharmacy, and veterinary medicine are incorporated into College of Science and Technology curricula. This approach allows our students to fulfill degree requirements, while at the same time meeting admissions criteria for professional and graduate programs.

CST offers three ways in which students can pursue health professional programs.

- Students may complete a bachelor's degree and apply to the health professional program.
- Students may apply to the $3+4$ and $3+3$ accelerated programs linked to particular Temple health professional programs by which they may complete both their bachelor and professional degree.
- Students may apply to the $2+4$ pre-pharmacy program by which students would only complete a Doctor of Pharmacy (PharmD).

Students interested in professional health programs should contact the Office of Pre-Professional Health Studies for detailed advising. The office is located in 1810 Liacouras Walk, Suite 100 and further information can be found at www.temple.edu/healthadvising. Applicants to professional health programs who are either pursuing a degree+professional program or the 3+professional program must complete a "Letter of Intent" with the Office of Pre-Professional Health Advising, preferably during their first semester but no later than the spring of their freshman year. Applicants to a Pharmacy program on a $2+4$ track apply directly to the Pharmacy program. The curriculum and advising of these students is specifically tailored to fulfill the prerequisites set forth by the Temple University School of Pharmacy. Pre-pharmacy students must declare a major upon completion of 30 credits. All students should identify a "parallel" program of study in addition to indicating their intent to pursue a professional health program.

## Academic Policies \& Regulations

Please see the Undergraduate Academic Policies in this Bulletin. Students are responsible for complying with all university-wide academic policies that apply to their individual academic status. Additional and unique policies, or exceptions for the College of Science and Technology (CST), appear below.

## Academic Holds

## Pre-Pharmacy

Pre-Pharmacy students who have completed 30 or more credits without declaring a major shall be placed on "academic hold" and directed to see a CST advisor before the priority registration period of the subsequent semester.

## Program Warning

Any CST student who does not make satisfactory progress in the CST major or track may be placed on "academic hold" and directed to see a departmental or CST advisor before the priority registration period of the subsequent semester.

## Undeclared

Students who have not declared a major who have completed 60 or more credits shall be placed on "academic hold" and directed to see a CST advisor before the priority registration period of the subsequent semester.

## Adding or Changing Majors or Minors

See Change of Program.

## Backtracking

Students may not apply toward the degree program credit earned for a lower-level course, if the student has progressed two levels beyond the material being taught. For example, a student who
has successfully completed Physics 1062: Elementary Classical Physics II, may not subsequently take Physics 0847: How Things Work for degree credit. This rule applies to Math and Science courses, language courses, and other sequenced courses. Advanced students should consult with an advisor in the CST's Office of Student Services before taking a lower-level course.

## Change of Program (COP)

## CST Students:

In order to add or change majors or minors within the College of Science and Technology, a CST student must meet with an advisor in the CST's Office of Student Services. The advisor will evaluate the student's record in accordance with the following policy:

1. CST students in their first semester at Temple University who wish to add or change majors or minors within the CST will be automatically approved, provided they are taking, have satisfied or placed higher than a GenEd-level Mathematics course.
2. Continuing CST students who wish to add or change declared majors or minors within the CST must have a cumulative grade point average (GPA) of 2.00 or higher. Continuing CST students who wish to change their major to undeclared will be automatically approved, provided that the total of completed and registered credits is fewer than 60 credits.
3. CST students can complete a second major in the CST by fulfilling all requirements for the primary and second majors, including at least four distinct courses in the primary major and four distinct courses in the second major. Distinct courses are those that do not overlap to fulfill requirements in the other major.

## Non-CST Students*:

In order to add or change majors or minors within the College of Science and Technology, a nonCST student must meet with an advisor in the CST's Office of Student Services. The advisor will evaluate the student's record in accordance with the following policy:

1. Students in their first semester at Temple University who wish to change their major or add a minor or second major within the CST will be automatically approved, provided they are taking, have satisfied or placed higher than a GenEd-level Mathematics course.
2. Continuing students who wish to change their major or add a minor or second major within the CST must have a cumulative grade point average (GPA) of 2.00 or higher and must have completed a course in their proposed major or minor with a grade of C (2.0) or better.
*Once all of the above is approved, students must attend an IUT group orientation session within the college before the transfer is official. Students approved for an IUT must comply with the major requirements effective during the applicable semester of transfer.

## Co-Requisites and Prerequisites

Students may be de-enrolled from courses for which they do not meet prerequisites and corequisites. (Please see the Prerequisites and Co-requisites policy for more information.) Students are responsible for reviewing and abiding by all course prerequisites and co-requisites in the Course Catalog. The requirements are designed to assure that students are appropriately prepared to be successful in their courses. Prerequisites provide an efficient manner for students to register for the next course in a sequence for which they are prepared. Students who appropriately satisfy prerequisites are permitted to register for a first and second attempt. Completion of a prerequisite does not permit a student to enroll in the third attempt of a repeated course. Students may attempt a course for the third time only if they have received permission from the College, which is not guaranteed and may require additional coursework (See Repeat Policy below).

## Course Eligibility

The College of Science and Technology offers four types of undergraduate courses:

1. Preparatory courses numbered 0700-0799: open to all students, including non-degree seeking students who have completed appropriate course prerequisites and have completed or are in the process of completing required co-requisite courses. If required, students must complete these courses before enrolling in any higher level courses in the same department.
2. General Education courses numbered 0800-0999: open to all students, including non-degree seeking students who have completed appropriate course prerequisites and have completed or are in the process of completing required co-requisite courses. These courses satisfy University General Education requirements as indicated in the course description.
3. Lower-Level courses numbered 1000-1999: open to all students, including non-degree seeking students who have completed appropriate course prerequisites and have completed or are in the process of completing required co-requisite courses. These are general foundation level courses in the various disciplines.
4. Upper-Level courses numbered 2000-4999: open to all students, including non-degree seeking students who have completed appropriate course prerequisites and have completed or are in the process of completing required co-requisite courses. These courses build on the foundation courses (and on other upper-level courses) to provide a focused exploration of field-specific content.
5. Graduate-Level courses numbered 5000-9999: undergraduate students are generally prohibited from taking Graduate-Level courses. In rare circumstances, special permission may be granted by the department for undergraduate students to take graduate courses. A higher graduate tuition will apply.

## Courses Inapplicable to Graduation

Semester hours earned in Mathematics 0701 or 0702, lower-level military science (ROTC), and RCC-enhanced courses are not credited toward the minimum semester hours required for graduation.

Students will not be awarded duplicate credit for courses that are repeated in transfer or at Temple.

Students will not receive credit towards graduation for lower-level courses, which are two or more courses below either an already-completed course or their placement level. For example, if a student successfully completes Math 1041 (Calculus I), then they are not permitted to subsequently take Math 1021 (College Algebra) for new credits.

A maximum of 8 semester hours of credit will be allowed by CST for life experience and CLEP examinations. A maximum of 4 courses or up to 12 semester hours will be allowed for upperlevel Military Science (Army ROTC), Naval Science (Navy ROTC) or Aerospace Studies (Air Force ROTC) courses. A maximum of 12 total semester hours will be allowed for a combination of CLEP, Life Experience, and upper-level Military Science.

## Courses Over Five Years Old

In admitting transfer or returning students, the College of Science and Technology will, when possible, allow credit for courses taken five or more years prior to the date of admission or reenrollment. The College of Science and Technology may choose not to accept courses regardless of age for credit in the major. Foundation courses, courses of a technical nature or courses in a particularly dynamic field may not be accepted for credit.

Courses over five years old will be reviewed by the College to determine whether they will be accepted toward the degree. Final determination of the acceptability of such courses is the responsibility of the Office of Student Services and generally occurs after the student has matriculated or been rematriculated.

## Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List policy for specific GPA and credit-hour requirements.

## Grading

Major, Minor, and GenEd courses must be completed with a letter grade of C- or higher unless otherwise specified. Certain courses require a C or better in order to advance to the next level.

## Graduation Procedures

All College of Science and Technology students are required to complete a graduation review with an advisor in the Office of Student Services prior to or at the start of their senior year. Students should schedule a review once they have completed 90 semester hours. The graduation review involves a detailing of the courses and credits completed and those that remain to be completed for graduation. Once a professional advisor completes the review, the Office of Student Services forwards the review to the student's department for the faculty advisor's approval.

Students are expected to be active participants in the review and have equal responsibility for assuring the accuracy and completeness of the review.

Early in the semester in which students will complete their degree requirements, they must apply online at www.temple.edu/cst/graduation. The deadlines for completing the online application are:

- October 11, 2013, for fall semester 2013
- February 14, 2014, for spring semester 2014
- June 7, 2014, for second summer session 2014


## Intra-University Transfer (IUT)

See Change of Program.

## Life Experience Credits

Students are required to write what proficiencies are developed by their life experience and designate courses similar to their background. The experience will be reviewed by the appropriate faculty. Students need a 2.5 minimum cumulative GPA in order to apply. A maximum of 12 semester hours is allowed for the combined category of life experience, upperlevel military science (ROTC) courses, and CLEP/DSST examinations.

## Non-Traditional Credits

A maximum of 12 semester hours of credit will be allowed by CST for life experience, upperlevel military science (ROTC) courses, and CLEP/DSST examinations.

## Overload Requests

Students in the College of Science and Technology must petition through the Office of Student Services for approval of an overload when they request to take more than 17 credits in either the fall or spring semesters or more than 8 credits in either summer session. The following items are considered when reviewing an overload petition:

- Minimum 2.75 GPA overall and in the last semester of graded coursework.
- The number of credits completed in previous semesters.
- The number of science and math courses taken previously in each semester.
- The amount of credits requested.
- The type of courses requested. The office focuses particularly on the number of science and math courses in the student's proposed roster.

Each petition will be reviewed individually based on the number of credits requested.

## Permission to Take Courses at Another Institution

Students in the College of Science and Technology who wish to take courses at another institution must petition the Office of Student Services for approval prior to enrolling in such a course. Petition forms are available in the Office of Student Services, 1810 Liacouras Walk, Room 203. The student is responsible for obtaining a course description from the other institution and attaching it to the petition form. The student takes the petition to the corresponding Temple department for faculty review and then submits the petition to the Office of Student Services for final approval.

Courses taken without prior approval will not be transferrable toward the Temple degree. In addition, students must have completed the prerequisites and have completed or be completing any listed co-requisites of both the Temple equivalent course and course at the host institution.

Please see the University policy on Permission to Take Courses Elsewhere for more information.

## Placement Tests

The results of placement tests determine if students are required to enroll in preparatory composition and mathematics courses. All incoming freshmen must take English and mathematics placement tests. Prior to taking the Placement tests, students are encouraged to review their English and mathematics work, and are particularly encouraged to use My Math Test as a refresher.

All CST transfer students are required to complete the math placement test, regardless of transfer credits. For students who have already completed their program's mathematics requirement or the prerequisite requirement through transfer credits, the test will be used as a diagnostic tool. The test results will be informational only and will not restrict or dictate course selection nor negate the transferability of credits. The results of the placement exam should be discussed with an academic advisor at the time of the initial registration. Your advisor may suggest certain "bridge courses" that will assist you in preparing for more advanced coursework. Bridge courses build on content from courses for which you have received transfer credit, allow you to keep your credits, and support your preparation for the next course in your sequence.

If students are unsuccessful in courses beyond their placement results, they may be asked to repeat the prerequisite course at Temple regardless of transfer credits.

Transfer students who have not completed English 1002 or 0802 are also required to take the English placement test. Students assigned to English 0701 or 0711 must register each semester for that course until the requirement is completed. Only upon successful completion of English 0701 or 0711 can such students enroll in English 0802 or 0812.

## Plagiarism and Academic Cheating

Plagiarism and academic cheating are prohibited by the College of Science and Technology. The development of independent thought and a respect for the thoughts of others is essential to intellectual growth. The prohibition of plagiarism and cheating is intended to foster this independence and respect. See the policy on Plagiarism in this Bulletin.

The penalty for plagiarism or cheating as a first offense is normally an F in the course in which the offense is committed. In such cases, the instructor writes a report to the dean and the Office of Student Conduct and Community Standards. The Office of Student Conduct and Community Standards generally adjudicates all cases and student appeals.

## Pre-Pharmacy Track Students

Pre-Pharmacy track students must declare a primary major upon completion of 30 credits. Students who have completed 30 credits without declaring a primary major will have an academic hold placed on their record that will prevent them from registering. Students must meet with an advisor to declare a major in order to have the hold removed. All Pre-Pharmacy students should identify a "parallel" program of study in addition to indicating their intent to pursue Pharmacy School admission.

## Prerequisites and Co-Requisites

Students may be de-enrolled from courses for which they do not meet prerequisites and corequisites. (Please see the Prerequisites and Co-requisites policy for more information.) Students are responsible for reviewing and abiding by all course prerequisites and co-requisites in the Course Catalog. The requirements are designed to assure that students are appropriately prepared to be successful in their courses. Prerequisites provide an efficient manner for students to register for the next course in a sequence for which they are prepared. Students who appropriately satisfy prerequisites are permitted to register for a first and second attempt. Completion of a prerequisite does not permit a student to enroll in the third attempt of a repeated course. Students may attempt a course for the third time only if they have received permission from the College, which is not guaranteed and may require additional coursework (See Repeat Policy below).

## Program Performance

Students must maintain a 2.00 cumulative GPA in their major or track and make satisfactory progress toward their CST degrees to remain in good academic standing in the College. Students who are not in good academic standing in the College will be placed on program warning, and an "academic hold" may be placed on their record.

## Re-enrollment to the College of Science and Technology

College of Science and Technology students who have not enrolled for two consecutive semesters must apply for re-enrollment. Any existing holds must be cleared prior to reenrollment and official transcripts provided for any college-level courses completed after leaving Temple University. Students who have been away for less than two semesters are subject to university policies and restrictions governing taking courses at another institution and must receive permission prior to enrollment in such courses. In addition, courses over five years old will be reviewed by the College to determine whether they will be accepted toward the degree. Final determination of the acceptability of such courses is the responsibility of the Office of Student Services and generally occurs after the student has been rematriculated.

The deadline for application to readmit for the fall semester is August 1 ; the deadline to readmit for the spring semester is December 1, and the deadline for summer semester I and II is April 1. Also see the policy on Academic Standing.

If the student's original curriculum is no longer available, students are required to follow the most current curriculum or choose another current curriculum, upon return. This applies to any student who has not registered for a single fall or spring semester. This can have significant impacts on degree progress and students are encouraged to discuss any planned absences with an advisor.

Full-time degree-seeking students have the option of pursuing a Leave of Absence for a period of no more than 2 semesters. Please refer to the Leave of Absence Policy for more information.

## Repeating a Course

Students may attempt a course two times without restriction. Students in the College of Science \& Technology are encouraged to meet with an advisor prior to attempting a course for the second time. A third attempt of any course is not guaranteed and requires permission of the student's home college. Petitions for a third attempt may require additional coursework, remediation, and/or academic/personal planning. Please refer to the University policy on Repeating a Course for further information.

## Undeclared Majors

After completing 30 credits, undeclared majors in the College of Science and Technology will be notified that they need to select a major. Students who have completed 60 credits without declaring a major will have a hold placed on their record that will prevent them from registering. Students must meet with an advisor to declare a major in order to have the hold removed.

## Warning, Probation and Dismissal

All University policies on warning, probation and dismissal are enforced with this addition: CST
students who are put on Academic Warning or Probation should see an academic advisor to review their proposed schedule of courses. See the University's policy on Academic Standing for more details.

## General College Graduation Requirements

## Requirements for the Bachelor of Science (B.S.) and the Bachelor of Arts (B.A.) Degrees

The College of Science and Technology offers two undergraduate degrees: a Bachelor of Arts (B.A.) and a Bachelor of Science (B.S.). The B.A. degree gives students a broad-based education, including the study of a foreign language. The B.S. degree is for those students who wish for more specialized training in their chosen disciplines.

## Credit Hour Requirements

The College of Science and Technology requires that students complete a total of 123 credits for most programs. The TUteach programs (Biology with Teaching, Chemistry with Teaching, Earth \& Space Science with Teaching, General Science with Teaching, Mathematics with Teaching, Mathematics and Computer Science with Teaching, Mathematics and Technology with Teaching, and Physics with Teaching) require students to complete a total of 124 credits. Of those totals, 90 credits must be in the College of Science and Technology or the College of Liberal Arts (CLA). A course shall count as a College of Science and Technology or College of Liberal Arts course if it is offered by a department or program in either of the respective colleges, or if it is in the departments of Economics and Art History, or if it is taken to satisfy a major or minor requirement in the College of Science and Technology. Of those 90 credits, 45 must be in upper-level courses. Upper-level courses consist of course numbers at the 2000 level or above. Students receiving a Bachelor of Arts (as opposed to Bachelor of Science) degree must take at least two courses numbered 2000 or above in the College of Liberal Arts.

## Courses Inapplicable to Graduation

Semester hours earned in Mathematics 0701, lower-level military science (ROTC), and RCCenhanced courses are not credited toward the minimum semester hours required for graduation.

Students will not be awarded duplicate credit for courses that are repeated in transfer or at Temple.

Students will not receive credit towards graduation for lower-level courses, which are two or more courses below either an already-completed course or their placement level. For example, if a student successfully completes Math 1041 (Calculus I), then they are not permitted to subsequently take Math 1021 (College Algebra) for new credits.

A maximum of 8 semester hours of credit will be allowed by CST for life experience and CLEP examinations. A maximum of 4 courses or up to 12 semester hours will be allowed for upper-
level Military Science (Army ROTC), Naval Science (Navy ROTC) or Aerospace Studies (Air Force ROTC) courses. A maximum of 12 total semester hours will be allowed for a combination of CLEP, Life Experience and upper-level Military Science (Army ROTC), Naval Science (Navy ROTC) or Aerospace Studies (Air Force ROTC) courses.

## Grade Point Average (GPA) Requirement

The College of Science \& Technology requires that students have a GPA of at least 2.00 overall and at least 2.00 in the department(s) of their major and/or minor.

## Residency Requirements

Students who transfer into the College of Science and Technology must complete at least 30 of their last 45 semester hours of coursework at Temple. These credits must be applicable to their degree.

For Bachelor of Arts programs, 7 of the courses required for the major must be completed at Temple. For the Bachelor of Science programs that are within a single discipline, 9 of the courses required for the major must be completed at Temple. For the Bachelor of Science programs that are interdisciplinary, 10 of the courses required for the major must be completed at Temple.

In addition, half of the courses required in the department of the major must be taken at Temple. Please refer to degree programs for the specific number of major courses required.

## Bachelor of Science Requirements

General Education. All students are required to complete the General Education (GenEd) requirements. The General Education curriculum consists of 25-26 s.h.

Major. Students must also complete the requirements of a departmental major. The minimum acceptable grade in a course taken to fulfill major requirements is a C - unless otherwise specified. Bachelor of Science majors are offered in the following programs:

- Applied Mathematics
- Biochemistry
- Biology
- Biology with Teaching
- Biophysics
- Chemistry
- Chemistry with Teaching
- Computer Science
- Earth and Space Science with Teaching
- Environmental Science
- General Science with Teaching
- Geology
- Information Science and Technology
- Mathematics
- Mathematics and Computer Science
- Mathematics and Physics
- Mathematics with Teaching
- Mathematics and Computer Science with Teaching
- Mathematics and Technology with Teaching
- Neuroscience - Cellular \& Molecular
- Physics
- Physics with Teaching

Minor or Concentration. Students may also choose to complete the requirements for a minor and/or concentration. The minimum acceptable grade in a course taken to fulfill minor or concentration requirements is a C - unless otherwise specified. A concentration is available in the program of Biology. At least three of the courses credited towards the minor must be courses that were not credited towards the major. If the primary major is not within CST, the student should follow the policies of the home college regarding distinct courses. At least half of the courses taken by a student to fulfill the minor must be taken at Temple. Minors are available in the following programs:

- Biology
- Computer Science
- Digital Media Technologies (CIS/MSP)
- Geology
- Information Science and Technology
- Mathematics
- Physics

Second Major. Students may complete a second major by fulfilling all requirements for the primary and second majors, including at least four distinct courses in the primary major and four distinct courses in the second major. If the primary major is not within CST, the student should follow the policies of the home college regarding distinct courses. General Education requirements must be satisfied in accordance with the requirements of the primary major. In instances of a double major, only one degree will be conferred.

## Bachelor of Arts Requirements

General Education. All students are required to complete the General Education (GenEd) requirements. The General Education curriculum consists of 25-26 s.h.

Language Requirement. In addition to the University General Education requirement, Bachelor of Arts candidates must complete a second language requirement. B.A. degree candidates are required to successfully complete the second semester (typically courses numbered 1002) of a second language or demonstrate proficiency in a second language. Languages include: American

Sign Language, Arabic, Chinese, French, German, Greek, Hebrew, Hindi, Italian, Japanese, Korean, Latin, Portuguese, Russian, Spanish, and Vietnamese.

Upper-level distribution requirements. Bachelor of Arts students must complete upper-level distribution requirements by taking two upper-level courses in one or more departments of the College of Liberal Arts or the departments of Economics or Art History. Upper-level courses consist of course numbers at the 2000 level or above.

Students who have second majors, one of which is in the College of Liberal Arts or Economics or Art History, automatically satisfy the distribution requirement.

Major. Bachelor of Arts candidates must complete the requirements of a major. It is important to note that students enter the College of Science and Technology as Bachelor of Science majors. If students wish to change their degree choice to Bachelor of Arts, they must complete a declaration of major form in the Office of Student Services with an advisor. The minimum acceptable grade in a course taken to fulfill major requirements is a C- unless otherwise specified. B.A. majors are offered in the following programs:

- Biology
- Chemistry
- Computer Science
- Earth Science (see Geology)
- Information Science and Technology
- Mathematics
- Mathematical Economics
- Natural Sciences
- Physics

Minor or Concentration. Students may also choose to complete the requirements for a minor and/or concentration. The minimum acceptable grade in a course taken to fulfill minor or concentration requirements is a C- unless otherwise specified. A concentration is available in the program of Biology. At least three of the courses credited towards the minor must be courses that were not credited towards the major. At least half of the courses taken by a student to fulfill the minor must be taken at Temple. Minors are available in the following programs:

- Biology
- Computer Science
- Geology
- Digital Media Technologies (CIS/MSP)
- Information Science and Technology
- Mathematics
- Physics

Second Major. Students may complete a second major by fulfilling all requirements for the primary and second majors, including at least four distinct courses in the primary major and four distinct courses in the second major. General Education requirements must be satisfied in
accordance with the requirements of the primary major. In instances of a double major, only one degree will be conferred.

## Individual Program Requirements

Certain courses fulfill multiple requirements. In careful consultation with your advisor, you will be able to optimize curriculum choices.

The total number of hours required for the degree may vary based on initial placement exams, transfer evaluations, individual curriculum choices, and academic programs.

Listed under each degree program are the courses students must successfully complete to earn that particular B.A. or B.S. degree. These required courses are in addition to the General Education curriculum requirements.

## Student Contact

For information about the College of Science \& Technology, please contact the Office of Student Services, 215-204-2890.

Contact information for academic programs can be found under the listing for each individual program.

## Faculty

## Administration

Michael Klein, Ph.D., University of Bristol, Dean
Shohreh Amini, Ph.D., University of Pennsylvania, Associate Dean
Douglas H. Baird, Ph.D., Yale University, Assistant Dean
Omar Hijab, Ph.D., University of California at Berkeley, Associate Dean
Ralph E. Jenkins, Ph.D., University of Texas at Austin, Senior Associate Dean
Mia K. Luehrmann, Ph.D., University of Illinois at Urbana-Champaign, Associate Dean

## Biology

## Professor

Shohreh Amini, Ph.D., University of Pennsylvania
Kenneth J. Blank, Ph.D., Yeshiva University
Frank N. Chang, Ph.D., University of Wisconsin
Mark Feitelson, Ph.D., University of California at Los Angeles
Antonio Giordano, Ph.D., University of Trieste
Edward Gruberg, Ph.D., University of Illinois

Emanuel B. Hey III, Ph.D., State University of New York, Stony Brook
Stuart E. Neff, Ph.D., Cornell University
Allen Nicholson, Ph.D., University of Pennsylvania, Chair
Joel B. Sheffield, Ph.D., University of Chicago

## Associate Professor

Karen Palter, Ph.D., Princeton University
Robert W. Sanders, Ph.D., University of Georgia
Jacqueline Tanaka, Ph.D., University of Illinois
Richard Waring, Ph.D., Essex University, England
Weidon Yang, Ph.D., Fudan University

## Assistant Professor

Darius Balciunas, Ph.D., Uppsala University
Erik Cordes, Ph.D., Pennsylvania State University
Amy Freestone, Ph.D., University of California at Davis
Tonia Hsieh, Ph.D., Harvard University
Robert Kulathinal, Ph.D., McMaster University
Rachel Spigler, Ph.D., University of Georgia

## Chemistry

## Professor

Eric Borguet, Ph.D., University of Pennsylvania
Hai-Lung Dai, Ph.D., University of California at Berkeley, Provost
David R. Dalton, Ph.D., University of California
Franklin A. Davis, Ph.D., Syracuse University
Susan Ann Jansen-Varnum, Ph.D., University of Missouri - St. Louis
Michael Klein, Ph.D., University of Bristol
Robert Levis, Ph.D., Pennsylvania State University, Chair
Ronald M. Levy, Ph.D., Harvard University
Scott Sieburth, Ph.D., Harvard University
Francis C. Spano, Ph.D., Princeton University
Daniel R. Strongin, Ph.D., University of California at Berkeley
Bradford Wayland, Ph.D., University of Illinois
Stephanie L. Wunder, Ph.D., University of Massachusetts

## Associate Professor

Rodrigo Andrade, Ph.D., Massachusetts Institute of Technology
Spiridoula Matsika, Ph.D., Ohio State University
Christian Schafmeister, Ph.D., University of California at San Francisco
Robert J. Stanley, Ph.D., Pennsylvania State University

## Assistant Professor

Vincent Voelz, Ph.D., University of California at San Francisco
William Wuest, Ph.D., University of Pennsylvania
Michael Zdilla, Ph.D., Princeton University
Computer and Information Sciences

## Professor

Richard Beigel, Ph.D., Stanford University
James F. Korsh, Ph.D., University of Pennsylvania
Eugene Kwatny, Ph.D., Drexel University
Longin Jan Latecki, Ph.D., University of Hamburg
David Lefkovitz, Ph.D., University of Pennsylvania
John T. Nosek, Ph.D., Temple University
Zoran Obradovic, Ph.D., Pennsylvania State University
Jie Wu, Ph.D., Florida Atlantic University, Chair

## Associate Professor

Xiaojiang Du, Ph.D., University of Maryland, College Park
Paul LaFollette, M.D., Temple University
Rolf Lakaemper, Ph.D., University of Hamburg
Vasileios Megalooikonomou, Ph.D., University of Maryland
Yuan Shi, Ph.D., University of Pennsylvania
Slobodan Vucetic, Ph.D., Washington State University

## Assistant Professor

Eduard Dragut, Ph.D., University of Illinois at Chicago
Yuhong Guo, Ph.D., University of Alberta
Shan Lin, Ph.D., University of Virginia
Haibin Ling, Ph.D., University of Maryland, College Park
Chiu C. Tan, Ph.D., College of William and Mary
Alexander Yates, Ph.D., University of Washington

## Earth and Environmental Science

## Professor

David E. Grandstaff, Ph.D., Princeton University, Chair
George H. Myer, Ph.D., Yale University
Jonathan Nyquist, Ph.D., University of Wisconsin

Laura Toran, Ph.D., University of Wisconsin

## Associate Professor

Dennis O. Terry, Jr., Ph.D., University of Nebraska

## Assistant Professor

Ilya Buynevich, Ph.D., Boston University

Nicholas Davatzes, Ph.D., Stanford University
Alexandra Davatzes, Ph.D., Stanford University
Bojeong Kim, Ph.D., Cornell University

## Mathematics

## Professor

Shiferaw Berhanu, Ph.D., Rutgers University
Boris Datskovsky, Ph.D., Harvard University
Cristian Gutierrez, Ph.D., University of Buenos Aires, Argentina
Yury Grabovsky, Ph.D., New York University
Omar Hijab, Ph.D., University of California at Berkeley
David R. Hill, Ph.D., University of Pittsburgh
Isaac Klapper, Ph.D., Courant Institute of Mathematical Sciences
Edward Letzter, Ph.D., University of Washington, Chair
Martin Lorenz, Ph.D., Universität Giessen
Jatinder S. Mehta, Ph.D., University of Wisconsin
Gerardo Mendoza, Ph.D., Massachusetts Institute of Technology
John Paulos, Ph.D., University of Wisconsin
Brian Rider, Ph.D., Courant Institute of Mathematical Sciences
Igor Rivin, Ph.D., Princeton University
Ranganathan Srinivasan, Ph.D., Wayne State University
Daniel B. Szyld, Ph.D., New York University
Georgia Triantafillou, Ph.D., University of Bonn, Germany
Wei-Shih Yang, Ph.D., Cornell University

## Associate Professor

Raymond F. Coughlin, Ph.D., Illinois Institute of Technology
Vasily Dolgushev, Ph.D., Massachusetts Institute of Technology
Irina Mitrea, Ph.D., University of Minnesota
John J. Schiller Jr., Ph.D., University of Pennsylvania

## Assistant Professor

David Futer, Ph.D., Stanford University

Benjamin Seibold, Ph.D., University of Kaiserslautern
Matthew Stover, Ph.D., University of Texas at Austin

## Physics

## Professor

Theodore W. Burkhardt, Ph.D., Stanford University
Dieter Forster, Ph.D., Harvard University
Zameer Hasan, Ph.D., Australian National University, Canberra
A. Marjatta Lyyra, Ph.D., University of Stockholm
C. Jeffrey Martoff, Ph.D., University of California at Berkeley

Zein-Eddine Meziani, Ph.D., Université de Paris XI
Peter S. Riseborough, Ph.D., Imperial College, London
Adrienn Ruzsinszky Perdew, Ph.D., Budapest University of Technology and Economics
Rongjia Tao, Ph.D., Columbia University, Chair
Xiaoxing Xi, Ph.D., Peking University and Institute of Physics

## Associate Professor

Zbigniew Dziembowski, Ph.D., Warsaw University
Edward T. Gawlinski, Ph.D., Boston University
Maria Iavarone, Ph.D., University of Napoli "Frederico II"
Chyanlong Lin, Ph.D., Temple University
Bernd Surrow, Ph.D., University of Hamburg
Tan Yuen, Ph.D., Temple University

## Assistant Professor

Ke Chen, Ph.D., Chinese Academy of Sciences
Andreas Metz, Ph.D., Institut Für Kernphysik Universität Mainz
Nikolas Sparveris, Ph.D., University of Athens
Xifan Wu, Ph.D., Rutgers, The State University of New Jersey

## Emeritus Faculty

## Professor

Robert M. Aiken
Edwin J. Anderson
Leonard B. Auerbach
Dorothy Berner
William Brinigar
Orin Chein

Leroy W. Dubeck
Ivan N. Erdelyi
Jerrold Franklin
Frank L. Friedman
Janos Galambos
Leonard J. Garrett
Antonio M. Ponte Goncalves

Seymour Haber
Peter Hagis, Jr.
Thomas E. Hanson
William Harvey
S. Robert Hilfer

Ralph Hillman
Robert L. Intemann
Elliot B. Koffman
V.S. Krishnan

Grant R. Krow
Mortimer M. Labes
Sigurd Y. Larsen
Seymour Lipschutz
Bernard Meth
Ted W. Mihalisin
Richard L. Miller
Michael I. Mote
William D. Nathan
Stuart E. Neff
Donald E. Neville

## Associate Professor

John Adams
Giora Baram
James Bloomer
Francis T. Christoph, Jr.
Bruce P. Conrad
Sarah Evangelista
Giorgio Ingargiola
James S. Karra
Nicholas Macri
H. Frank Thornton

Stephen Washburne

Elmer L. Offenbacher
Eli A. Passow
Hala Pflugfelder
Arthur T. Poe
K. Raghunandanan

Harry P. Rappaport
Louis Raymon
Daniel Reich
Shepherd K. Roberts
Robert Salomon
William Schmitt
Robert Searls
Leon Steinberg
Raza A. Tahir-Kheli
Stephen T. Takats
Gene C. Ulmer
Robert B. Weinberg
Richard C. Weisenberg
John R. Williams
David E. Zitarelli

## Applied Mathematics

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The mathematics major prepares student for professions requiring a strong mathematical background or for graduate study in mathematics and related fields.

There are several degree programs from which to choose: the Bachelor of Arts in Mathematics, the Bachelor of Science in Mathematics, the Bachelor of Science in Applied Mathematics, the Bachelor of Science in Mathematics with Teaching, and joint programs with Computer and Information Science, Economics, and Physics.

The Bachelor of Arts in Mathematics provides a solid mathematical foundation and also allows for the most flexibility.

The Bachelor of Science in Mathematics provides an in-depth theoretical background focusing on the traditional core areas of mathematics. This program is suitable preparation for graduate study in mathematics.

The Bachelor of Science in Applied Mathematics focuses on mathematical and computational methods applicable in the sciences, engineering, and industry. In particular, this degree is suitable preparation for professions featuring sophisticated mathematical modeling and/or scientific computing. This degree is also suitable preparation for graduate study in applied mathematics or related disciplines.

The Bachelor of Science in Mathematics with Teaching program is aimed at students interested in teaching mathematics at the high school level. This program combines a solid mathematical foundation with the pedagogical training necessary for success as a high school teacher. This program also satisfies Pennsylvania's teacher certification requirements.

## Bachelor of Science

## Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writingintensive requirement: Math 3096 or Math 3098, Math 4096.
- Students must complete the General Education (GenEd) requirements.
o The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.

2. College Requirements

- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 45 Upper-Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (66-67 s.h.)

- One (1) Computer \& Information Science course is required (4 s.h.): Computer \& Information Science 1053 or 1057.
- Sixteen (16) Mathematics courses are required (53 s.h.): Mathematics 1041, 1042, 2043, 2103, 2111 or 3003, 3031, 3043, 3044, 3046, 3096 or 3098, 3141, 3142, 4043, 4051, 4096 and one (1) Mathematics elective at the 3000+ level or above.
- Two (2) Physics courses are required (8 s.h.): Physics 1061 or 2021, and 1062 or 2022.


## Suggested Semester by Semester Plan

| Year 1 - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Computer \& Information Science <br> Computer \& Information Science | $\begin{gathered} 1053 \\ \text { or } \\ 1057 \end{gathered}$ | Programming in Matlab or <br> Computer Programming in C | $4$ $4$ |  |
| Mathematics <br> Mathematics | $\begin{aligned} & 1041 \\ & 1941 \end{aligned}$ | Calculus I or Honors Calculus I | 4 4 |  |
|  | $\begin{gathered} 1061 \\ \text { or } \\ 2021 \\ \hline \end{gathered}$ | Elementary Classical Physics I or General Physics I | $4$ <br> 4 |  |
| General Education / Elective Credits |  |  | 4 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 1 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics <br> Mathematics | $\begin{gathered} 1042 \\ \text { or } \\ 1942 \\ \hline \end{gathered}$ | Calculus II or <br> Honors Calculus II | 4 <br> 4 |  |
| Physics Physics | $\begin{gathered} 1062 \\ \text { or } \\ 2022 \\ \hline \end{gathered}$ | Elementary Classical Physics II or <br> General Physics II | $\begin{aligned} & 4 \\ & 4 \\ & \hline \end{aligned}$ |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 2-Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 2043 | Calculus III | 4 |  |
| Mathematics | 2103 | Linear Algebra with Computer Lab (F) | 4 |  |
| General Education / Elective Credits |  |  | 8 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 2 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |


| Mathematics | 3031 | Probability Theory I | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Mathematics | 3046 | Differential Equations with Computer Lab (S) | 4 |  |
| Mathematics | $\begin{array}{\|c} \hline 2111 \\ \text { or } \\ 3003 \\ \hline \end{array}$ | Basic Concepts of Math or <br> Theory of Numbers | $\begin{aligned} & 3 \\ & 3 \\ & \hline \end{aligned}$ |  |
| General Education / Elective Credits |  |  | 6 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 3 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 3043 | Numerical Analysis I (F) | 4 |  |
| Mathematics | 3141 | Advanced Calculus I (F) | 3 |  |
| General Education / Elective Credits |  |  | 8 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 3 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 3044 | Numerical Analysis II (S) | 3 |  |
| Mathematics | 3142 | Advanced Calculus II (S) | 3 |  |
| General Education / Elective Credits |  |  | 9 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 4 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 4051 | Complex Analysis (F) | 3 |  |
| Mathematics | 4043 | Applied Math (F) | 3 |  |
| Mathematics | $\begin{array}{\|c} \hline 3096 \\ \text { or } \\ 3098 \\ \hline \end{array}$ | Introduction to Modern Algebra or <br> Modern Algebra (F) | $3$ $3$ | WI <br> WI |
| General Education / Elective Credits |  |  | 6 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 4 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 4096 | Senior Problem Solving (S) | 3 | WI |
| Mathematics |  | 3000+ Math Elective | 3-4 |  |
| General Education / Elective Credits |  |  | 9-8 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Credits in Coursework for B.S. in Applied Mathematics |  |  | 66-67 |  |
| General Education / Elective Credits |  |  | 57-56 |  |
| Total Credits for B.S. Degree |  |  | 123 |  |

Students who complete CST majors typically receive a waiver for 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

## Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department.
Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include Mathematics 1022, for example.

## Distinction in Major

To graduate with Distinction in Applied Mathematics a student should meet the following requirements:

1. All requirements for the degree in Applied Mathematics must be met with a GPA of at least 3.50 in the Mathematics courses.
2. At the time of graduation, the student's overall GPA, including all college-level courses, must be at least 3.25 .
3. Students must complete Mathematics 3098 instead of Mathematics 3096 in order to qualify for a Distinction in Major.
4. A student must have a GPA of 3.50 or higher in Mathematics 3141, Mathematics 3142, Mathematics 3098, Mathematics 4051 and any additional courses from the following list: Mathematics 3043, Mathematics 3044, Mathematics 3101, and any 4000-level course other than individual study.

## Biochemistry

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## Bachelor of Science

## Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writingintensive requirement: Biology 2296, Biology 3096 and Chemistry 4196.
- Students must complete the General Education (GenEd) requirements.
o The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.

2. College Requirements

- 45 Upper Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (78-81 s.h.)

- Seven (7) Chemistry courses are required (26 s.h.): Chemistry 1031/1033, 1032/1034, $2201 / 2203$, 2202/2204, 3103/3105, 3301 or 3405 , and 4401.
- Seven (7) Biology courses are required (26 s.h.): Biology 1111 or 1911, 2112 or 2912, 2296, 3096, 3324, 4344 and 4376.
- Two (2) Biochemistry Electives selected from the following (6-9 s.h.): Biology 3201, 3265, 3301, 3317, 3325, 3327, 3328, 3334, 3352, 3363, 3367, 3368, 3371, 3374, 3380; Chemistry 3001, 3302, 4196, 4201, 4405. With approval from the faculty advisor, two semesters of Undergraduate Research (Biology 4391/4491 or Chemistry 3891/4891) for a minimum of 6 credits can be used to fulfill one of the Biochemistry electives.
- Three (3) Mathematics courses are required (12 s.h.): Mathematics 1041, 1042 and 2043.
- Two (2) Physics courses are required (8 s.h.): Physics 1061 or 2021 and 1062 or 2022.

Note: A grade of C or higher in Chemistry 1031 and Chemistry 1032 is required to take Biology 1111 and Biology 2112. A grade of C or higher in Biology 1111 and Biology 2112 is required to take upper-level Biology courses, and a C - or higher is required unless otherwise specified in all other courses for the major, including course prerequisites. Most research and Independent Study courses, such as Biology 3091, 3183, 3681, 4291, 4483, 4491, and 4591, are not available for major credit.

## Suggested Semester by Semester Plan

| Year 1 - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 1031 | General Chemistry I and | 3 |  |
| Chemistry | 1033 | General Chemistry I Laboratory or | 1 |  |
| Chemistry | 1951 | Honors General Chemistry I and | 3 |  |
| Chemistry | 1953 | Honors General Chemistry I Laboratory | 1 |  |
| Mathematics <br> Mathematics | $\begin{aligned} & 1041 \\ & 1941 \end{aligned}$ | Calculus I or Honors Calculus I | 4 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 1 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology <br> Biology | $\begin{aligned} & 1111 \\ & 1911 \end{aligned}$ | Introduction to Biology I or <br> Honors Introduction to Biology I | 4 4 |  |
| Chemistry | 1032 | General Chemistry II and | 3 |  |
| Chemistry | $1034$ | General Chemistry II Laboratory or | 1 |  |
| Chemistry | 1952 | Honors General Chemistry II and | 3 |  |
| Chemistry | 1954 | Honors General Chemistry II Laboratory | 1 |  |
| Mathematics <br> Mathematics | $\begin{aligned} & 1042 \\ & 1942 \end{aligned}$ | Calculus II or Honors Calculus II | 4 4 |  |
| Mathematics | 1942 | Honors Calculus II | 4 |  |
| General Education / Elective Credits |  |  | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 2 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology <br> Biology | $\begin{aligned} & 2112 \\ & 2912 \end{aligned}$ | Introduction to Biology II or <br> Honors Introduction to Biology II | 4 4 |  |


| Chemistry | 2201 | Organic Chemistry I and | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Chemistry | 2203 | Organic Chemistry I Laboratory or | 1 |  |
| Chemistry | 2211 | Organic Chemistry I for Majors and | 3 |  |
| Chemistry | 2213 | Organic Chemistry I Laboratory for Majors or | 1 |  |
| Chemistry | 2921 | Honors Organic Chemistry I and | 3 |  |
| Chemistry | 2923 | Honors Organic Chemistry I Laboratory | 1 |  |
| Physics | $2021$ | General Physics I or | 4 |  |
| Physics | 1061 | Elementary Classical Physics I | 4 |  |
| General Education / Elective Credits |  |  | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 2 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | 2296 | Genetics (S) | 4 | WI |
| Chemistry | 2202 | Organic Chemistry II and | 3 |  |
| Chemistry | 2204 | Organic Chemistry II Laboratory or | 1 |  |
| Chemistry | 2212 | Organic Chemistry for Majors II and | 3 |  |
| Chemistry | $2214$ | Organic Chemistry II Laboratory for Majors or | 1 |  |
| Chemistry | 2922 | Honors Organic Chemistry II and | 3 |  |
| Chemistry | 2924 | Honors Organic Chemistry II Laboratory | 1 |  |
| Physics | $2022$ | General Physics II or | 4 |  |
| Physics | 1062 | Elementary Classical Physics II | 4 |  |
| General Education / Elective Credits |  |  | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 3 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | 3096 | Cell Structure and Function (F) | 4 | WI |
| Chemistry | 3103 | Techniques of Chemical Measurement I | 3 |  |
| Chemistry | 3105 | Introduction to Chemical Research Techniques | 1 |  |
| Mathematics | 2043 | Calculus III | 4 |  |
| General Education / Elective Credits |  |  | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 3 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry Chemistry* | $\begin{aligned} & 3301 \\ & 3405 \end{aligned}$ | Physical Chemistry Lecture I <br> or <br> Physical Chemistry of Biomolecules | 3 3 |  |
| Chemistry* | 3405 | Physical Chemistry of Biomolecules | 3 |  |
| Chemistry | 4401 | Biochemistry I (S) | 3 |  |
| General Education / Elective Credits |  |  | 10 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 4 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |


| Biology | 3324 | Molecular Biology (F) | 3 |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
| Biology | 4376 | General Biochemistry II (F) | 3 |  |
| Biochemistry |  | Elective* | $3-4$ |  |
| General Education / Elective Credits |  |  | $6-7$ |  |
| Subtotal |  |  | $15-17$ |  |
|  |  |  |  |  |
| Year 4 - Spring Semester | Course \# |  |  |  |
| Subject | Course Title |  |  |  |
| Biology |  | Elective* | Hours | Attribute |
| Biochemistry |  |  | 4 |  |
| General Education / Elective Credits |  |  | $3-5$ |  |
| Subtotal |  |  | $7-9$ |  |
|  |  | $\mathbf{1 4 - 1 8}$ |  |  |
| Credits in Coursework for B.S. in Biochemistry |  |  |  |  |
| General Education / Elective Credits | $\mathbf{7 8 - 8 1}$ |  |  |  |
| Total Credits for B.S. Degree |  | $\mathbf{4 5 - 4 2}$ |  |  |

*NOTE: Biochemistry majors taking this course instead of Chemistry 3301 cannot also receive Biochemistry elective credit for it. Biochemistry majors who want to take Chemistry 4196 or 3397 or 3398 as a Biochemistry elective must take the Chemistry 3301-3302 sequence as Chemistry 3405 does not serve as a prerequisite for these courses or any other course that has 3301 as a prerequisite or corequisite.
(F) - Fall only course.
(S) - Spring only course.

Students who complete CST majors typically receive a waiver for 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

## *Biochemistry Electives

Students are required to take two advanced biochemistry electives selected from the following list:

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Biology | 3201 | Human Genetics (F) | 3 |  |
| Biology | 3265 | Developmental Biology (F) | 3 |  |
| Biology | 3301 | Cell Biology (S) | 3 |  |
| Biology | 3317 | General Microbiology (S) | 4 |  |
| Biology | 3325 | Research Techniques in Molecular Biology (S) | 4 |  |
| Biology | 3327 | Immunology (S) | 3 |  |
| Biology | 3328 | Virology (F) | 3 |  |
| Biology | 3334 | Mammalian Physiology (S) | 4 |  |
| Biology | 3352 | Systems Neuroscience | 3 |  |
| Biology | 3363 | Mammalian Development | 3 |  |
| Biology | 3367 | Endocrinology $(F)$ | 3 |  |
| Biology | 3368 | Biology of Cancer (S) | 3 |  |
| Biology | 3371 | Cell Proliferation (S) | 3 |  |
| Biology | 3374 | Physical Biochemistry (S) | 3 |  |
| Biology | 3380 | Contemporary Biology (F) | 3 |  |
| Chemistry | 3001 | Inorganic Chemistry (F) | 3 |  |
| Chemistry | 3302 | Physical Chemistry Lecture II | 3 |  |


| Chemistry | 4196 | Techniques of Chemical Measurement II | 5 | WI |
| :--- | :--- | :--- | :--- | :--- |
| Chemistry | 4201 | Organic Structure and Mechanisms (F) | 3 |  |
| Chemistry | 4405 | Biophysical Chemistry (S) | 3 |  |
|  |  |  |  |  |
| Notes: |  |  |  |  |
| 1. Other courses may be acceptable with the permission of one of the biochemistry faculty advisors. |  |  |  |  |
| 2. With approval from the faculty advisor, two semesters of Undergraduate Research (Biology 4391/4491 or <br> Chemistry 3891/4891) for a minimum of 6 credits can be used to fulfill one of the Biochemistry electives. |  |  |  |  |

## Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include Biology 1011, for example.

## Distinction in Major

To graduate with Distinction in Major, students are required to achieve a 3.33 GPA or higher in all the Biology and Chemistry courses in their major.

## Biology

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## Bachelor of Arts

## Summary of Requirements for the Degree

## 1. University Requirements

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writingintensive requirement: Biology 2296, Biology 3096 or Biology 3396.
- Students must complete General Education (GenEd) requirements.
o The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.

2. College Requirements

- 45 Upper Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- Two (2) Upper Level (2000+) Liberal Art courses.
- Second (2nd) Level of a Foreign Language (1002).

3. Major Requirements for Bachelor of Arts (60-63 s.h.)

- Eight (8) Biology courses are required (28-31 s.h.): Biology 1111 or 1911, 2112 or 2912, 2227, 2296, 3096 and 3 Biology electives 2200 or above (see course descriptions for exceptions).
- Four (4) Chemistry courses with labs are required (16 s.h.): Chemistry 1031/1033, 1032/1034, 2201/2203, and 2202/2204.
- Two (2) Mathematics courses are required (8 s.h.): Mathematics 1041 and 1042.
- Two (2) Physics courses are required (8 s.h.): Physics 2021 and 2022.

Note: A grade of C or higher in Chemistry 1031 and Chemistry 1032 is required to take Biology 1111 and Biology 2112, respectively. A grade of C or higher in Biology 1111 and Biology 2112 is required to take upper-level Biology courses, and a C- or higher is required unless otherwise specified in all other courses for the major, including course prerequisites. Most research and Independent Study courses, such as Biology 3091, 3183, 3681, 4291, 4483, 4491, and 4591, are not available for major credit. A GPA of 2.0 or better is required in Biology courses in order to graduate.

## Suggested Semester by Semester Plan

| Year 1 - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 1031 | General Chemistry I and | 3 |  |
| Chemistry | 1033 | General Chemistry I Laboratory or | 1 |  |
| Chemistry |  | Honors General Chemistry I and | 3 |  |
| Chemistry | 1953 | Honors General Chemistry I Laboratory | 1 |  |
| Mathematics | $1041$ | Calculus I or | 4 |  |
| Mathematics | 1941 | Honors Calculus I | 4 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 1 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | $\int_{1011}^{1111}$ | Introduction to Biology I or | 4 |  |
| Biology | 1911 | Honors Introduction to Biology I | 4 |  |
| Chemistry | 1032 | General Chemistry II and | 3 |  |
| Chemistry | 1034 | General Chemistry II Laboratory or | 1 |  |
| Chemistry | 1952 | Honors General Chemistry II and | 3 |  |
| Chemistry | 1954 | Honors General Chemistry II Laboratory | 1 |  |
| Mathematics |  | Calculus II <br> or | 4 |  |
| Mathematics | 1942 | Honors Calculus II | 4 |  |
| General Education / Elective Credits |  |  | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 2 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | 2112 | Introduction to Biology II or | 4 |  |
| Biology | 2912 | Honors Introduction to Biology II | 4 |  |
| Chemistry | 2201 | Organic Chemistry I and | 3 |  |
| Chemistry | 2203 | Organic Chemistry I Laboratory or | 1 |  |
| Chemistry | 2211 | Organic Chemistry for Majors I and | 3 |  |
| Chemistry | 2213 | Organic Majors Laboratory I or | 1 |  |
| Chemistry | 2921 | Honors Organic Chemistry I and | 3 |  |
| Chemistry | 2923 | Honors Organic Chemistry I Laboratory | 1 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 2 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | $\begin{aligned} & 2227 \\ & 2296 \end{aligned}$ | Principles of Ecology (S) or Genetics (S) | $\begin{aligned} & 3 \\ & 4 \\ & 4 \end{aligned}$ | WI |


| Chemistry | 2202 | Organic Chemistry II and | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Chemistry | 2204 | Organic Chemistry II Laboratory or | 1 |  |
| Chemistry | 2212 | Organic Chemistry for Majors II and | 3 |  |
| Chemistry | 2214 | Organic Majors Laboratory II or | 1 |  |
| Chemistry | 2922 | Honors Organic Chemistry II and | 3 |  |
| Chemistry | 2924 | Honors Organic Chemistry II Laboratory | 1 |  |
| General Education / Elective Credits |  |  | 8-9 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 3-Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | 3096 | Cell Structure \& Function (F) | 4 | WI |
| Physics | 2021 | General Physics I | 4 |  |
| General Education / Elective Credits |  |  | 8 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 3 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | $\begin{aligned} & 2296 \\ & 2227 \end{aligned}$ | $\begin{array}{\|l} \hline \text { Genetics }(S) \\ \quad \text { or } \\ \text { Principles of Ecology }(S) \\ \hline \end{array}$ | 4 <br> 3 | WI |
| Physics | 2022 | General Physics II | 4 |  |
| General Education / Elective Credits |  |  | 7-8 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 4 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | Elective | Upper-Level 2200+ Biology Elective^ | 3-4 |  |
| Biology | Elective | Upper-Level 2200+ Biology Elective^ | 3-4 |  |
| General Education / Elective Credits |  |  | 7-9 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 4 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | Elective | Upper-Level 2200+ Biology Elective^ | 3-4 |  |
| General Education / Elective Credits |  |  | 12-13 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Credits in Coursework for B.A. in Biology |  |  | 60-63 |  |
| General Education / Elective Credits |  |  | 63-60 |  |
| Total Credits for B.A. Degree |  |  | 123 |  |

(F) - Fall only course
(S) - Spring only course
${ }^{\wedge}$ If the student has taken the necessary prerequisite courses, some of the Biology elective courses may be taken before the Fall semester of Year 4.

Students who complete CST majors typically receive a waiver for 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

## Bachelor of Science

## Summary of Requirements for the Degree

1. University Requirements

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writingintensive requirement: Biology 2296, Biology 3096 or Biology 3396.
- Students must complete the General Education (GenEd) requirements.
o The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.


## 2. College Requirements

- 45 Upper Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (69-75 s.h.)

- Eleven (11) Biology courses are required (37-43 s.h.): Biology 1111 or 1911, 2112 or 2912, 2227, 2296, 3096, and 6 Biology electives 2200 or above ** (see course descriptions for exceptions).
- Four (4) Chemistry courses with labs are required (16 s.h.): Chemistry 1031/1033, 1032/1034, 2201/2203, and 2202/2204.
- Two (2) Mathematics courses are required (8 s.h.): Mathematics 1041 and 1042.
- Two (2) Physics courses are required (8 s.h.): Physics 2021 and 2022.

Note: A grade of C or higher in Chemistry 1031 is required to take Biology 1111. Grades of C or higher in both Chemistry 1031 and 1032 are required to take Biology 2112. A grade of C or higher in Biology 1111 and Biology 2112 is required to take upper-level Biology courses, and a C- or higher is required unless otherwise specified in all other courses for the major, including course prerequisites. Most research and Independent Study courses, such as Biology 3091, 3183,

3681, 4291, 4483, 4491, and 4591, are not available for major credit. A GPA of 2.0 or better is required in Biology courses in order to graduate.
** Up to two (2) Biology Electives (6-8 s.h.) may be replaced by Cognate electives selected from the following (B.S. degree only): Anthropology 2764; Chemistry 3301, Chemistry 3302;
Mathematics 2043; Physics 2501, Physics 4301; Statistics 5002 (if substituted for Biology 3312; students are not allowed to use both Biology 3312 and Statistics 5002 as upper-level electives).

## Suggested Semester by Semester Plan

| Year 1 - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 1031 | General Chemistry I and | 3 |  |
| Chemistry | 1033 | General Chemistry I Laboratory or | 1 |  |
| Chemistry | 1951 | Honors General Chemistry I and | 3 |  |
| Chemistry | 1953 | Honors General Chemistry I Laboratory | 1 |  |
| Mathematics | $1041$ | Calculus I or | 4 |  |
| Mathematics | 1941 | Honors Calculus I | 4 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 1 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | 1111 | Introduction to Biology I or | 4 |  |
| Biology | 1911 | Honors Introduction to Biology I | 4 |  |
| Chemistry | 1032 | General Chemistry II and | 3 |  |
| Chemistry | 1034 | General Chemistry II Laboratory or | 1 |  |
| Chemistry | 1952 | Honors General Chemistry II and | 3 |  |
| Chemistry | 1954 | Honors General Chemistry II Laboratory | 1 |  |
| Mathematics | $1042$ | Calculus II <br> or | 4 |  |
| Mathematics | 1942 | Honors Calculus II | 4 |  |
| General Education / Elective Credits |  |  | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 2 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | 2112 | Introduction to Biology II or | 4 |  |
| Biology | 2912 | Honors Introduction to Biology II | 4 |  |
| Chemistry | 2201 | Organic Chemistry I and | 3 |  |
| Chemistry | 2203 | Organic Chemistry I Laboratory or | 1 |  |
| Chemistry | 2211 | Organic Chemistry for Majors I and | 3 |  |
| Chemistry | 2213 | Organic Majors Laboratory I or | 1 |  |
| Chemistry | 2921 | Honors Organic Chemistry I and | 3 |  |
| Chemistry | 2923 | Honors Organic Chemistry I Laboratory | 1 |  |


| General Education / Elective Credits |  |  | 8 |  |
| :---: | :---: | :---: | :---: | :---: |
| Subtotal |  |  | 16 |  |
| Year 2 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | 2227 | Principles of Ecology (S) | 3 |  |
| Biology | 2296 | Genetics (S) | 4 | WI |
| Chemistry | 2202 | Organic Chemistry II and | 3 |  |
| Chemistry | 2204 | Organic Chemistry II Laboratory or | 1 |  |
| Chemistry | 2212 | Organic Chemistry for Majors II and | 3 |  |
| Chemistry | 2214 | Organic Majors Laboratory II or | 1 |  |
| Chemistry | 2922 | Honors Organic Chemistry II and | 3 |  |
| Chemistry | 2924 | Honors Organic Chemistry II Laboratory | 1 |  |
| General Education / Elective Credits |  |  | 3-4 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 3 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | 3096 | Cell Structure \& Function (F) | 4 | WI |
| Physics | 2021 | General Physics I | 4 |  |
| General Education / Elective Credits |  |  | 8 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 3 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | Elective | Upper-Level 2200+ Biology Elective^ | 3-4 |  |
| Biology | Elective | Upper-Level 2200+ Biology Elective^ | 3-4 |  |
| Physics | 2022 | General Physics II | 4 |  |
| General Education / Elective Credits |  |  | 3-5 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 4 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | Elective | Upper-Level 2200+ Biology Elective^ | 3-4 |  |
| Biology | Elective | Upper-Level 2200+ Biology Elective^ | 3-4 |  |
| General Education / Elective Credits |  |  | 7-9 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 4 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology/Cognitive | Elective | Upper-Level 2200+ Biology Elective or Cognitive Elective^ | 3-4 |  |
| Biology/Cognitive | Elective | Upper-Level 2200+ Biology Elective or Cognitive Elective^ | 3-4 |  |
| General Education / Elective Credits |  |  | 8-10 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Credits in Coursework for B.S. in Biology |  |  | 69-75 |  |


| General Education / Elective Credits | $54-48$ |  |
| :--- | :---: | :---: |
| Total Credits for B.S. Degree | 123 |  |

(F) - Fall only course
(S) - Spring only course
$\wedge$ If the student has taken the necessary prerequisite courses, some of the Biology or Cognitive elective courses may be taken before the Spring semester of Year 3.

Students who complete CST majors typically receive a waiver for 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

## Minor Requirements

Students interested in acquiring basic knowledge in biology but not wishing to major in the subject may pursue a minor by successful completion of Biology 1111 and Biology 2112 (Introduction to Biology I and II), plus three additional upper-level 2200 or above Biology electives (see course descriptions for exceptions). At least one of these additional Biology electives must have a laboratory component.

Note that Chemistry 1031 and Chemistry 1032 (with labs) are the co-requisites or prerequisites for Biology 1111 and Biology 2112, and that a grade of C or higher in Biology 1111 and Biology 2112 is required to take Biology electives. Biology 2227, Biology 2296, and Biology 3096 can be taken as electives for the minor. Please consult the Biology Department's advisor when choosing the three additional courses to ensure that prerequisites have been satisfied. (A minimum of 18 credits in Biology is required for the minor.)

## Distinction in the Major

To be eligible for distinction in the major, a student must retain a grade point average of 3.2 or better (overall and in the major); should register for Biology 4391 (Accelerated Research in Biology) or Biology 4291 (Extradepartmental Research) for a total of 6 s.h. over two semesters; and must write a final research paper and present his/her research at a departmental research poster session before graduation. A student, however, does not have to enroll in the distinction program in order to participate in departmental research. Other courses (Biology 2082, Independent Research I, and Biology 3082, Independent Research II) provide credit toward graduation and research experience, and are available to undergraduate students from their sophomore through their senior year. A student may register for Biology 3082 more than one semester. In all cases, permission of the faculty and application to the department Honors Committee is required before registering for research credits.

## Concentration in Neuroscience

Undergraduate students with an interest in Neuroscience may apply to the Neuroscience Concentration after declaration of a major in biology or psychology. Upon successful completion of their departmental and Neuroscience Program requirements, students receive a bachelor's
degree with a Concentration in Neuroscience. Please note that the College of Science \& Technology now offers a Bachelor of Science in Neuroscience - Cellular and Molecular that will result in a phasing out of the Biology Neuroscience Concentration over the next several years.

## Neuroscience Concentration Requirements

- Completion of three Neuroscience courses with a grade of B or better. Courses may be selected from: Biology 3354, Biology 3356; Communication Sciences \& Disorders 3235; Philosophy 5244; Psychology 2501, Psychology 2502.
- One year of Neuroscience research with a faculty member of the Neuroscience Program, with public and written presentation of the results. Two faculty members in the Neuroscience Program must approve the written presentation.


## Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include Biology 1011, for example.

A total of up to 3 s.h. of Biology research courses numbered lower than 4000 (to include: Biology 3082, 3181, 3183, 3281, 3681, and 3781) may be taken for a letter grade. Any additional credits in research courses in this category can be taken only on a CR/NC basis. No research courses numbered lower than 4000 may be used for Biology elective credit.

Five-Year Combined B.A. or B.S. and Ed.M. Program

## Five-Year Master's/Secondary Education Certification Program

This is a combined program between the College of Science \& Technology and the College of Education. For more information, see the following web site:
www.temple.edu/bulletin/Academic_programs/schools_colleges/ed/intro/generalinfo/ed_generali nfo.shtm\#teacher

## Biophysics

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## Bachelor of Science

## Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writingintensive requirement: Biology 2296, Biology 3096, Biology 3396, Chemistry 4196, the combination of Chemistry 3397 and Chemistry 3398, Mathematics 3098, Mathematics 4096, Physics 2796 or Physics 4796.
- Students must complete the General Education (GenEd) requirements.
o The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.

2. College Requirements

- 45 Upper Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).


## 3. Major Requirements for Bachelor of Science (75-79 s.h.)

- Three (3) Biology courses are required (12 s.h.): Biology 2112, 2296, and 3096.
- Six (6) Physics courses are required (23 s.h.): Physics 1061 or 2021, 1062 or 2022, 2502, 2796, 3301, and 4101.
- Four (4) Chemistry courses with Labs (16 s.h.): Chemistry 1031/1033, 1032/1034, 2201/2203 and 2202/2204.
- Three (3) Mathematics courses are required (12 s.h.): Mathematics 1041, 1042 and 2043.
- Four (4) 2000+ Biophysics Electives are required (12-16 s.h.): Electives must be chosen in consultation with the Physics faculty advisor.

Note: A grade of C or higher in Chemistry 1031 and Chemistry 1032 is required to take Biology 1111 and Biology 2112. A grade of C or higher in Biology 1111 and Biology 2112 is required to
take upper-level Biology courses, and a C- or higher is required unless otherwise specified in all other courses for the major, including course prerequisites. Most research and Independent Study courses, such as Biology 3091, 3183, 3681, 4291, 4483, 4491, and 4591, are not available for major credit.

## Suggested Semester by Semester Plan



| Chemistry | 2202 | Organic Chemistry II and | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Chemistry | 2204 | Organic Chemistry II Laboratory or | 1 |  |
| Chemistry | 2212 | Organic Chemistry II for Majors and | 3 |  |
| Chemistry | 2214 | Organic Chemistry II for Majors Laboratory or | 1 |  |
| Chemistry | 2922 | Honors Organic Chemistry II and | 3 |  |
| Chemistry | 2924 | Honors Organic Chemistry II Laboratory | 1 |  |
| Physics | $2022$ | General Physics II or | 4 |  |
| Physics | 1062 | Elementary Classical Physics II | 4 |  |
| General Education / Elective Credits |  |  | 8 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 3-FALL |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | $2112$ | Introduction to Biology II or | 4 |  |
| Biology | 2912 | Honors Introduction to Biology II | 4 |  |
| Physics | 3301 | Electricity \& Magnetism (F) | 4 |  |
| Elective | Elective $\dagger$ | 2000+ Biophysics Elective | 3-4 |  |
| General Education / Elective Credits |  |  | 3-4 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 3 - SPRING |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Physics | 2502 | Mathematical Physics (S) | 4 |  |
| Physics | 2796 | Introduction to Modern Physics (S) | 4 | WI |
| Physics | Elective $\dagger$ | 2000+ Biophysics Elective | 3-4 |  |
| General Education / Elective Credits |  |  | 3-4 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 4 - FALL |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | 3096 | Cell Structure \& Function (F) | 4 | WI |
| Physics | 4101 | Thermodynamics \& Kinetic Theory (F) | 3 |  |
| Physics | Elective† | 2000+ Biophysics Elective | 3-4 |  |
| General Education / Elective Credits |  |  | 4-5 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 4 - SPRING |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | 2296 | Genetics (S) | 4 | WI |
| Elective | Elective† | 2000+ Biophysics Elective | 3-4 |  |
| General Education / Elective Credits |  |  | 8-9 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Credits in Coursework for Biophysics |  |  | 75-79 |  |
| General Education / Elective Credits |  |  | 48-44 |  |
| Total Credits for B.S. Degree |  |  | 123 |  |

(F) - Fall only course
(S) - Spring only course
$\dagger$ Four electives must be chosen in consultation with the physics advisor. All courses must be 2000-level or above. At least two electives must be Physics courses. Choose courses in Physics, Biology (Neurobiology, Genetics, Cell Structure, Physiology), Chemistry (Physical Chemistry), Biochemistry and Biophysics. Recommended for graduate school in Physics: Physics 2101, 3302, 3701 and 4796 and as much of the B.S. program in Physics as time allows. Students planning to go to medical school should complete Biology 1111: Introduction to Biology.

Students who complete CST majors typically receive a waiver for 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

## Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include Biology 1011, for example.

## Distinction in Major

A student who wishes to graduate with Distinction in the Major must complete all courses required for the biophysics major with a GPA of 3.5 or better, and carry out an independent study or undergraduate thesis project. Consult the undergraduate physics advisor for more details.

## Chemistry

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The Department of Chemistry is one of the oldest departments in the university and has a long record of preparing students for careers in science. Both Bachelor of Arts (B.A.) and Bachelor of Science (B.S.) degrees are available, depending upon a student's career goals. Since a significant portion of America's chemical industry is centered in the Philadelphia region, there is a wide range of career opportunities locally available. Although most of our students have gone on to medicine, dentistry, or the chemical industry, recent graduates have also gone on to careers in law, forensics, and even art restoration.

All prospective majors should schedule an appointment with one of the departmental advisors (names of current advisors are available from the Chemistry Office, Beury Hall, Room 130) to plan a program of study. The recommended order of courses for the two majors is listed below; a different order is acceptable as long as the student adheres to prerequisite requirements.

## Bachelor of Arts

## Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses in their major at Temple. For Chemistry majors, one must be Chemistry 4196 and the second should be either Chemistry 3397 or 3398.
- Students must complete the General Education (GenEd) requirements.
o The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.


## 2. College Requirements

- 45 Upper Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- Two (2) Upper Level (2000+) Liberal Art courses.
- Second (2nd) Level of a Foreign Language (1002).

3. Major Requirements for Bachelor of Arts (53 s.h.)

- Nine (9) Chemistry courses are required (33 s.h.): Chemistry 1031/1033, 1032/1034, 2201/2203, 2202/2204, 3103/3105, 3301, 3302, 4196 and [3397 or 3398].
- Three (3) Mathematics courses are required (12 s.h.): Mathematics 1041, 1042 and 2043.
- Two (2) Physics courses are required (8 s.h.): Physics 1061 or 2021 and 1062 or 2022.

Note: Chemistry 3091 is not available for major credit.

## Suggested Semester by Semester Plan

| Year 1 - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 1031 | General Chemistry I and | 3 |  |
| Chemistry | 1033 | General Chemistry I Laboratory <br> or | 1 |  |
| Chemistry | 1951 | Honors General Chemistry I and | 3 |  |
| Chemistry | 1953 | Honors General Chemistry I Laboratory | 1 |  |
| Mathematics <br> Mathematics | $\begin{aligned} & 1041 \\ & 1941 \end{aligned}$ | Calculus I or Honors Calculus I | 4 4 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 1 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 1032 | General Chemistry II and | 3 |  |
| Chemistry | 1034 | General Chemistry II Laboratory or | 1 |  |
| Chemistry | 1952 | Honors General Chemistry II and | 3 |  |
| Chemistry | 1954 | Honors General Chemistry II Laboratory | 1 |  |
| Mathematics | $1042$ | Calculus II or | 4 |  |
| Mathematics | 1942 | Honors Calculus II | 4 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 2 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 2201 | Organic Chemistry I and | 3 |  |
| Chemistry | 2203 | Organic Chemistry I Laboratory or | 1 |  |
| Chemistry | 2211 | Organic Chemistry I for Majors and | 3 |  |
| Chemistry | 2213 | Organic Chemistry I Laboratory for Majors or | 1 |  |
| Chemistry | 2921 | Honors Organic Chemistry I and | 3 |  |
| Chemistry | 2923 | Honors Organic Chemistry I Laboratory | 1 |  |
| Mathematics | 2043 | Calculus III | 4 |  |
| Physics | 2021 1061 | ```General Physics I or Elementary Classical Physics I``` | 4 4 |  |
| Physics | 1061 | Elementary Classical Physics I | 4 |  |
| General Education / Elective Credits |  |  | 3 |  |


| Subtotal |  |  | 15 |  |
| :---: | :---: | :---: | :---: | :---: |
| Year 2 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 2202 | Organic Chemistry II and | 3 |  |
| Chemistry | $2204$ | Organic Chemistry II Laboratory or | 1 |  |
| Chemistry | 2212 | Organic Chemistry II for Majors and | 3 |  |
| Chemistry | $2214$ | Organic Chemistry II Laboratory for Majors or | 1 |  |
| Chemistry | 2922 | Honors Organic Chemistry II and | 3 |  |
| Chemistry | 2924 | Honors Organic Chemistry II Laboratory | 1 |  |
| Physics <br> Physics | $\begin{aligned} & 2022 \\ & 1062 \end{aligned}$ | General Physics II or <br> Elementary Classical Physics II | $4$ |  |
| General Education / Elective Credits |  |  | 8 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 3 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 3302 | Physical Chemistry Lecture II | 3 |  |
| General Education / Elective Credits |  |  | 12 |  |
| Subtotal |  |  | 15 |  |
| ${ }^{1}$ Chemistry 3103 is a pre- or co-requisite for all chemistry laboratory courses numbered above 3103. |  |  |  |  |
|  |  |  |  |  |
| Year 3 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 3301 | Physical Chemistry Lecture I | 3 |  |
| Chemistry | 3103 | Techniques of Chemical Measurements I ${ }^{1}$ | 3 |  |
| Chemistry | 3105 | Introduction to Chemical Research Techniques | 1 |  |
| General Education / Elective Credits |  |  | 9 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Year 4 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 4196 | Techniques of Chemical Measurement II | 5 | WI |
| General Education / Elective Credits |  |  | 11 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 4 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | $\begin{gathered} 3397 \\ \text { or } \\ 3398 \end{gathered}$ | Physical Chemistry Laboratory I or <br> Physical Chemistry Laboratory II | $\overline{2}$ $2$ | WI <br> WI |
| General Education / Elective Credits |  |  | 13 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Credits in Coursework for B.A. in Chemistry |  |  | 53 |  |
| General Education / Elective Credits |  |  | 70 |  |

(F) - Fall only course.
(S) - Spring only course.

Students who complete CST majors typically receive a waiver for 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

## Bachelor of Science

## Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writingintensive requirement: Biology 2296, Biology 3096, Biology 3396, Chemistry 4196, the combination of Chemistry 3397 and Chemistry 3398, Earth \& Environmental Science 2096, Earth \& Environmental Science 4096, Mathematics 3098, Mathematics 4096, Physics 2796 or Physics 4796.
- Students must complete the General Education (GenEd) requirements.
o The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.

2. College Requirements

- 45 Upper Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (70-74 s.h.)

- Twelve (12) Chemistry courses are required (44-46 s.h.): Chemistry 1031/1033, 1032/1034, 2201/2203, 2202/2204, 3001, 3103/3105, 3301, 3302, 3397/3398, 4196, and 2 Advanced Chemistry courses (4003 or above).
- Two (2) Advanced Science courses selected from the following list (6-8 s.h.): Chemistry 3881, 3891 or 4891 (only one of these may be counted as an advanced science course), all other Chemistry courses numbered 4003 and above; Biology 2296, 3096, 3265, 3334
and above; Earth \& Environmental Science 2002 and above; Mathematics 2101, 3031, and above; Physics 2101, 2502, 2796, 3101, 3301, 3302, 4101, 4301, and above.
- Three (3) Mathematics courses are required (12 s.h.): Mathematics 1041, 1042 and 2043.
- Two (2) Physics courses are required (8 s.h.): Physics 1061 or 2021 and 1062 or 2022.

Note: Chemistry 3091 is not available for major credit.

## Suggested Semester by Semester Plan

| Year 1 - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 1031 | General Chemistry I and | 3 |  |
| Chemistry | 1033 | General Chemistry I Laboratory or | 1 |  |
| Chemistry | 1951 | Honors General Chemistry I and | 3 |  |
| Chemistry | 1953 | Honors General Chemistry I Laboratory | 1 |  |
| Mathematics <br> Mathematics | $\begin{aligned} & 1041 \\ & 1941 \end{aligned}$ | Calculus I or Honors Calculus I | 4 4 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 1 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 1032 | General Chemistry II and | 3 |  |
| Chemistry | 1034 | General Chemistry II Laboratory or | 1 |  |
| Chemistry | 1952 | Honors General Chemistry II and | 3 |  |
| Chemistry | 1954 | Honors General Chemistry II Laboratory | 1 |  |
| Mathematics | $1042$ | Calculus II <br> or | 4 |  |
| Mathematics | 1942 | Honors Calculus II | 4 |  |
| General Education / Elective Credits |  |  | 8 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 2- Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 2201 | Organic Chemistry I and | 3 |  |
| Chemistry | 2203 | Organic Chemistry I Laboratory or | 1 |  |
| Chemistry | 2211 | Organic Chemistry I for Majors and | 3 |  |
| Chemistry | 2213 | Organic Chemistry I Laboratory for Majors or | 1 |  |
| Chemistry | 2921 | Honors Organic Chemistry I and | 3 |  |
| Chemistry | 2923 | Honors Organic Chemistry I Laboratory | 1 |  |
| Mathematics | 2043 | Calculus III | 4 |  |
| Physics | 2021 1061 | General Physics I or <br> Elementary Classical Physics I | 4 4 |  |
| Physics | 1061 | Elementary Classical Physics I | 4 |  |
| General Education / Elective Credits |  |  | 3 |  |


| Subtotal |  |  | 15 |  |
| :---: | :---: | :---: | :---: | :---: |
| Year 2 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 2202 | Organic Chemistry II and | 3 |  |
| Chemistry | 2204 | Organic Chemistry II Laboratory or | 1 |  |
| Chemistry | 2212 | Organic Chemistry II for Majors and | 3 |  |
| Chemistry | 2214 | Organic Chemistry II Laboratory for Majors or | 1 |  |
| Chemistry | 2922 | Honors Organic Chemistry II and | 3 |  |
| Chemistry | 2924 | Honors Organic Chemistry II Laboratory | 1 |  |
| Physics | $2022$ | General Physics II or | 4 |  |
| Physics | 1062 | Elementary Classical Physics II | 4 |  |
| General Education / Elective Credits |  |  | 8 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 3 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 3103 | Techniques of Chemical Measurements I ${ }^{1}$ | 3 |  |
| Chemistry | 3105 | Introduction to Chemical Research Techniques | 1 |  |
| Chemistry | 3301 | Physical Chemistry Lecture I | 3 |  |
| General Education / Elective Credits |  |  | 8 |  |
| Subtotal |  |  | 15 |  |
| Chemistry 3103 is a pre- or co-requisite for all chemistry laboratory courses numbered above 3103. |  |  |  |  |
|  |  |  |  |  |
| Year 3 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 3302 | Physical Chemistry Lecture II | 3 |  |
| Chemistry | 3397 | Physical Chemistry Laboratory I | 2 | WI |
| Chemistry | 3001 | Inorganic Chemistry | 3 |  |
| General Education / Elective Credits |  |  | 8 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 4 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 3398 | Physical Chemistry Laboratory II | 2 | WI |
| Science or Mathematics |  | Advanced Science Course ${ }^{2,4}$ | 3-4 |  |
| Chemistry | 4003 or above | Advanced Chemistry Course ${ }^{3,4}$ | 3-4 |  |
| General Education / Elective Credits |  |  | 7-5 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 4 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 4196 | Techniques of Chemical Measurement II | 5 | WI |
| Science or Mathematics |  | Advanced Science Course ${ }^{2,4}$ | 3-4 |  |
| Chemistry | 4003 or above | Advanced Chemistry Course ${ }^{3,4}$ | 3-4 |  |


(F) - Fall only course.
(S) - Spring only course.

Students who complete CST majors typically receive a waiver for 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

## Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include Chemistry 1027, for example.

## Five-Year Master's Programs

Five-Year B.A. or B.S./M.A.
Chemistry majors at the beginning of their junior year may apply for admission to the fifth-year M.A. Program. Upon admission to the program and satisfactory completion of the program requirements, the student is assured of having a master's degree at the end of the fifth year. Interested students should contact their advisor for details.

## Five-Year Master's/Secondary Education Certification Program

This is a combined program between the College of Science and Technology and the College of Education. For more information, see the following web site:
www.temple.edu/bulletin/Academic_programs/schools_colleges/ed/intro/generalinfo/ed_generali nfo.shtm\#teacher

## Distinction in Major

To graduate with Distinction in Major, students are required to achieve a 3.33 GPA or higher in all the Chemistry courses in their major.

## Computer Science

Dr. Jie Wu, Chair
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Computer Science undergraduates study computer software - including program, design and engineering - system architecture, networks, distributed systems, theory and mathematical foundations, Data Bases, Computer Graphics, and Web technologies. Our alumni will have a detailed understanding of computer and information technology, good practical skills in the use of that technology, good abilities in written and oral communications, and experience in teamwork. They will also have the opportunity to participate in internship programs and in research projects. Our alumni will have been in a program that stresses personal and professional responsibility, where all students, regardless of religion, race, or gender, feel at home. Our alumni will be ready for successful careers in societies and technologies that are undergoing rapid change.

## Bachelor of Arts

## Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing intensive courses at Temple as part of their major: English 2696 and either Computer \& Information Science 4397 or Computer \& Information Science 4398.
- Students must complete the General Education (GenEd) requirements.
o The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.


## 2. College Requirements

- 45 Upper Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- Two (2) Upper Level (2000+) Liberal Art courses.
- Second (2nd) Level of a Foreign Language (1002).

3. Major Requirements for Bachelor of Arts (55 s.h.)

- Ten (10) Computer \& Information Science courses are required (36 s.h.): Computer \& Information Science 1001, 1068, 1166, 2033, 2107, 2166, 2168, 3207, 3238 and 4397 or 4398.
- One (1) Technical Writing course is required (3 s.h.): English 2696.
- Two (2) Mathematics courses are required (8 s.h.): Mathematics 1041 and 1042.
- Two (2) lab science courses are required (8 s.h.): Must select within a Sequence for Lab Science A and Lab Science B. See the Sequenced Lab Science sheet for the science options.


## Suggested Semester by Semester Plan

| Year 1 - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Computer \& Information Science | 1001 | Introduction to Academics in Computer Science | 1 |  |
| Computer \& Information Science | 1068 | Program Design \& Abstraction | 4 |  |
| Mathematics <br> Mathematics | $\begin{array}{r} 1041 \\ 1941 \\ \hline \end{array}$ | $\begin{array}{\|l} \hline \text { Calculus I } \\ \text { or } \\ \text { Honors Calculus I } \\ \hline \end{array}$ | $4$ <br> 4 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 1 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Computer \& Information Science | 1166 | Mathematical Concepts in Computing I | 4 |  |
| Mathematics <br> Mathematics | $\begin{aligned} & 1042 \\ & 1942 \end{aligned}$ | Calculus II <br> or <br> Honors Calculus II | 4 4 |  |
| English | 2696 | Technical Writing | 3 | WI |
| General Education / Elective Credits |  |  | 4 |  |
| Subtotal |  |  | 15 |  |

Year 2 - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Computer \& Information Science | 2168 | Data Structures | 4 |  |
| General Education / Elective Credits |  |  | 11 |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

## Year 2 - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Computer \& Information Science | 2033 | Computational Probability and Statistics | 4 |  |
| Computer \& Information Science | 2107 | Computer Systems \& Low-Level Programming | 4 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

Year 3 - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Computer \& Information Science | 3207 |  <br> Operating Systems | 4 |  |
| Science |  | Laboratory Science A | 4 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

Year 3 - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Computer \& Information Science | 3238 | Software Design | 4 |  |
| Science |  | Laboratory Science B | 4 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

Year 4 - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Computer \& Information Science | 2166 | Mathematical Concepts in Computing II | 4 |  |
| General Education / Elective Credits |  |  | 12 |  |
| Subtotal |  |  | $\mathbf{1 6}$ |  |

Year 4 - Spring Semester

| Subject | Cour | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Select one capstone course: |  |  | 3 |  |
| Computer \& Information Science <br> Computer \& Information Science | $\begin{aligned} & 4397 \\ & 4398 \end{aligned}$ | Independent Research in Computer Science or <br> Projects in Computer Science |  | WI <br> WI |
| General Education / Elective Credits |  |  | 13 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Credits in Coursework for B.A. in Computer Science |  |  | 55 |  |
| General Education / Elective Credits |  |  | 68 |  |
| Total Credits for B.A. Degree |  |  | 123 |  |

Students who complete CST majors typically receive a waiver for 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

## Bachelor of Science

## Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major: English 2696 and either Computer \& Information Science 4397 or Computer \& Information Science 4398.
- Students must complete the General Education (GenEd) requirements.
o The General Education Curriculum consists of 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.

2. College Requirements

- 45 Upper Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (72 s.h.)

- Eleven (11) Computer \& Information Science courses are required (39 s.h.): Computer \& Information Science 1001, 1068, 1166, 2033, 2107, 2166, 2168, 3207, 3223, 3238, and 4397 or 4398.
- Four (4) to five (5) Computer \& Information Science elective courses, totalling fourteen (14) credits are required (14 s.h.): Select Computer Science electives from the following list: Computer \& Information Science 2308, 3203, 3211, 3219, 3242, 3381^, 4282^, $4305,4307,4308,4319,4324,4331,4350,4360,4382 \wedge, 4397$ or 4398 (if not taken as capstone requirement).
- One (1) Technical Writing course is required (3 s.h.): English 2696.
- Two (2) Mathematics courses are required (8 s.h.): Mathematics 1041 and 1042.
- Two (2) lab science courses are required (8 s.h.): Must select within a Sequence for Lab Science A and Lab Science B. See the Sequenced Lab Science sheet for the science options.
$\wedge$ Note: A maximum of eight (8) credits may be taken from Computer \& Information Science 3381, 4282 and 4382 to fulfill Computer Science electives.


## Suggested Semester by Semester Plan

| Year 1 - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Computer \& Information Science | 1001 | Introduction to Academics in Computer Science | 1 |  |
| Computer \& Information Science | 1068 | Program Design \& Abstraction | 4 |  |
| Mathematics <br> Mathematics | $\begin{array}{r} 1041 \\ 1941 \\ \hline \end{array}$ | Calculus I <br> or <br> Honors Calculus I | 4 <br> 4 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 1 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Computer \& Information Science | 1166 | Mathematical Concepts in Computing I | 4 |  |
| Mathematics <br> Mathematics | $\begin{array}{r} 1042 \\ 1942 \\ \hline \end{array}$ | Calculus II or Honors Calculus II | $\overline{4}$ <br> 4 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 2 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Computer \& Information Science | 2168 | Data Structures | 4 |  |
| Computer \& Information Science | 2107 | Computer Systems \& Low-Level Programming | 4 |  |
| English | 2696 | Technical Writing | 3 | WI |
| General Education / Elective Credits |  |  | 4 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 2 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Computer \& Information Science | 3207 | Introduction to Systems Programming \& Operating Systems | 4 |  |
| Computer \& Information Science | 2033 | Computational Probability and Statistics | 4 |  |
| General Education / Elective Credits |  |  | 8 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 3 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Computer \& Information Science | 2166 | Mathematical Concepts in Computing II | 4 |  |
| Science |  | Laboratory Science A | 4 |  |
| General Education / Elective Credits |  |  | 8 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 3 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Computer \& Information Science | 3223 | Data Structures \& Algorithms | 3 |  |
| Computer \& Information Science |  | Computer \& Information Science Elective* | 3-4 |  |
| Computer \& Information Science | 3238 | Software Design | 4 |  |
| Science |  | Laboratory Science B | 4 |  |


| General Education / Elective Credits |  |  | 1-0 |  |
| :---: | :---: | :---: | :---: | :---: |
| Subtotal |  |  | 15 |  |
| Year 4 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Computer \& Information Science |  | Computer \& Information Science elective* | 3-4 |  |
| Computer \& Information Science |  | Computer \& Information Science elective* | 3-4 |  |
| General Education / Elective Credits |  |  | 9-7 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 4 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Select one capstone course: |  |  |  |  |
| Computer \& Information Science <br> Computer \& Information Science | $\begin{array}{r} \hline 4397 \\ 4398 \\ \hline \end{array}$ | Independent Research in Computer Science or Projects in Computer Science | 3 3 | WI WI |
| Computer \& Information Science |  | Computer \& Information Science elective* | 3-4 |  |
| General Education / Elective Credits |  |  | 9-8 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Credits in Coursework for B.S. in Computer Science |  |  | 72 |  |
| General Education / Elective Credits |  |  | 51 |  |
| Total Credits for B.S. Degree |  |  | 123 |  |

*Computer \& Information Science electives: Computer \& Information Science 2308, 3203, 3211, 3219, 3242 , 3381^, 4282^, 4305, 4307, 4308, 4319, 4324, 4331, 4350, 4360, 4382^, 4397 or 4398 (if not taken as capstone requirement).
^Note: A maximum of eight (8) credits may be taken from Computer \& Information Science 3381, 4282 and 4382 to fulfill Computer \& Information Science electives.

Students who complete CST majors typically receive a waiver for 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

## Interdisciplinary B.S. Degree in Mathematics \& Computer Science

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The Interdisciplinary program is jointly administered by the Departments of Mathematics \& Computer \& Information Science. For further discussion of the Interdisciplinary major requirements, please see Mathematics \& Computer Science in this Bulletin.

## Minor Requirements

Students desiring a minor in Computer Science are required to satisfy the following:

- Computer \& Information Science 1068: Program Design \& Abstraction
- Computer \& Information Science 1166: Mathematical Concepts in Computing I or Mathematics 2196: Basic Mathematical Concepts
- Computer \& Information Science 2107: Computer Systems \& Low-Level Programming
- Computer \& Information Science 2168: Data Structures
- Computer \& Information Science 4282: Independent Study or an approved 2000 or above Computer \& Information Science elective


## Five-Year Master's Program

## Five-Year B.A. or B.S./M.S.

Computer Science majors at the beginning of their junior year may apply for admission to the fifth-year M.S. Program in Information Science \& Technology or Computer Science. Upon admission to the program and satisfactory completion of the program requirements, the student is assured of having a master's degree at the end of the fifth year. Interested students should contact their advisor for details.

## Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include Computer \& Information Science 1066, for example.

## Distinction in Major

To graduate with Distinction in Major, students are required to have a 3.50 or higher grade point average (GPA) both in the major and overall as well as be recommended by the department of Computer \& Information Science.

# Environmental Science 

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Students will be equipped with the scholarly background and intellectual skills to understand a wide range of pressing environmental issues, and they will come to appreciate the physical, economic, political, demographic, and ethical factors that define those issues. Among the many environmental problems central to our program are groundwater contamination, suburban sprawl, river basin management, environmental justice, and the greening of abandoned urban spaces. Our graduates find employment with government environmental agencies, citizens’ organizations, consulting firms, and corporate environmental affairs departments.

The Bachelor of Science degree is offered through the College of Science and Technology. A related Bachelor of Arts degree is offered through the College of Liberal Arts. There is further explanation in the "Intercollegial Programs" section of this Bulletin.

## Bachelor of Science

## Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writingintensive requirement: Earth \& Environmental Science 2096, Environmental Studies/Economics 3596, Environmental Science (ENVS) 4198, Environmental Studies 4896, Environmental Studies/Geography \& Urban Studies 3097, Environmental Studies/Geography \& Urban Studies 4096, History/Environmental Studies 4297, Philosophy/Environmental Studies 2596.
- Students must complete the General Education (GenEd) requirements.
o The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.

2. College Requirements

- 45 Upper Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (73-79 s.h.)

- Three (3) Biology courses are required (11 s.h.): Biology 1111, 2112 and 2227.
- Three (3) Chemistry courses with labs are required (12 s.h.): Chemistry 1031/1033, 1032/1034 and 2201/2203.
- Three (3) Earth \& Environmental Science courses are required (11-12 s.h.): Earth \& Environmental Science 2001, 3021 and 3011 or Geography \& Urban Studies 3062.
- Two (2) Economics courses are required (6 s.h.): Economics 1102 and Environmental Studies/Economics 3596.
- One (1) Environmental Science course is required (3 s.h.): Environmental Science 4198.
- One (1) Environmental Studies course is required (3 s.h.): Environmental Studies 1051 or Geography \& Urban Studies 1051.
- Five (5) Environmental Science electives are required. Three of the electives must be Natural Science courses and of these two must be from the same department. One of the electives must be from the social science or policy elective courses. Select electives from the following lists (15-20 s.h.):
o Natural Science Electives: Biology 2233, Biology 2241, Biology 3225, Biology 3244, Biology 3245, Biology 3254, Biology 3307, Biology 3311, Biology 3316, Biology 3321, Biology 3336, Biology 4327, Botany 1112, Earth \& Environmental Science 2021, Earth \& Environmental Science 2042, Earth \& Environmental Science 2061, Earth \& Environmental Science 2096, Earth \& Environmental Science 3042, Horticulture 2114, Landscape Architecture 2758.
o Social Science/Policy Electives: Environmental Studies/Anthropology 3175, Environmental Studies/Anthropology 4117, Environmental Studies/Anthropology 4796, Community \& Regional Planning 1027, Community \& Regional Planning 2014, Community \& Regional Planning 2114, Community \& Regional Planning 2213, Community \& Regional Planning 2524, Community \& Regional Planning 3256, Economics 1101, Economics 3512, Economics 3513, Environmental Engineering Technology 4761, Environmental Studies 3025, Asian Studies/Environmental Studies/Geography \& Urban Studies 3052, Environmental Studies/Geography \& Urban Studies 2051, Environmental Studies/Geography \&

Urban Studies 3051, Environmental Studies/Geography \& Urban Studies 3054, Environmental Studies/Geography \& Urban Studies 3062, Environmental Studies/Geography \& Urban Studies 3097, Environmental Studies/Geography \& Urban Studies 4015, Environmental Studies/Geography \& Urban Studies 4051, Environmental Studies/Geography \& Urban Studies 4056, Environmental Studies/Geography \& Urban Studies 4071, Environmental Studies/Geography \& Urban Studies 4096, History/Environmental Studies 3214, History/Environmental Studies 4297, Journalism 3253, Philosophy/Environmental Studies 2157, Philosophy/Environmental Studies 2596, Political Science/Environmental Studies 3152, Political Science/Environmental Studies 3265, Public Health 2102, Religion/Environmental Studies 3001, Religion/Asian Studies/Environmental Studies 3904, Sociology/Environmental Studies 3511.
o Topic Electives: Environmental Science 3000, Environmental Science 4082, Environmental Science 4085, Environmental Studies/Anthropology 3170, Environmental Studies/Anthropology 3189, Environmental Studies 4896, Environmental Studies 3000, Horticulture 2334, Horticulture 2353, Horticulture 3514, Landscape Architecture 2144.

- Three (3) Mathematics courses are required (12 s.h.): Mathematics 1041, 1042 and one of the following: Mathematics 2031, Biology 3312, Statistics 2103.

Note: Earth \& Environmental Science 3091 is not available for major credit.
Note: A grade of C or higher in Chemistry 1031 and Chemistry 1032 is required to take Biology 1111 and Biology 2112. A grade of C or higher in Biology 1111 and Biology 2112 is required to take upper-level Biology courses, and a C- or higher is required unless otherwise specified in all other courses for the major, including course prerequisites.

## Suggested Semester by Semester Plan

Please note that this is a suggested academic plan. Depending on your situation, your academic plan may look different.

| Year 1 - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | $\begin{aligned} & 1031 / 1033 \\ & 1951 / 1953 \end{aligned}$ | General Chemistry I with Lab or | $\overline{4}$ |  |
|  |  |  | 4 |  |
| Mathematics Mathematics | $\left[\begin{array}{l} 1041 \\ 1941 \end{array}\right.$ | or <br> Honors Calculus I | 4 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 1 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |


| Chemistry <br> Chemistry | $\begin{array}{r} 1032 / 1034 \\ 1952 / 1954 \\ \hline \end{array}$ | $\begin{aligned} & \text { General Chemistry II with Lab } \\ & \text { or } \\ & \text { Honors General Chemistry II with Lab } \\ & \hline \end{aligned}$ | $4$ <br> 4 |  |
| :---: | :---: | :---: | :---: | :---: |
| Earth \& Environmental Science | 2001 | Physical Geology | 4 |  |
| Mathematics <br> Mathematics | $\begin{aligned} & 1042 \\ & 1942 \end{aligned}$ |  | $4$ $4$ |  |
| General Education / Elective Credits |  |  | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 2 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology <br> Biology | $\begin{array}{r} 2112 \\ 2912 \\ \hline \end{array}$ | ```Introduction to Biology II or Honors Introduction to Biology II``` | $4$ $4$ |  |
| Chemistry | 2201/2203 | Organic Chemistry I with Lab | 4 |  |
| Environmental Studies/ Geography \& Urban Studies | 1051 or 1951 | Environment \& Society | 3 |  |
| General Education / Elective Credits |  |  | 4 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 2 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology <br> Biology | $\begin{aligned} & 1111 \\ & 1911 \end{aligned}$ | $\left\lvert\, \begin{aligned} & \text { Introduction to Biology I } \\ & \text { or } \\ & \text { Honors Introduction to Biology I }\end{aligned}\right.$ | $\overline{4}$ $4$ |  |
| Mathematics <br> Statistics <br> Biology | 2031 <br> or <br> 2103 <br> or <br> 3312 | Probability \& Statistics or Business Statistics or Biostatistics (F) | $\begin{aligned} & \hline \hline 3 \\ & 4 \\ & 3 \end{aligned}$ |  |
| Environmental Science Elective |  | Environmental Science Elective (Natural Science)* | 3-4 |  |
| General Education / Elective Credits |  |  | 3-5 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 3 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Earth \& Environmental Science | 3021 | Introduction to Hydrology (F) | 4 |  |
| Environmental Science Elective |  | Environmental Science Elective (Natural Science)* | 3-4 |  |
| Environmental Science Elective |  | Environmental Science Elective* | 3-4 |  |
| General Education / Elective Credits |  |  | 4-6 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 3 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | 2227 | Principles of Ecology (S) | 3 |  |
| Economics <br> Economics | $\begin{aligned} & 1102 \\ & 1902 \end{aligned}$ | ```Microeconomic Principles or Honors Microeconomic Principles``` | 3 3 |  |


(F) - Fall only course
(S) - Spring only course

Students who complete CST majors typically receive a waiver for 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

## *Environmental Science Electives

In addition to the required courses and their prerequisites, B.S. majors must take five (5) courses from the list of approved electives. Three of these courses must be Natural Science courses and of these two must be from the same department. One of the electives must be a Social Science/Policy elective course. Please note that your electives can be taken prior to the fourth year as long as you have successfully completed the pre- and co-requisites.

| *Students must take five electives from the following list: |  |
| :--- | :--- |
| Subject | Course |
| Natural Science Electives |  |
| Biology | 2233 |


| Biology | 2241 | Invertebrate Biology |
| :---: | :---: | :---: |
| Biology | 3225 | Evolutionary Genetics |
| Biology | 3244 | Experimental Marine Biology |
| Biology | 3245 | Marine Ecology |
| Biology | 3254 | Animal Behavior |
| Biology | 3307 | Conservation Biology |
| Biology | 3311 | Herpetology |
| Biology | 3316 | Tropical Marine Biology |
| Biology | 3321 | Plant Community Ecology |
| Biology | 3336 | Freshwater Ecology |
| Biology | 4327 | Biological Impacts of Global Climate Change |
| Botany | 1112 | Plant Ecology |
| Earth \& Environmental Science | 2021 | Facies Models |
| Earth \& Environmental Science | 2042 | Process Geomorphology |
| Earth \& Environmental Science | 2061 | Introduction to Geochemistry |
| Earth \& Environmental Science | 2096 | Climate Change: Oceans to Atmosphere |
| Earth \& Environmental Science | 3042 | Coastal Processes \& Geomorphology |
| Horticulture | 2114 | Soils |
| Landscape Architecture | 2758 | Summer Field Ecology |
| Social Science/Policy Electives |  |  |
| Environmental Studies/Anthropology | 3175 | Heritage Management in Archaeology |
| Environmental Studies/Anthropology | 4117 | Seminar in Environmental Archaeology |
| Environmental Studies/Anthropology | 4796 | Biocultural Adaptations in Human Populations |
| Community \& Regional Planning | 1027 | History \& Practice of Community \& Regional Planning |
| Community \& Regional Planning | 2014 | Planning Policy \& Law |
| Community \& Regional Planning | 2114 | Urban Form \& Design |
| Community \& Regional Planning | 2213 | Environmental Planning |
| Community \& Regional Planning | 3256 | Sustainable Community Design \& Development |
| Economics | 1101 | Macroeconomic Principles |
| Economics | 3512 | Public Finance |
| Economics | 3513 | Economics of State \& Local Governments |
| Environmental Engineering Technology | 4761 | Environmental Regulations |
| Environmental Studies | 3025 | Environmental Law \& Regulation |
| Asian Studies/Environmental Studies/Geography \& Urban Studies | 3052 | Environmental Problems in Asia |
| Environmental Studies/Geography \& Urban Studies | 2051 | The Urban Environment |
| Environmental Studies/Geography \& Urban Studies | 3051 | Environmental Policy Issues |
| Environmental Studies/Geography \& Urban Studies | 3054 | Energy, Resources, \& Conservation |
| Environmental Studies/Geography \& Urban Studies | 3062 | Fundamentals of Geographic Information Systems |
| Environmental Studies/Geography \& Urban Studies | 3097 | Environment \& Development |
| Environmental Studies/Geography \& Urban Studies | 4015 | The Geographic Basis of Land Use Planning |
| Environmental Studies/Geography \& Urban Studies | 4051 | Geography of Hazards |


| Environmental Studies/Geography \& Urban Studies | 4056 | Political Ecology |
| :---: | :---: | :---: |
| Environmental Studies/Geography \& Urban Studies | 4071 | Medical Geography |
| Environmental Studies/Geography \& Urban Studies | 4096 | Problems of Environmental Quality |
| History/Environmental Studies | 3214 | North American Environmental History |
| History/Environmental Studies | 4297 | Social History of American Medicine |
| Journalism | 3253 | Health \& Environmental Writing |
| Philosophy/Environmental Studies | 2157 | Environmental Ethics |
| Philosophy/Environmental Studies | 2596 | Philosophical Perspectives on the Environment |
| Political Science/Environmental Studies | 3152 | U.S. Environmental Policy |
| Political Science/Environmental Studies | 3265 | International Environmental Policy |
| Public Health | 2102 | Environmental Health |
| Religion/Environmental Studies | 3001 | Earth Ethics |
| Religion/Asian Studies/Environmental Studies | 3904 | Honors Earth Ethics |
| Sociology/Environmental Studies | 3511 | Sociology of the Environment |
| Topic Electives |  |  |
| Environmental Science | 3000 | Special Topics in Environmental Science |
| Environmental Science | 4082 | Independent Study: Environmental Science |
| Environmental Science | 4085 | Internship: Environmental Science |
| Environmental Studies/Anthropology | 3170 | Methods in Archaeology |
| Environmental Studies/Anthropology | 3189 | Field Session in Archaeology |
| Environmental Studies | 4896 | Environmental Physiology |
| Environmental Studies | 3000 | Special Topics in Environmental Studies |
| Horticulture | 2334 | Food Crops I |
| Horticulture | 2353 | Food Crops II |
| Horticulture | 3514 | Landscape Restoration |
| Landscape Architecture | 2144 | Landscape Architecture Design Studio II |

## Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include Chemistry 1027, for example.

## Distinction in Major

To graduate with Distinction in Major, students are required to achieve a 3.5 GPA for courses required for the major. If the difficulty of courses chosen as electives is high, then a 3.3 GPA will earn Distinction in Major. This determination will be made by the appropriate faculty.

## Geology

Dr. Jonathan Nyquist, Chair
Dr. Allison Tumarkin-Deratzian, Faculty Advisor
Beury Hall, Room 315B
215-204-2321
altd@temple.edu
The Department of Earth and Environmental Science offers both a Bachelor of Arts and a Bachelor of Science in Geology.

The B.S. program prepares students for immediate entry into a career in geology or for graduate studies. Career opportunities for geologists in industry and government include planning for the environment, evaluation of waste disposal sites, monitoring of groundwater, and exploration for natural resources. The B.S. program is excellent preparation for graduate study and ultimately for a career in research, teaching, industry, or government.

The B.A. program is not intended for prospective geologists. The B.A. program is suitable for pre-medicine or pre-law students or for students planning to teach earth science in secondary schools.

A departmental field trip for undergraduate students, graduate students, and faculty will be conducted during each fall semester.

## Bachelor of Arts

## Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writingintensive requirement: Earth \& Environmental Science 2096, Earth \& Environmental Science 3096, or Earth \& Environmental Science 4696.
- Students must complete the General Education (GenEd) requirements.
o The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.


## 2. College Requirements

- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 45 Upper Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- Two (2) Upper-Level (2000+) Liberal Art courses.
- Second (2nd) Level of a Foreign Language (1002).

3. Major Requirements for Bachelor of Arts (55-56 s.h.)

- One (1) Chemistry course is required (4 s.h.): Chemistry 1031/1033 or 1951/1953.
- One (1) Mathematics course is required (4 s.h.): Mathematics 1041 or 1941.
- One (1) Physics course is required (4 s.h.): Physics 1061 or 2021.
- Eight (8) Earth \& Environmental Science (EES) courses are required (32 s.h.): Earth \& Environmental Science 2001, 2011, 3021, and five (5) EES electives 2002 or above. Two (2) of the five (5) EES electives must be writing-intensive and one (1) of the five (5) EES elective courses can be outside of the department with faculty advisor approval.
- Three (3) Science/Math Foundation courses are required. One foundation course must be within mathematics and two foundation courses must be within science. Select science/math foundation courses from the following list (11-12 s.h.): Biology 1111 or 1911, Biology 2112 or 2912, Chemistry 1032/1034 or 1952/1954, Chemistry 2201/2203, Mathematics 1042, Mathematics 2031, Statistics 2103, and Physics 1062 or 2022.

Suggested Semester by Semester Plan

| Year 1 - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Earth \& Environmental Science | 2001 | Physical Geology | 4 |  |
| Mathematics | $\begin{aligned} & 1041 \\ & 1941 \end{aligned}$ | $\begin{aligned} & \text { Calculus I } \\ & \text { or } \\ & \text { Honors Calculus I } \end{aligned}$ | 4 4 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 1 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 1031 | General Chemistry I and | 3 |  |
| Chemistry | 1033 | General Chemistry I Laboratory or | 1 |  |
| Chemistry | 1951 | Honors General Chemistry I and | 3 |  |
| Chemistry | 1953 | Honors General Chemistry I Laboratory | 1 |  |


| General Education / Elective Credits |  |  | 12 |  |
| :---: | :---: | :---: | :---: | :---: |
| Subtotal |  |  | 16 |  |
| Year 2 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Earth \& Environmental Science | 2011 | Mineralogy I (F) | 4 |  |
| Physics | 1061 | Elementary Classical Physics I | 4 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 2 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Earth \& Environmental Science | 2002+ | Earth \& Environmental Science Elective* | 4 |  |
| Mathematics |  | Science Foundation Elective (Math)^ | 3-4 |  |
| General Education / Elective Credits |  |  | 7-8 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 3-Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Earth \& Environmental Science | 3021 | Introduction to Hydrology (F) | 4 |  |
| Science |  | Science Foundation Elective (Science)^ | 4 |  |
| General Education / Elective Credits |  |  | 8 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 3 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Earth \& Environmental Science | 2002+ | Earth \& Environmental Science Elective* | 4 | WI |
| Science |  | Science Foundation Elective (Science)^ | 4 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 4 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Earth \& Environmental Science | 2002+ | Earth \& Environmental Science Elective* | 4 |  |
| General Education / Elective Credits |  |  | 12 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 4 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Earth \& Environmental Science | 2002+ | Earth \& Environmental Science Elective* | 4 | WI |
| Earth \& Environmental Science | 2002+ | Earth \& Environmental Science Elective* | 4 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Credits in Coursework for B.A. in Geology |  |  | 55-56 |  |
| General Education / Elective Credits |  |  | 68-67 |  |
| Total Credits for B.A. Degree |  |  | 123 |  |

(F) - Fall only course.

Students who complete CST majors typically receive a waiver for 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

## *Earth \& Environmental Science Electives

Earth \& Environmental Science electives must be above 2001, and at least two of the Earth \& Environmental Science electives must be writing-intensive courses. One of the five EES elective courses can be outside of the department with faculty advisor approval.

## ${ }^{\wedge}$ Science Foundation Electives

NOTE: One course from the approved list of Science Foundation Electives must be a Mathematics course and two courses must be science courses.

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Biology | 1111 | Introduction to Biology I <br> or <br> Honors Introduction to Biology I | 4 |  |
| Biology | 2112 | Introduction to Biology II <br> or <br> Honors Introduction to Biology II | 4 |  |
| Chemistry | $1032 / 1034$ | General Chemistry II \& Lab <br> or | 4 |  |
| Chemistry | $2201 / 2203$ | Organic Chemistry I \& Lab | 4 |  |
| Mathematics | 1042 | Calculus II | 4 |  |
| Mathematics | 2031 | Probability \& Statistics | 4 |  |
| Statistics | 2103 | Business Statistics | 4 |  |
| Physics | 1062 | Elementary Classical Physics II <br> or <br> General Physics II | 3 |  |

## Bachelor of Science

## Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing intensive requirement: Earth \& Environmental Science 2096, Earth \& Environmental Science 3096, or Earth \& Environmental Science 4696.
- Students must complete the General Education (GenEd) requirements.
o The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.


## 2. College Requirements

- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 45 Upper Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (70-73 s.h.)

- One (1) Chemistry course is required (4 s.h.): Chemistry 1031/1033 or 1951/1953.
- Two (2) Mathematics courses are required (8 s.h.): Mathematics 1041 or 1941, and Mathematics 1042 or 1942 or 2031.
- One (1) Physics course is required (4 s.h.): Physics 1061 or 2021.
- Twelve (12) Earth \& Environmental Science (EES) courses are required (46-49 s.h.): Earth \& Environmental Science 2001, 2011, two (2) EES courses between 2020-2029, one (1) EES course between 3096-3099, one (1) EES course between 3020-3025, one (1) EES course between 4101-4109, 4589, and four (4) Upper-Level (2002+) EES electives. Two of the four EES electives may be replaced with science upper-level electives (SUE) from the following list: Biology 2112 or higher; Chemistry 2201/2203 or higher; Mathematics 2043 or higher; and Physics 1062 or higher. One of the four electives must be writing intensive.
- Two (2) Science Foundation Elective (SFE) courses are required. Select foundation courses from the following list (8 s.h.): Biology 1111 or 1911, Biology 2112 or 2912, Chemistry 1032/1034 or 1042/1044 or 1952/1954, Chemistry 2201/2203, and Physics 1062 or 2022.

NOTE: Science Foundation Electives (SFE) and Science Upper-Level Electives (SUE) courses cannot be double-counted.

## Suggested Semester by Semester Plan

| Year 1 - Fall Semester | Course \# | Course Title |  |  |
| :--- | :--- | :--- | :--- | :---: |
| Subject | 2001 | Physical Geology | Hours | Attribute |
| Earth \& Environmental Science | 1041 | Calculus I <br> or <br> Honors Calculus I | 4 |  |
| Mathematics | 1941 | 4 |  |  |
| General Education / Elective Credits |  |  | 7 |  |


| Subtotal |  |  | 15 |  |
| :---: | :---: | :---: | :---: | :---: |
| Year 1 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | $\begin{aligned} & 1031 / 1033 \\ & 1951 / 1953 \end{aligned}$ | ```General Chemistry I & Lab or Honors General Chemical Science I & Lab``` | 4 |  |
| Mathematics | $\begin{array}{r} 1042 \\ 1942 \\ 2031 \\ \hline \end{array}$ | Calculus II <br> or <br> Honors Calculus II <br> or <br> Probability \& Statistics | 4 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 2-Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Earth \& Environmental Science | 2011 | Mineralogy I (F) | 4 |  |
| Physics | $\begin{array}{\|c} \hline 1061 \\ \text { or } \\ 2021 \\ \hline \end{array}$ | Elementary Classical Physics I or <br> General Physics I | 4 |  |
| General Education / Elective Credits |  |  | 6 |  |
| Subtotal |  |  | 14 |  |
|  |  |  |  |  |
| Year 2 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Earth \& Environmental Science | 3096-3099 | Igneous \& Metamorphic Petrology (or Similar) (S) | 4 | WI |
| Earth \& Environmental Science | 2002+ | 2002+ EES Elective | 3-4 |  |
| Science |  | Science Foundation Elective ^ | 4 |  |
| General Education / Elective Credits |  |  | 4-3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 3-Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Earth \& Environmental Science | 2020-2029 | Facies Models (or Similar) | 4 |  |
| Earth \& Environmental Science | 3020-3025 | Introduction to Hydrology (or Similar) (F) | 4 |  |
| Science |  | Science Foundation Elective ^ | 4 |  |
| General Education / Elective Credits |  |  | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 3 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Earth \& Environmental Science | 2020-2029 | Paleontology \& Stratigraphy (or Similar) (S) | 4 |  |
| Earth \& Environmental Science | 4101-4109 | Structural Geology (or Similar) (S) | 4 |  |
| General Education / Elective Credits |  |  | 6 |  |
| Subtotal |  |  | 14 |  |
|  |  |  |  |  |
| Year 3 - Summer Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Earth \& Environmental Science | 4589 | Field Geology (see Advisor) (SS) | 6 |  |


| Subtotal |  |  | 6 |  |
| :---: | :---: | :---: | :---: | :---: |
| Note: Summer field camp is required of all B.S. geology majors and is usually taken in the summer of the junior or senior year. Students choose summer field camps at other institutions which are typically 4-6 weeks in length with tuition typically ranging from $\$ 2,000$ to $\$ 4,000$. The Earth \& Environmental Science Department holds fundraisers throughout the year to help defray the costs. Students may also apply for research scholarships at CST and at the university. The Earth \& Environmental Science undergraduate advisor must approve the choice of field camp. |  |  |  |  |
|  |  |  |  |  |
| Year 4 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Earth \& Environmental Science <br> or <br> Science Upper-Level Elective (SUE) | 2002+ |  | 3-4 |  |
| General Education / Elective Credits |  |  | 11-10 |  |
| Subtotal |  |  | 14 |  |
|  |  |  |  |  |
| Year 4 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Earth \& Environmental Science | 2002+ | 2002+ EES Elective | 3-4 | WI |
| Earth \& Environmental Science or <br> Science Upper-Level Elective (SUE) | 2002+ | $\begin{aligned} & \hline 2002+\text { EES Elective } \\ & \text { or } \\ & \text { Science Upper-Level Elective* } \\ & \hline \end{aligned}$ | 3-4 |  |
| General Education / Elective Credits |  |  | 9-7 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Credits in Coursework for B.S. in Geology |  |  | 70-73 |  |
| General Education / Elective Credits |  |  | 53-50 |  |
| Total Credits for B.S. Degree |  |  | 123 |  |

(F) - Fall only courses.
(S) - Spring only courses.
(SS) - Summer only course.
Students who complete CST majors typically receive a waiver for 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

## ^Science Foundation Electives

NOTE: Two courses required from this list.

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Biology | 1111 | Introduction to Biology I <br> or |  |  |
|  | 1911 | Honors Introduction to Biology I | 4 |  |
| Biology | 2112 | Introduction to Biology II <br> or <br> Honors Introduction to Biology II | 4 |  |
| Chemistry | $1032 / 1034$ | General Chemistry II \& Lab <br> or <br> or | 4 |  |
| Chemistry | $2201 / 2203$ | Organic Chemistry I \& Lab | 4 |  |


| Physics | 1062 | Elementary Classical Physics II <br> or <br> General Physics II | 4 |  |
| :--- | :--- | :--- | :--- | :--- |
| 2022 |  |  |  |  |

## *Science Upper Level Electives (SUE)

The following is the list of courses that you can select from to fulfill the Science Upper-Level Electives (SUEs): Biology 2112 or higher; Chemistry 2201/2203 or higher; Earth \& Environmental Science (EES) 2002 or higher; Mathematics 2043 or higher; and Physics 1062 or higher. Science Foundation Electives (SFE) and Science Upper-Level Electives (SUE) courses cannot be double-counted.

Earth \& Environmental Science electives must be above 2001, and at least one must be writingintensive. At most, one of the EES electives or SUEs may be a graduate-level course with permission of the faculty advisor.

## Minor

Students interested in acquiring a basic knowledge of Geology but not wishing to major in Geology may pursue a minor in Geology by successfully completing the following courses:

- Earth \& Environmental Science 2001
- Chemistry 1021/1023 or Chemistry 1031/1033
- Mathematics 1022 or Mathematics 1041 or higher
- Earth \& Environmental Science electives numbered above 2001, with a total of 16 or more credits, chosen with the approval of the undergraduate Earth \& Environmental Science advisor.


## Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include Chemistry 1027, for example.

## Five-Year Master's Program

## Five-Year Combined B.A. or B.S. and Ed.M. Program

This is a combined program between the College of Science and Technology and the College of Education. For more information, see the following web site:
www.temple.edu/bulletin/Academic_programs/schools_colleges/ed/intro/generalinfo/ed_generali nfo.shtm\#teacher

## Senior Research Project

Students whose cumulative GPA is at least 3.25 at the end of the first semester of their junior year are eligible to undertake a senior research project. In the second semester of their junior year, students must select a faculty research advisor and, with the advisor, prepare a written research proposal. After the research advisor and the undergraduate Earth \& Environmental Science advisor approve the proposal, the student may register for up to four (4) hours of Earth \& Environmental Science 4082 (Individual Study Program) for a grade. Additional credits may be offered in subsequent semesters, but only for Credit/Non-Credit (CR/NC), to carry out the research project. Normally, the project will involve field or laboratory work in the summer between the junior and senior years and lead to presentation of the results at a departmental seminar.

## Distinction in Major

To graduate with Distinction in Major, students are required to achieve a 3.5 GPA for the aggregate of courses required for the B.S. in Geology or the B.A. in Geology.

## Information Science \& Technology

Dr. Jie Wu, Chair<br>Ms. Wendy Urban, Faculty Advisor<br>Wachman Hall, Room 304<br>215-204-5236<br>wendy.urban@temple.edu

The undergraduate programs in Information Science and Technology (IS\&T) offered by the Computer and Information Science (CIS) Department are intended to provide students with both a detailed knowledge and a broad background in the technology of information systems. Fundamental concepts in mathematics, programming, object-oriented modeling, databases, software systems analysis and design, computer-operating systems and architectures, and networks and communications are stressed in the first two years. Special topics, including component-based software development and net-centric and client-server computing, are offered as part of the last two years of the program. A two-semester capstone project course is required. This course is designed to help students integrate what they have learned in other courses and apply this knowledge in the design and implementation of a software application.

Students develop the skills and the knowledge necessary to analyze information problems and to apply current technology to their solution. The emphasis is to develop problem-solving and communication skills. Substantial laboratory work is required. Students participate individually and in groups in the design, development, testing and documentation of information systems for a university or an external client.

## Bachelor of Arts

## Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing intensive courses at Temple at Temple as part of their major. Following is a list of courses that can be used to satisfy the writing-intensive requirement: Computer \& Information Science 4296 and Computer \& Information Science 4396.
- Students must complete the General Education (GenEd) requirement.
o The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.

2. College Requirements

- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 45 Upper Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- Two (2) Upper Level (2000+) Liberal Art courses.
- Second (2nd) Level of a Foreign Language (1002).

3. Major Requirements for Bachelor of Arts (59 s.h.)

- Thirteen (13) Computer \& Information Science courses are required (47 s.h.): Computer \& Information Science 1001, 1048, 1068, 1166, 2033, 2109, 2168, 2229, 3309, 3329, 3342, 4296 and 4396.
- One (1) Mathematics course is required (4 s.h.): Mathematics 1031* or Mathematics 1041*.
- Two (2) lab science courses are required (8 s.h.): Must select within a Sequence for Lab Science A and Lab Science B. See the Sequenced Lab Science sheet for the science options.

[^6]
## Suggested Semester by Semester Plan

| Year 1 - Fall Semester | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Subject | 1001 | Introduction to Academics in Computer Science | 1 |  |
| Computer \& Information Science | Introduction to IS\&T | 3 |  |  |
| Computer \& Information Science | 1048 | Differential \& Integral Calculus <br> or <br> Calculus I | 4 |  |
| Mathematics | $1031^{*}$ |  |  |  |
| Mathematics | $1041^{*}$ |  | 4 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

*NOTE: IS\&T majors are required to have completed Mathematics 1022. They can choose either Mathematics 1031 or 1041.

Year 1 - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Computer \& Information Science | 1068 | Program Design \& Abstraction | 4 |  |
| Computer \& Information Science | 1166 | Mathematical Concepts in Computing I | 4 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |
|  |  |  |  |  |
| Year 2 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Computer \& Information Science | 2033 | Computational Probability \& Statistics | 4 |  |
| Computer \& Information Science | 2168 | Data Structures | 4 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

Year 2- Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Computer \& Information Science | 2109 | Database \& File Management Systems | 4 |  |
| Computer \& Information Science | 2229 | Architecture, Operating Systems \& Networking | 4 |  |
| General Education / Elective Credits |  |  | 8 |  |
| Subtotal |  |  | $\mathbf{1 6}$ |  |

Year 3 - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Computer \& Information Science | 3309 | Component-Based Software Design | 4 |  |
| Science |  | Laboratory Science A | 4 |  |
| General Education / Elective Credits |  |  | 8 |  |
| Subtotal |  |  | $\mathbf{1 6}$ |  |
|  |  |  |  |  |
| Year 3 - Spring Semester | Course \# | Course Title |  |  |
| Subject | Network Architectures | 4 |  |  |
| Computer \& Information Science | 3329 | Networked Application Systems | 4 |  |
| Computer \& Information Science | 3342 |  | Laboratory Science B | 4 |
| Science |  |  | 4 |  |
| General Education / Elective Credits |  |  |  |  |


| Subtotal |  |  | 16 |  |
| :---: | :---: | :---: | :---: | :---: |
| Year 4 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Computer \& Information Science | 4296 | Information Systems Analysis \& Design | 4 | WI |
| General Education / Elective Credits |  |  | 12 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 4 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Computer \& Information Science | 4396 | Information Systems Implementation | 3 | WI |
| General Education / Elective Credits |  |  | 11 |  |
| Subtotal |  |  | 14 |  |
|  |  |  |  |  |
| Credits in Coursework for B.A. in IS\&T |  |  | 59 |  |
| General Education / Elective Credits |  |  | 64 |  |
| Total Credits for B.A. Degree |  |  | 123 |  |

Students who complete CST majors typically receive a waiver for 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

## Bachelor of Science

## Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writingintensive requirement: Computer \& Information Science 4296 and Computer \& Information Science 4396.
- Students must complete the General Education (GenEd) requirement.
o The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.


## 2. College Requirements

- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 45 Upper Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (71-75 s.h.)

- Thirteen (13) Computer \& Information Science courses are required (47 s.h.): Computer \& Information Science 1001, 1048, 1068, 1166, 2033, 2109, 2168, 2229, 3309, 3329, 3342, 4296 and 4396.
- One (1) Mathematics course is required (4 s.h.): Mathematics 1031* or Mathematics 1041*.
- Four (4) Information Science \& Technology (IS\&T) related electives are required. Select electives from the following list (12-16 s.h.): Computer \& Information Science 3281^, $3374,3376,4106,4108,4282 \wedge$, 4330, 4340, 4344, 4362, 4376, 4378, or 4382^, as well as other courses communicated to the students from the IS\&T Faculty Advisor.
o Students may also select other 3000-level Computer \& Information Science courses for which they meet the prerequisites as long as that course is not already used for the IS\&T degree.
o No more than two courses that do not have formal classes and a text, such as Independent Study, Directed Study, and co-op may be used to satisfy the elective requirement. In addition, the co-op course may only be taken once.
o Students with senior standing and a minimum overall 3.25 GPA may also request permission from both the IS\&T advisor and course instructor to use graduate courses (5xxx level) as electives.
- Two (2) lab science courses are required (8 s.h.): Must select within a Sequence for Lab Science A and Lab Science B. See the Sequenced Lab Science sheet for the science options.
*NOTE: IS\&T majors are required to have completed Mathematics 1022. They can choose either Mathematics 1031 or Mathematics 1041.
$\wedge$ Note: A maximum of two courses may be taken from Computer \& Information Science 3281, Computer \& Information Science 4282, and Computer \& Information Science 4382. Computer \& Information Science 3281 may be taken once within this two-course maximum.


## Suggested Semester by Semester Plan

## Year 1 - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Computer \& Information Science | 1001 | Introduction to Academics in Computer Science | 1 |  |
| Computer \& Information Science | 1048 | Introduction to IS\&T | 3 |  |
| Mathematics | $1031^{*}$ | Differential \& Integral Calculus <br> or | 4 |  |
| Mathematics | $1041^{*}$ | Calculus I | 4 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

*NOTE: IS\&T majors are required to have completed Mathematics 1022. They can choose either Mathematics 1031 or 1041.

Year 1 - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Computer \& Information Science | 1068 | Program Design \& Abstraction | 4 |  |
| Computer \& Information Science | 1166 | Mathematical Concepts in Computing I | 4 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

Year 2 - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Computer \& Information Science | 2033 | Computational Probability \& Statistics | 4 |  |
| Computer \& Information Science | 2168 | Data Structures | 4 |  |
| Science |  | Laboratory Science A | 4 |  |
| General Education / Elective Credits |  |  | 4 |  |
| Subtotal |  |  | $\mathbf{1 6}$ |  |

## Year 2- Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Computer \& Information Science | 2109 | Database \& File Management Systems | 4 |  |
| Computer \& Information Science | 2229 | Architecture, Operating Systems \& Networking | 4 |  |
| Science |  | Laboratory Science B | 4 |  |
| General Education / Elective Credits |  |  | 3 |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

## Year 3 - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Computer \& Information Science | 3309 | Component-Based Software Design | 4 |  |
| Computer \& Information Science |  | IS\&T Elective* | $3-4$ |  |
| eneral Education / Elective Credits |  |  | $9-8$ |  |
| Subtotal |  |  | $\mathbf{1 6}$ |  |

Year 3 - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Computer \& Information Science | 3329 | Network Architectures | 4 |  |
| Computer \& Information Science |  | IS\&T Elective* | $3-4$ |  |
| General Education / Elective Credits |  |  | $8-7$ |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

## Year 4 - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Computer \& Information Science | 4296 | Information Systems Analysis \& Design | 4 | WI |
| Computer \& Information Science | 3342 | Networked Application Systems | 4 |  |
| Computer \& Information Science |  | IS\&T Elective* | $3-4$ |  |
| General Education / Elective Credits |  |  | $5-4$ |  |
| Subtotal |  |  | $\mathbf{1 6}$ |  |

Year 4 - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Computer \& Information Science | 4396 | Information Systems Implementation | 3 | WI |
| Computer \& Information Science |  | IS\&T Elective* | $3-4$ |  |


| General Education / Elective Credits |  |  | $9-8$ |  |
| :--- | :--- | :--- | :---: | :---: |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Credits in Coursework for B.S. in IS\&T |  | $71-75$ |  |  |
| General Education / Elective Credits | $52-48$ |  |  |  |
| Total Credits for B.S. Degree | $\mathbf{1 2 3}$ |  |  |  |

* Four (4) Information Science \& Technology (IS\&T) related electives are required. Select electives from the following list (12-16 s.h.): Computer \& Information Science 3281^, 3374, 3376, 4106, 4108, 4282^, $4330,4340,4344,4362,4376,4378$, or $4382 \wedge$, as well as other courses communicated to the students from the IS\&T Faculty Advisor.
$\wedge$ Note: A maximum of two courses may be taken from Computer \& Information Science 3281, Computer \& Information Science 4282, and Computer \& Information Science 4382. Computer \& Information Science 3281 may be taken twice within this two-course maximum.

Students who complete CST majors typically receive a waiver for 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

## Information Science \& Technology Minor Requirements

Students desiring a minor in Information Science and Technology are required to satisfy the following:

- Computer \& Information Science 1001 (Introduction to Academics in Computer Science)
- Computer \& Information Science 1048 (Introduction to IS\&T)
- Computer \& Information Science 1068 (Program Design \& Abstraction)
- Computer \& Information Science 2109 (Database \& File Management Systems)
- Computer \& Information Science 2168 (Data Structures) OR Computer \& Information Science 2229 (Architecture, Operating Systems \& Networking)
- IS\&T related elective from any department at the 3000-level or above, chosen in consultation with the faculty advisor since prior permission is required.


## Five-Year Master's Program

## Five-Year B.A. or B.S./M.S.

Information Science \& Technology majors at the beginning of their junior year may apply for admission to the fifth-year M.S. Program. Upon admission to the program and satisfactory completion of the program requirements, the student is assured of having a master's degree at the end of the fifth year. Interested students should contact their advisor for details.

## Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general,
courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include Computer \& Information Science 1056, for example.

## Distinction in Major

To graduate with Distinction in Major, students are required to have a 3.50 or higher grade point average (GPA) both in the major and overall, as well as be recommended by the department of Computer \& Information Science.

## Minor in Digital Media Technologies

For more information about this minor, contact:
Dr. Justin Y. Shi, Advisor
Department of Computer \& Information Science
Wachman Hall, room 350
215-204-2030
shi@temple.edu
Dr. Patrick Murphy, Advisor
Annenberg Hall, room 205
215-204-3876
murphy.p@temple.edu
The Digital Media Technologies Minor is a 21-23 semester hour interdisciplinary minor offered through the Department of Media Studies and Production (MSP) within the School of Media and Communication and the Computer and Information Sciences (CIS) Department within the College of Science and Technology. It is designed to expand students' knowledge of the information age and to empower them to understand how to communicate using emerging media and computer technologies. The ability to tell stories through emerging digital media technologies will be critically and analytically explored as students examine the science of those technologies. The algorithms of communicating via emergent technologies will be at the core of this minor. This program addresses serious gaps in the current curriculum because current students of media have little understanding of the science of digital media and fast evolving interactive web-based information sharing technologies.

The minor is available to undergraduate students in Media Studies and Production, Computer \& Information Science, as well as other departments and colleges. Upon completion of the minor, students should be able to demonstrate the following competencies:

1. Utilization of the hardware, software and technologies for integrating content for computers, the Internet, and mobile devices;
2. Critical analysis of decisions made regarding the use of technology specifically in the social and ethical arenas;
3. Understand the impact of current and emerging technologies locally and globally;
4. Design and implementation of content for various media digitally;
5. Ability to evaluate the science of technology as it impacts communications;
6. Develop and refine presentation, analytical, problem solving and writing skills.

## Transfer credits are not accepted for credit for the minor.

Students must receive the permission of their advisor before starting in this program. Minor credit is not given for MSP grades below C. Students must maintain at least a 2.00 grade point average in the program for successful completion of the minor. Students with averages under 2.00 for more than two semesters will be dropped from the program. Students with averages under 2.00 may not begin the program.

## Requirements for the minor in Digital Media Technologies are as follows:

| Required (14 credits) | Course \# | Course Title | Hours |
| :--- | :--- | :--- | :---: |
| Subject | 1701 | Introduction to Media Technology | 3 |
| Media Studies \& Production | 1052 | Introduction to Web Technology and Programming | 4 |
| Computer \& Information Science | 1056 | Advanced Web Technology and Programming | 4 |
| Computer \& Information Science | 1056 | 3 |  |
| Media Studies \& Production | 2741 | Introduction to Internet Studies and Web Authoring | 3 |
|  |  |  |  |
| Electives: Select Two (7 credits)* | Course \# | Course Title | Hours |
| Subject | 4741 | Cybermedia Workshop | 4 |
| Media Studies \& Production | 4221 | Information Technology Policy | 3 |
| Media Studies \& Production | 4252 | Law and Ethics of Digital Media | 4 |
| Media Studies \& Production | 4541 | Mobile Media | 3 |
| Media Studies \& Production | 4614 | Creating a Media Business | 4 |
| Media Studies \& Production | $2000+$ | Computer \& Information Science 2000+ level course * | $3-4$ |
| Computer \& Information Science | 2 | $\mathbf{2 1 - 2 3}$ |  |
| Total |  |  |  |

## *Other requirements:

- For Media Studies \& Production students, at least one (1) Computer \& Information Science elective is required.
- For Computer \& Information Science students, at least one (1) Media Studies \& Production elective is required.
- For students of other backgrounds, at least one (1) Media Studies \& Production and one (1) Computer \& Information Science elective are required.
- All prerequisites must be completed or permission by instructor received to enroll in minor courses.
- Example Computer \& Information Science Elective: Computer \& Information Science 2305 (Mobile Computing Technologies). This course accepts Computer \& Information Science 1052-1056 sequence as prerequisites.
- Permitted Substitute Elective: Biology 3333
- For students taking the Digital Media Technologies minor, 5 courses applied toward completion of minor requirements must be distinct from the major requirements. As such, additional electives will be accepted in place of courses that are listed for both the major and the minor. For Media Studies \& Production majors taking this minor, Media Studies
\& Production 2701 or 2751 will be accepted in place of the required Media Studies \& Production 1701.


## Mathematics

Dr. Edward Letzter, Chair
Dr. Boris Datskovsky, Director of Undergraduate Studies
215-204-7847
Wachman Hall, Room 632
bdats@temple.edu
The mathematics major prepares student for professions requiring a strong mathematical background or for graduate study in mathematics and related fields.

There are several degree programs from which to choose: the Bachelor of Arts in Mathematics, the Bachelor of Science in Mathematics, the Bachelor of Science in Applied Mathematics, the Bachelor of Science with Teaching, and joint programs with Computer and Information Science, Economics, and Physics.

The Bachelor of Arts in Mathematics provides a solid mathematical foundation and also allows for the most flexibility.

The Bachelor of Science in Mathematics provides an in-depth theoretical background focusing on the traditional core areas of mathematics. This program is suitable preparation for graduate study in mathematics.

The Bachelor of Science in Applied Mathematics focuses on mathematical and computational methods applicable in the sciences, engineering, and industry. In particular, this degree is suitable preparation for professions featuring sophisticated mathematical modeling and/or scientific computing. This degree is also suitable preparation for graduate study in applied mathematics or related disciplines.

The Bachelor of Science in Mathematics with Teaching program is aimed at students interested in teaching mathematics at the high school level. This program combines a solid mathematical foundation with the pedagogical training necessary for success as a high school teacher. This program also satisfies Pennsylvania's teacher certification requirements.

Five-year combined bachelor's and master's programs are also available.

## Bachelor of Arts

## Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writingintensive requirement: Math 3096 or Math 4096.
- Students must complete the General Education (GenEd) requirements.
o The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.


## 2. College Requirements

- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 45 Upper Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- Two (2) Upper Level (2000+) Liberal Art courses.
- Second (2nd) Level of a Foreign Language (1002).

3. Major Requirements for Bachelor of Arts (54 s.h.)

- One (1) Computer \& Information Science course is required (4 s.h.): Computer \& Information Science 1053, 1057 or 1068.
- Thirteen (13) Mathematics courses are required (42 s.h.): Mathematics 1041, 1042, 2043, 2101, 2111, 3031, 3096, 3137, 3138, 4096 and 3 Mathematics electives at the 3000 level or above.
- Two (2) Physics courses are required (8 s.h.): Physics 1061 or 2021 and 1062 or 2022.


## Suggested Semester by Semester Plan

| Year 1 - Fall Semester | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Subject | 1041 | Calculus I <br> or | 4 |  |
| Mathematics | 1941 | Honors Calculus I | 4 |  |
| Mathematics | 1053 | Programming in Matlab <br> or | 4 |  |
| Computer \& Information Science |  |  |  |  |
| Computer \& Information Science | 1057 | Computer Programming in C <br> or <br> Program Design \& Abstraction | 4 | 4 |
| Computer \& Information Science | 1068 |  | 7 |  |
| General Education / Elective Credits |  |  |  |  |


| Subtotal |  |  | 15 |  |
| :---: | :---: | :---: | :---: | :---: |
| Year 1 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics <br> Mathematics | $\begin{aligned} & 1042 \\ & 1942 \end{aligned}$ | Calculus II or Honors Calculus II | $4$ <br> 4 |  |
| Physics | 1061 | Elementary Classical Physics I | 4 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 15 |  |
| Year 2 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 2043 | Calculus III | 4 |  |
| Mathematics | 2111 | Basic Concepts of Math | 3 |  |
| Physics | 1062 | Elementary Classical Physics II | 4 |  |
| General Education / Elective Credits |  |  | 4 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 2 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 2101 | Linear Algebra | 3 |  |
| Mathematics |  | 3000+ Mathematics Elective | 3 |  |
| General Education / Elective Credits |  |  | 10 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 3 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 3137 | Real \& Complex Analysis I (F) | 3 |  |
| Mathematics | 3031 | Probability Theory I | 3 |  |
| General Education / Elective Credits |  |  | 9 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 3 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 3096 | Introduction to Modern Algebra (S) | 3 | WI |
| Mathematics | 3138 | Real \& Complex Analysis II (S) | 3 |  |
| Mathematics |  | 3000+ Mathematics Elective | 3 |  |
| General Education / Elective Credits |  |  | 6 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 4 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics |  | 3000+ Mathematics Elective | 3 |  |
| General Education / Elective Credits |  |  | 13 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 4 - Spring Semester |  |  |  |  |
| Subject | Course \#\|Course Title |  | Hours Attribute |  |


| Mathematics | 4096 | Senior Problem Solving (S) | 3 | WI |
| :--- | :--- | :--- | :---: | :---: |
| General Education / Elective Credits |  |  | 13 |  |
| Subtotal |  |  | $\mathbf{1 6}$ |  |
|  |  |  |  |  |
| Credits in Coursework for B.A. in Mathematics | $\mathbf{5 4}$ |  |  |  |
| General Education / Elective Credits | $\mathbf{6 9}$ |  |  |  |
| Total Credits for B.A. Degree | $\mathbf{1 2 3}$ |  |  |  |

(F) - Fall only course.
(S) - Spring only course.

Students who complete CST majors typically receive a waiver for 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

## Bachelor of Science

## Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writingintensive requirement: Math 3098 or Math 4096.
- Students must complete the General Education (GenEd) requirements.
o The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.


## 2. College Requirements

- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 45 Upper-Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (65 s.h.)

- One (1) Computer \& Information Science course is required (4 s.h.): Computer \& Information Science 1053, 1057 or 1068.
- Sixteen (16) Mathematics courses are required (53 s.h.): Mathematics 1041, 1042, 2043, 3031, 3045, 3051, 3098, 3101, 3141, 3142, 4051, 4096 and four (4) Mathematics
electives at the 3000+level or above. NOTE: Mathematics 2111 can count for one of the Math 3000+ electives, provided it is taken prior to Mathematics 3098 and Mathematics 3141.
- Two (2) Physics courses are required (8 s.h.): Physics 1061 or 2021 and 1062 or 2022.


## Suggested Semester by Semester Plan

$\left.\begin{array}{|l|l|l|l|l|l|}\hline \text { Year 1 - Fall Semester } & \text { Course \# Course Title } & \text { Hours } & \text { Attribute } \\ \hline \text { Subject } & 1053 \\ \hline \text { Computer \& Information Science } \\ \text { Computer \& Information Science } \\ \text { Promming in Matlab } \\ \text { or } \\ \text { Computer Programming in C } \\ \text { or } \\ \text { Program Design \& Abstraction }\end{array}\right)$

| General Education / Elective Credits |  |  | 6 |  |
| :---: | :---: | :---: | :---: | :---: |
| Subtotal |  |  | 15 |  |
| Year 3 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 3101 | Topics in Modern Algebra (S) | 3 |  |
| Mathematics | 3142 | Advanced Calculus II (S) | 3 |  |
| Mathematics |  | 3000+ Mathematics Elective | 3 |  |
| General Education / Elective Credits |  |  | 6 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 4 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 4051 | Complex Analysis (F) | 3 |  |
| Mathematics |  | 3000+ Mathematics Elective | 3 |  |
| General Education / Elective Credits |  |  | 10 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 4 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 4096 | Senior Problem Solving (S) | 3 | WI |
| Mathematics |  | 3000+ Mathematics Elective | 3 |  |
| General Education / Elective Credits |  |  | 9 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Credits in Coursework for B.S. in Mathematics |  |  | 65 |  |
| General Education / Elective Credits |  |  | 58 |  |
| Total Credits for B.S. Degree |  |  | 123 |  |

Students who complete CST majors typically receive a waiver for 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

Intercollegial B.A. Degree in Mathematical Economics
Dr. Edward Letzter, Chair, Mathematics
Dr. Boris A. Datskovsky, Director of Undergraduate Studies, Mathematics
Wachman Hall, Room 632
215-204-7847
bdats@temple.edu
or
Dr. Michael Bognanno, Chair, Economics
Dr. Dimitrios Diamantaras, Advisor, Economics
Ritter Annex 623
215-204-8169
dimitrios.diamantaras@temple.edu

The Departments of Economics and Mathematics offer the Mathematical Economics program as a platform for systematic concentration in the mathematical approach to economics. Economics has progressed in the last several decades by making extensive use of mathematical techniques. As a result, students who wish to pursue graduate study in economics, finance, accounting and other disciplines that make an extensive use of economics need a thorough grounding in both economics and mathematics. The Mathematical Economics curriculum provides this grounding with a broad selection of courses that cover all important areas of economics and the mathematical tools required for a critical, deep mastery of these areas. This program is especially recommended for those students who intend to pursue graduate studies in Economics. The program and its requirements are described in full in the "Intercollegial Programs" section of this Bulletin.

## B.S. Degree in Applied Mathematics

Dr. Edward Letzter, Chair, Mathematics
Dr. Boris Datskovsky, Director of Undergraduate Studies, Mathematics
215-204-7847
bdats@temple.edu
The program is administered by the department of Mathematics. For further discussion of the major requirements, please see Applied Mathematics in this Bulletin.

## Interdisciplinary B.S. Degree in Mathematics \& Computer Science

Dr. Jie Wu, Chair, Computer \& Information Science
Dr. Anthony Hughes, Undergraduate Faculty Advisor, Mathematics \& Computer Science 215-204-7910
anthony.hughes@temple.edu
Dr. Edward Letzter, Chair, Mathematics
Dr. Boris Datskovsky, Director of Undergraduate Studies, Mathematics
215-204-7847
bdats@temple.edu
The interdisciplinary program is jointly administered by the departments of Mathematics and Computer \& Information Science. For further discussion of the Interdisciplinary major requirements, please see Mathematics \& Computer Science in this Bulletin.

## Interdisciplinary B.S. Degree in Mathematics \& Physics

Dr. Tao Rongjia, Chair, Physics
Dr. Zbigniew Dziembowski, Undergraduate Faculty Advisor, Physics
215-204-7639
zbig.dziembowski@temple.edu

Dr. Edward Letzter, Chair, Mathematics
Dr. Boris Datskovsky, Director of Undergraduate Studies, Mathematics
215-204-7847
bdats@temple.edu
The interdisciplinary program is jointly administered by the departments of Mathematics and Physics. For further discussion of the Interdisciplinary major requirements, please see Mathematics \& Physics in this Bulletin.

Five-Year Master's Program
The Combined B.A. or B.S./M.A. Program

To participate in this five-year program, a mathematics major should be enrolled in either the B.A. or the B.S. program. Application to continue in the M.A. program must be made to the graduate chair of the department no later than the first semester of the senior year. To be accepted by the M.A. program, a student must have a GPA of at least 3.25 in Mathematics courses when the application is made. Students must complete Mathematics 3141, 3142 and 4051 in place of Mathematics 3137 and 3138 and Mathematics 3098 in place of Mathematics 3096 in order to be considered for admission to the Master's program. In addition to completing the B.A. or B.S. requirements, the student must complete four additional graduate-level mathematics courses numbered 5000 and above by the end of her/his senior year. If the Core and College requirements have also been met, the student will be awarded the B.A. or B.S. degree at the conclusion of this portion of the program. All courses must be passed with a grade of C - or better, and no more than two graduate courses can carry a grade less than B - for the student to continue with the M.A. portion of the program.

## Fifth-Year Course Requirements

The student will take a total of six graduate-level courses, selected to conform to the M.A. requirements. At the end of the fifth year, the student must either write a master's thesis or pass one of the following examinations:

- Master's Comprehensive Examination in Pure Mathematics
- Master's Comprehensive Examination in Applied Mathematics
- Ph.D. Combined Comprehensive Examination (M.A. level pass)

For further details on the M.A. degree requirement see the Graduate Bulletin.

## Five-Year Master's/Secondary Education Certification Program

This is a combined program between the College of Science and Technology and the College of Education. For more information, see the following web site:www.temple.edu/bulletin/Academic_programs/schools_colleges/ed/intro/generalinfo/ed_gen eralinfo.shtm\#teacher

## Minor Requirements

- Three semesters of calculus (Mathematics 1041, Mathematics 1042, and Mathematics 2043).
- Linear algebra (Mathematics 2101)
- Four additional mathematics courses numbered 3000 or above, or Mathematics 2196 and three mathematics courses numbered 3000 or above. (Mathematics 2196 must be taken prior to Mathematics 3098 or Mathematics 3141.)


## Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include Mathematics 1022, for example.

## Distinction in Major

To graduate with Distinction in Mathematics a student should meet the following requirements:

1. All requirements for the B.A. or B.S. degree in Mathematics must be met with a GPA of at least 3.50 in the Mathematics courses.
2. At the time of graduation, the student's overall GPA, including all college-level courses, must be at least 3.25 .
3. Bachelor of Arts students must complete Mathematics 3141, Mathematics 3142 and Mathematics 4051 instead of Mathematics 3137 and Mathematics 3138, as well as Mathematics 3098 instead of Mathematics 3096 in order to qualify for a Distinction in Major.
4. A student must have a GPA of 3.50 or higher in Mathematics 3141, Mathematics 3142, Mathematics 3098, Mathematics 4051 and any additional courses from the following list: Mathematics 3043, 3044, 3101, and any 4000-level course other than individual study.

## Mathematics \& Computer Science

Dr. Edward Letzter, Chair<br>Dr. Boris Datskovsky, Director of Undergraduate Studies<br>Department of Mathematics<br>215-204-7847<br>Wachman Hall, Room 632<br>bdats@temple.edu<br>Dr. Jie Wu, Chair<br>Dr. Anthony Hughes, Faculty Advisor

Department of Computer \& Information Science
Wachman Hall, Room 1039
215-204-7910
hughes@temple.edu
This program is intended for students who are interested in computer science and mathematical computing. It provides a solid knowledge of theoretical computer science and its mathematical foundations and compares favorably with other theoretically-oriented computer science programs. The program is particularly recommended to those students who are interested in pursuing a graduate degree in computer science or computational mathematics.

## Bachelor of Science

## Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writingintensive requirement: Computer \& Information Science 4397, Computer \& Information Science 4398, Mathematics 3098, or Mathematics 4096.
- Students must complete the General Education (GenEd) requirements.
o The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.


## 2. College Requirements

- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 45 Upper Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (72-73 s.h.)

- Eight (8) Computer \& Information Science courses are required (31 s.h.): Computer \& Information Science 1068, 1166, 2107, 2166, 2168, 3207, 3223, and 3238 or one (1) Computer \& Information Science elective at the 3000 level or above which must be approved by Computer \& Information Science faculty advisor.
- Nine (9) Mathematics courses are required (30-31 s.h.): Mathematics 1041, 1042, 2043, 2101, 2111 or 3003, 3031, 3096 or 3098, 3137 or 3043, and 3138 or a Mathematics elective. Mathematics 2111 can count for the elective, provided it is taken prior to Mathematics 3098 and Mathematics 3141.
- Two (2) Science courses are required (8 s.h.): Chemistry 1031/1033 and 1032/1034, or Physics 1061 and 1062.
- One (1) capstone course is required (3 s.h.): Computer \& Information Science 4397* or 4398* or Mathematics 4096*.
*NOTE: Computer \& Information Science 3287 is the prerequisite for Computer \& Information Science 4397/4398 and should be taken as a 3000+ Computer \& Information Science elective, if you plan to take Computer \& Information Science 4397 or 4398 as the capstone course. Mathematics 3098 is the prerequisite for Mathematics 4096 and should be selected in place of Mathematics 3003 if you plan to take Mathematics 4096 as the capstone course.

Suggested Semester by Semester Plan

| Year 1 - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Computer \& Information Science | 1068 | Program Design \& Abstraction | 4 |  |
| Mathematics | 1041 | Calculus I | 4 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 1 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Computer \& Information Science | 1166 | Mathematical Concepts in Computing I | 4 |  |
| Mathematics | 1042 | Calculus II | 4 |  |
| General Education / Elective Credits |  |  | 8 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 2 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Computer \& Information Science | 2168 | Data Structures | 4 |  |
| Mathematics | 2043 | Calculus III | 4 |  |
| Mathematics | 2101 | Linear Algebra | 3 |  |
| General Education / Elective Credits |  |  | 4 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 2 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Computer \& Information Science | 2107 | Computer Systems \& Low-Level Programming | 4 |  |
| Computer \& Information Science | 2166 | Mathematical Concepts in Computing II | 4 |  |
| Mathematics Mathematics | $\begin{gathered} 2111 \\ \text { or } \\ 3003 \end{gathered}$ | Basic Concepts of Math or <br> Theory of Numbers | 3 3 |  |
| Mathematics | 3031 | Probability Theory I | 3 |  |


| General Education / Elective Credits |  |  | 2 |  |
| :---: | :---: | :---: | :---: | :---: |
| Subtotal |  |  | 16 |  |
| Year 3 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Computer \& Information Science | 3207 | Introduction to Systems Programming \& Operating Systems | 4 |  |
| Mathematics <br> Mathematics | $\begin{array}{r} 3043 \\ 3137 \\ \hline \end{array}$ | Numerical Analysis or <br> Real \& Complex Analysis I | $3-4$ $3$ |  |
| Chemistry <br> Physics | $\begin{aligned} & 1031 / 1033 \\ & 1061 \end{aligned}$ | ```General Chemistry I and General Chemistry I Laboratory or Elementary Classical Physics I``` | $4$ $4$ |  |
| General Education / Elective Credits |  |  | 3-4 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 3 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Computer \& Information Science | 3223 | Data Structures \& Algorithms | 3 |  |
| Mathematics <br> Mathematics | $\begin{array}{\|c} \hline 3138 \\ \text { or } \\ \text { Elective } \\ \hline \end{array}$ | Real \& Complex Analysis II or 3000+ Mathematics Elective^ | $\begin{aligned} & 3 \\ & 3 \end{aligned}$ |  |
| Chemistry <br> Physics | $\begin{aligned} & 1032 / 1034 \\ & 1062 \end{aligned}$ | ```General Chemistry II and General Chemistry II Laboratory or Elementary Classical Physics II``` | $4$ $4$ |  |
| General Education / Elective Credits |  |  | 5 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 4 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Computer \& Information Science | $\begin{aligned} & 3238 \\ & \text { or } \\ & \text { Elective } \end{aligned}$ | Software Design <br> or <br> 3000+ Computer \& Information Science <br> Elective** | $4$ $4$ |  |
| Mathematics | $\begin{gathered} 3096 \\ \text { or } \\ 3098 \end{gathered}$ | Introduction to Modern Algebra or <br> Modern Algebra (F) | $\begin{aligned} & 3 \\ & 3 \\ & \hline \end{aligned}$ |  |
| General Education / Elective Credits |  |  | 8 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 4 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Computer \& Information Science <br> Mathematics | $\begin{aligned} & 4397 / 4398 \\ & \text { or } \\ & 4096 \\ & \hline \end{aligned}$ | Independent Research or Projects in Computer Science <br> or <br> Senior Problem Solving (S) | $3$ $3$ | WI <br> WI |
| General Education / Elective Credits |  |  | 13 |  |
| Subtotal |  |  | 16 |  |


|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Credits in Coursework for B.S. in Mathematics \& Computer Science | $72-73$ |  |  |  |
| General Education / Elective Credits | $51-50$ |  |  |  |
| Total Credits for B.S. Degree | 123 |  |  |  |

(F) - Fall only course.
(S) - Spring only course.
$\wedge$ Mathematics electives must be 3000 or higher, and they must be approved by the mathematics program advisor. NOTE: Mathematics 2111 can count for an elective, provided it is taken prior to Mathematics 3098 and Mathematics 3141.
${ }^{* *}$ Computer \& Information Science electives must be 3000 or higher, and they must be approved by the Computer \& Information Science program advisor.

Students who complete CST majors typically receive a waiver for 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

## Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include Mathematics 1022, for example.

## Distinction in Major

To graduate with Distinction in Mathematics \& Computer Science, a student should meet the following requirements:

1. At the time of graduation, the student's overall grade point average (GPA), including all college-level courses, must be at least 3.50.
2. Students must have a 3.50 or higher grade point average in the $3000+$ level Computer Science courses.
3. Students must have a GPA of 3.50 or higher in their 3000+ level Mathematics courses.
4. Students must complete Mathematics 3098 and one of the following three two-semester analysis sequences: Mathematics 3043-3044, Mathematics 3137-3138, or Mathematics 3141-3142.

# Mathematics \& Physics 

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## Bachelor of Science

## Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writingintensive requirement: Mathematics 3098, Mathematics 4096, Physics 2796 and Physics 4796.
- Students must complete the General Education (GenEd) requirements.
o The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.

2. College Requirements

- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 45 Upper Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).


## 3. Major Requirements for Bachelor of Science (76 s.h.)

- Ten (10) Mathematics courses are required (35 s.h.): Mathematics 1041, 1042, 2043, 3031, 3045, 3051, 3098, 3141, 3142 and 4051.
- Eleven (11) Physics courses are required (38 s.h.): Physics 1061 or 2021, 1062 or 2022, 2101, 2501, 2502, 2796, 3101, 3301, 3302, 3701 and 4101.
- One (1) capstone course for the major is required (3 s.h.): Mathematics 4096 or Physics 4796.


## Suggested Semester by Semester Plan

| Year 1 - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | $\begin{aligned} & 1041 \\ & 1941 \end{aligned}$ | Calculus I or | 4 |  |
| Mathematics | 1941 | Honors Calculus I | 4 |  |
| Physics | 1061 | Elementary Classical Physics I | 4 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 1 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics <br> Mathematics | $\begin{array}{r} 1042 \\ 1942 \\ \hline \end{array}$ |  | $4$ $4$ |  |
| Physics | 1062 | Elementary Classical Physics II | 4 |  |
| General Education / Elective Credits |  |  | 8 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 2-Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 2043 | Calculus III | 4 |  |
| Mathematics | 3031 | Probability Theory I | 3 |  |
| Mathematics | 3045 | Differential Equations with Linear Algebra | 4 |  |
| General Education / Elective Credits |  |  | 4 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 2 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Physics | 2502 | Mathematical Physics (S) | 4 |  |
| Physics | 2796 | Introduction to Modern Physics (S) | 4 | WI |
| Mathematics | 3051 | Theoretical Linear Algebra (S) | 4 |  |
| General Education / Elective Credits |  |  | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 3-Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 3141 | Advanced Calculus I (F) | 3 |  |
| Physics | 2501 | Computing for Scientists (F) | 3 |  |
| Physics | 3301 | Electricity \& Magnetism (F) | 4 |  |
| General Education / Elective Credits |  |  | 6 |  |
| Subtotal |  |  | 16 |  |


| Year 3-Spring Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 3142 | Advanced Calculus II (S) | 3 |  |
| Physics | 2101 | Classical Mechanics (S) | 3 |  |
| Physics | 3701 | Introduction to Quantum Mechanics (S) | 3 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 4 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 3098 | Modern Algebra (F) | 3 | WI |
| Mathematics | 4051 | Complex Analysis (F) | 3 |  |
| Physics | 3101 | Analytical Mechanics (F) | 3 |  |
| Physics | 4101 | Thermodynamics \& Kinetic Theory (F) | 3 |  |
| General Education / Elective Credits |  |  | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 4 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | $4096$ | Senior Problem Solving (S) or | 3 | WI |
| Physics | 4796 | Experimental Physics (S) | 3 | WI |
| Physics | 3302 | Classical Electromagnetism (S) | 3 |  |
| General Education / Elective Credits |  |  | 9 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Credits in Coursework for B.S. in Math/Physics |  |  | 76 |  |
| General Education / Elective Credits |  |  | 47 |  |
| Total Credits for B.S. Degree |  |  | 123 |  |

(F) - Fall only course.
(S) - Spring only course.

Students who complete CST majors typically receive a waiver for 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

## Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include Mathematics 1022, for example.

## Distinction in Major

To graduate with Distinction in Mathematics \& Physics, a student should meet the following requirements:

1. Students must have a cumulative grade point average (GPA) of 3.50 or better.
2. Students must have a GPA of 3.50 or better in their Physics courses.
3. Students must have a GPA of 3.50 or better in their Mathematics courses.
4. Students must have a GPA of 3.50 or higher in the following Mathematics courses: Mathematics 3141, Mathematics 3142, Mathematics 3098, Mathematics 4051, and any other 4000-level course other than individual study.
5. Students must carry out an independent study, undergraduate research or undergraduate thesis project. Consult the undergraduate Physics advisor for more details.

## Natural Sciences

Dr. Susan Varnum, Program Director<br>Beury Hall, Room 130<br>215-204-6390<br>susan.varnum@temple.edu<br>https://chem.cst.temple.edu/

The Bachelor of Arts (B.A.) in the Natural Sciences provides students more breadth than traditional science programs. Many exciting areas of scientific inquiry, such as the neurosciences, environmental sciences, and biophysical sciences, require general science backgrounds that encompass multiple science disciplines.

Students planning graduate study or technical careers in one of these interdisciplinary areas, as well as students preparing for careers in health sciences, legal professions, science education, science-related business, or social service might be well served by the B.A. in the Natural Sciences.

However, this program of study will not prepare students for graduate study in a traditional science discipline nor will it prepare students for technical employment in a traditional science discipline.

## Bachelor of Arts

## Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writingintensive requirement: Biology 2296, Biology 3096, Biology 3396, Chemistry 4196, [Chemistry 3397/3398], Earth \& Environmental Science 2096, English 2696, Philosophy 2196, Philosophy 2596, Physics 2796 or Physics 4796.
- Students must complete the General Education (GenEd) requirements.
o The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.


## 2. College Requirements

- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 45 Upper-Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- Two (2) Upper-Level (2000+) Liberal Art courses.
- Second (2nd) Level of a Foreign Language (1002).

3. Major Requirements for Bachelor of Arts (56-65 s.h.)

- Two (2) Biology courses are required (8 s.h.): Biology 1011 or 1111 and 1012 or 2112.
- Two (2) Chemistry courses with labs are required (8 s.h.): Chemistry 1031/1033 and 1032/1034.
- One (1) Technical Writing course is required (3 s.h.): English 2696.
- One (1) College of Science \& Technology course is required (3 s.h.): College of Science \& Technology 4351 or Biology/Chemistry/Earth \& Environmental Science/Physics 3091.
- One (1) Earth \& Environmental Science course is required (4 s.h.): Earth \& Environmental Science 1001 or 2001.
- One or Two (1-2) Mathematics course(s) are required (4-8 s.h.): Mathematics 1031 or the combination of Mathematics 1041 and 1042 or the combination of Mathematics 1941 and 1942.
- One (1) Philosophy course is required (3 s.h.): Philosophy 2196.
- Three (3) Physics courses are required (11-12 s.h.): Physics 1004, 1021, and 1022.
- Four (4) Upper-Level (2000+) elective science courses are required (12-16 s.h.): The four electives must be selected from the same department. The departments you can choose electives from are: Biology, Chemistry, Earth \& Environmental Science or Physics.
- Successful completion of a comprehensive general science exam at the conclusion of the major course requirements.

Note: In addition to the overall major residency requirements, half of the concentration area must be completed at Temple.

Note: A grade of C or higher in Chemistry 1031 and Chemistry 1032 is required to take Biology 1111 and Biology 2112. A grade of C or higher in Biology 1111 and Biology 2112 is required to take upper-level Biology courses, and a C- or higher is required unless otherwise specified in all other courses for the major, including course prerequisites.

## Suggested Semester by Semester Plan

| Year 1-Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 1031 | General Chemistry I and | 3 |  |
| Chemistry | 1033 | General Chemistry I Laboratory or | 1 |  |
| Chemistry | 1951 | Honors General Chemistry I and | 3 |  |
| Chemistry | 1953 | Honors General Chemistry I Laboratory | 1 |  |
| Mathematics | $\begin{gathered} 1031 \\ \text { or } \end{gathered}$ | Differential \& Integral Calculus or | 4 |  |
| Mathematics | $\begin{array}{\|c} 1041 \\ \text { or } \end{array}$ | Calculus I <br> or | 4 |  |
| Mathematics | 1941 | Honors Calculus I | 4 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 1 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 1032 | General Chemistry II and | 3 |  |
| Chemistry | 1034 | General Chemistry II Laboratory or | 1 |  |
| Chemistry | 1952 | Honors General Chemistry II and | 3 |  |
| Chemistry | 1954 | Honors General Chemistry II Laboratory | 1 |  |
| Mathematics | $\begin{aligned} & \hline 1042 \sim \\ & \text { or } \\ & 1942 \sim \\ & \hline \end{aligned}$ |  | 4~ <br> 4~ |  |
| General Education / Elective Credits |  |  | 8-12 |  |
| Subtotal |  |  | 16 |  |
| ~Not required if Mathematics 1031 is completed. |  |  |  |  |
|  |  |  |  |  |
| Year 2 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | 1011 | General Biology I (F) | 4 |  |
| Earth \& Environmental Science <br> Earth \& Environmental Science | $\begin{aligned} & 1001 \\ & 2001 \end{aligned}$ | Introductory Geology or <br> Physical Geology | 4 |  |
| General Education / Elective Credits |  |  | 8 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |


| Year 2 - Spring Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | 1012 | General Biology II (S) | 4 |  |
| English | 2696 | Technical Writing | 3 | WI |
| Science |  | Elective* | 3-4 | WI |
| General Education / Elective Credits |  |  | 5-4 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 3 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Physics | 1021 | Introduction to General Physics I | 4 |  |
| Philosophy | 2196 | Perspectives on Science \& Mathematics | 3 | WI |
| Science |  | Elective* | 3-4 |  |
| General Education / Elective Credits |  |  | 5-4 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 3 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Physics | 1004 | Introduction to Astronomy | 3 |  |
| Physics | 1022 | Introduction to General Physics II | 4 |  |
| General Education / Elective Credits |  |  | 8 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 4 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Science |  | Elective* | 3-4 |  |
| General Education / Elective Credits |  |  | 12-11 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 4 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| College of Science \& Technology <br> Biology/Chemistry/Earth \& Environmental Science/Physics | $\begin{aligned} & 4351 \\ & 3091 \end{aligned}$ | Paradigms of Scientific Knowledge (S) or <br> Research Methods | 3 3 |  |
| Science |  | Elective* | 3-4 |  |
| General Education / Elective Credits |  |  | 10-9 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Credits in Coursework for B.A. in Natural Sciences |  |  | 56-65 |  |
| General Education / Elective Credits |  |  | 67-58 |  |
| Total Credits for B.A. Degree |  |  | 123 |  |

(F) - Fall only course.
(S) - Spring only course.
*The four science electives chosen to satisfy the science concentration must be taken from the same department. See major requirements above for details.

Students who complete CST majors typically receive a waiver for 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

## Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include Mathematics 1022, for example.

## Distinction in Major

To graduate with a Distinction in Natural Sciences a student is required to achieve a 3.33 GPA or higher in all of the content area courses in the major.

## Neuroscience - Cellular \& Molecular

Dr. Allen Nicholson, Chair<br>https://bio.cst.temple.edu/undergraduate/

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Dr. Joel Sheffield, Faculty Advisor
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The major in Neuroscience - Cellular \& Molecular leading to a Bachelor of Science from the College of Science and Technology is designed to provide rigorous preparation in scientific knowledge at the molecular and cellular level to those students interested in pursuing advanced studies and professional development in neuroscience, medicine or a related field in life sciences. In addition to neuroscience, graduates in the major will be well prepared for graduate or professional studies in cell or molecular biology, biochemistry, biophysics, biomedical sciences, medicine, pharmacy, dentistry, and many allied health fields. Neuroscience graduates who do not pursue graduate studies will be prepared to accept technical positions in industry (pharmaceutical, biotech) or government and university laboratories. Graduates will be ready to conduct research on a range of neuroscience and related topics at the level of cells or molecules, including nervous system function, development, disease or injury.

## Bachelor of Science

## Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writingintensive requirement: Biology 2296 and 3096.
- Students must complete the General Education (GenEd) requirements.
o The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.

2. College Requirements

- 45 Upper Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (75-81 s.h.)

- Six (6) Biology courses are required (22 s.h.): Biology 1111 or 1911, 2112 or 2912, 2296, 3096, 3352 and 3358.
- Four (4) Chemistry courses with labs are required (16 s.h.): Chemistry 1031/1033, 1032/1034, 2201/2203 and 2202/2204.
- Two (2) Mathematics courses are required (8 s.h.): Mathematics 1041 and 1042.
- Five (5) Neuroscience courses are required (15-19 s.h.): Neuroscience 1051 and four (4) neuroscience electives (two of the four electives must be within the College of Science \& Technology). Electives must be selected from the following list: Biology 3232, Biology 3312, Biology 3325, Biology 3333, Biology 3334, Biology 3354, Biology 3356, Biology 4375, Computer \& Information Science 1166, Neuroscience 3087, Psychology 2501, Psychology 2502.
- Two (2) Neuroscience Research/Independent Study courses are required (6-8 s.h.): Please select in consultation with the Neuroscience faculty advisor. Students are required to have a B- or above average in all major courses in order to be allowed to enroll in the Neuroscience Research/Independent Study.
- Two (2) Physics courses are required (8 s.h.): Physics 2021 and 2022.

Note: A grade of C or higher in Chemistry 1031 and Chemistry 1032 is required to take Biology 1111 and Biology 2112. A grade of C or higher in Biology 1111 and Biology 2112 is required to take upper-level Biology courses, and a C- or higher is required unless otherwise specified in all other courses for the major, including course prerequisites.

## Suggested Semester By Semester Plan

| Year 1 - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 1031 | General Chemistry I and | 3 |  |
| Chemistry | 1033 | General Chemistry I Laboratory or | 1 |  |
| Chemistry | 1951 | Honors General Chemistry I and | 3 |  |
| Chemistry | 1953 | Honors General Chemistry I Laboratory | 1 |  |
| Mathematics | 1041 | Calculus I <br> or | 4 |  |
| Mathematics | 1941 |  | 4 |  |
| Neuroscience | 1051 | Fundamentals of Neuroscience | 3 |  |
| General Education / Elective Credits |  |  | 4 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 1-Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | 1111 | Introduction to Biology I or | 4 |  |
| Biology | 1911 | Honors Introduction to Biology I | 4 |  |
| Chemistry | 1032 | General Chemistry II and | 3 |  |
| Chemistry | 1034 | General Chemistry II Laboratory or | 1 |  |
| Chemistry | 1952 | Honors General Chemistry II and | 3 |  |
| Chemistry | 1954 | Honors General Chemistry II Laboratory | 1 |  |
| Mathematics | 1042 | Calculus II <br> or | 4 |  |
| Mathematics | 1942 | Honors Calculus II | 4 |  |
| General Education / Elective Credits |  |  | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 2 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | 2112 | Introduction to Biology II or | 4 |  |
| Biology | 2912 | Honors Introduction to Biology II | 4 |  |
| Chemistry | 2201 | Organic Chemistry I and | 3 |  |
| Chemistry | 2203 | Organic Chemistry I Laboratory or | 1 |  |
| Chemistry | 2211 | Organic Chemistry for Majors I and | 3 |  |
| Chemistry | 2213 | Organic Majors Laboratory I or | 1 |  |
| Chemistry | 2921 | Honors Organic Chemistry I and | 3 |  |
| Chemistry | 2923 | Honors Organic Chemistry I Laboratory | 1 |  |


| General Education / Elective Credits |  |  | 8 |  |
| :---: | :---: | :---: | :---: | :---: |
| Subtotal |  |  | 16 |  |
| Year 2 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | 2296 | Genetics (S) | 4 | WI |
| Biology | 3352 | Systems Neuroscience (S) | 3 |  |
| Chemistry | 2202 | Organic Chemistry II and | 3 |  |
| Chemistry | 2204 | Organic Chemistry II Laboratory or | 1 |  |
| Chemistry | 2212 | Organic Chemistry for Majors II and | 3 |  |
| Chemistry | 2214 | Organic Majors Laboratory II or | 1 |  |
| Chemistry | 2922 | Honors Organic Chemistry II and | 3 |  |
| Chemistry | 2924 | Honors Organic Chemistry II Laboratory | 1 |  |
| General Education / Elective Credits |  |  | 4 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 3 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | 3096 | Cell Structure \& Function (F) | 4 | WI |
| Neuroscience |  | Neuroscience Elective^ | 3-4 |  |
| Physics | 2021 | General Physics I | 4 |  |
| General Education / Elective Credits |  |  | 4-3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 3 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | 3358 | Cellular \& Molecular Neuroscience (S) | 3 |  |
| Neuroscience |  | Neuroscience Elective^ | 3-4 |  |
| Physics | 2022 | General Physics II | 4 |  |
| General Education / Elective Credits |  |  | 5-4 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 4 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology <br> Biology | 4591 | Research in Neuroscience* or <br> Neuroscience Independent Study* | 3 3-4 |  |
| Neuroscience |  | Neuroscience Elective^ | 3-4 |  |
| General Education / Elective Credits |  |  | 10-8 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 4 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | 4591 | Research in Neuroscience* or | $3$ |  |
| Biology |  | Neuroscience Independent Study* | 3-4 |  |
| Neuroscience |  | Neuroscience Elective^ | 3-4 |  |
| General Education / Elective Credits |  |  | 10-8 |  |


| Subtotal |  |  | 16 |  |
| :--- | :--- | :--- | :---: | :---: |
|  |  |  |  |  |
| Credits in Coursework for B.S. in Neuroscience | $75-81$ |  |  |  |
| General Education / Elective Credits | $48-42$ |  |  |  |
| Total Credits for B.S. Degree | 123 |  |  |  |

(F) - Fall only course.
(S) - Spring only course.
*Neuroscience Research/Independent Study courses should be determined in consultation with the neuroscience faculty advisor. Students are required to have BOTH a B- or above in Biology 3352 AND a Science GPA of 2.7. The Science GPA is to consist of all Biology courses, Chemistry through Organic Chemistry, Calculus, and Physics.

Students who complete CST majors typically receive a waiver for 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

## ${ }^{\wedge}$ Neuroscience Electives

| $\wedge$ Neuroscience Electives |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Students are required to take four advanced neuroscience electives from the following list. Two of the electives must be within the College of Science \& Technology (CST). |  |  |  |  |
| Biology | 3232 | Behavioral Genetics | 3 |  |
| Biology | 3312 | Biostatistics | 3 |  |
| Biology | 3325 | Research Techniques in Molecular Biology | 4 |  |
| Biology | 3333 | Advanced Techniques in Microscopy | 4 |  |
| Biology | 3334 | Mammalian Physiology | 4 |  |
| Biology | 3354 | Neural Basis of Animal Behavior | 3 |  |
| Biology | 3356 | Organization \& Development of the Nervous System | 3 |  |
| Biology | 4375 | General Biochemistry I | 3 |  |
| Computer \& Information Science | 1166^^ | Mathematical Concepts in Computing I | 4 |  |
| Neuroscience | 3087~ | Techniques in Neuroscience | 3 |  |
| Psychology | 2501~ | Foundations of Behavioral Neuroscience | 3 |  |
| Psychology | 2502~ | Foundations of Cognitive Neuroscience | 3 |  |
|  |  |  |  |  |
| ^^Computer \& Information Science 1166 may be replaced with Computer \& Information Science 1053 or 1066. |  |  |  |  |
| $\sim$ Non-CST courses. |  |  |  |  |

## Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include Biology 1011, for example.

A total of up to 3 s.h. of Biology research courses numbered lower than 4000 (to include: Biology 3082, 3181, 3183, 3281, 3681, 3781, and 4291) may be taken for a letter grade. Any
additional credits in research courses in this category can be taken only on a CR/NC basis. No research courses numbered lower than 4000 may be used for Biology elective credit.

## Distinction in the Major

Distinction in Neuroscience is awarded based upon the completion of two semesters of Biology 4591, submission of a paper, a poster presentation, AND maintaining a GPA of 3.2. Admission to the program for Distinction is by application to the Neuroscience Program during the junior year.

## Physics

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The Bachelor of Science (B.S.) program serves two purposes. First, it gives strong preparation for those wishing to attend graduate school in physics or related disciplines. Second, the B.S. program is recommended for those who intend to enter the scientific workforce upon completion of a bachelor's degree.

The Bachelor of Arts (B.A.) program is designed for those who are planning for a non-research career in a field which nevertheless has an important science component. Examples include patent law, environmental law enforcement, medicine or sales or management in a hightechnology industry.

## Bachelor of Arts

## Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writingintensive requirement: Physics 2796 and Physics 4796.
- Students must complete the General Education (GenEd) requirements.
o The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.


## 2. College Requirements

- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 45 Upper Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- Two (2) Upper Level (2000+) Liberal Art courses.
- Second (2nd) Level of a Foreign Language (1002).

3. Major Requirements for Bachelor of Arts (55 s.h.)

- Three (3) Mathematics courses are required (12 s.h.): Mathematics 1041, 1042 and 2043.
- Two (2) sequenced science courses outside the Department of Physics are required (8 s.h.): Biology 1011 and 1012, Biology 1111 and 2112, Chemistry 1031/1033 and 1032/1034 or Earth \& Environmental Science 2001 and a 2000+ Elective.
- Ten (10) Physics courses are required (35 s.h.): Physics 1061 or 2021, 1062 or 2022, 2101, 2502, 2796, 3301, 4796 and three (3) Physics electives. The three physics electives must be selected from the following list: Physics 1004, 2501, 3101, 3302, 3701, 4101, 4301, 4302, 4701 or 4702.

Note: Physics 3091 is not available for major credit.
Suggested Semester By Semester Plan
$\left.\begin{array}{|l|l|l|c|c|}\hline \text { Year 1 - Fall Semester } & \text { Course \# } & \text { Course Title } & \text { Hours } & \text { Attribute } \\ \hline \text { Subject } & 1041 & \begin{array}{l}\text { Calculus I } \\ \text { or }\end{array} \\ \hline \text { Mathematics } & 1941 & \text { Honors Calculus I }\end{array}\right)$

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Mathematics | 2043 | Calculus III | 4 |  |
| General Education / Elective Credits |  |  | 12 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 2 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Physics | 2502 | Mathematical Physics (S) | 4 |  |
| Physics | 2796 | Introduction to Modern Physics (S) | 4 | WI |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 3 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Physics | 3301 | Electricity \& Magnetism (F) | 4 |  |
| Science |  | Sequenced Science Part 1* | 4 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 3 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Physics | 2101 | Classical Mechanics (S) | 3 |  |
| Science |  | Sequenced Science Part 2* | 4 |  |
| General Education / Elective Credits |  |  | 9 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 4 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Physics |  | Physics Elective^ | 3 |  |
| Physics |  | Physics Elective^ | 3 |  |
| General Education / Elective Credits |  |  | 10 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 4 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Physics | 4796 | Experimental Physics (S) | 3 | WI |
| Physics |  | Physics Elective^ | 3 |  |
| General Education / Elective Credits |  |  | 9 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Credits in Coursework for B.A. in Physics |  |  | 55 |  |
| General Education / Elective Credits |  |  | 68 |  |
| Total Credits for B.A. Degree |  |  | 123 |  |

(F) - Fall only course.
(S) - Spring only course.

Students who complete CST majors typically receive a waiver for 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

## *Sequenced Science Options

Students are required to take a two-semester sequence of laboratory science electives not within physics. The science courses can be chosen from Biology, Chemistry, or Earth \& Environmental Science from the following list:

| Sequence Science Elective Options |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology Biology | $\begin{aligned} & 1011 \\ & 1012 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { General Biology I (F) } \\ & \text { and } \\ & \text { General Biology II (S) } \end{aligned}$ | $4$ <br> 4 |  |
|  |  | OR |  |  |
| Biology <br> Biology | $\begin{aligned} & 1111 \\ & 2112 \\ & \hline \end{aligned}$ | Introduction to Biology I and Introduction to Biology II | $\overline{4}$ <br> 4 |  |
|  |  | OR |  |  |
| Chemistry <br> Chemistry | 1031 and 1033 1032 and 1034 |  | $\begin{aligned} & 4 \\ & 4 \\ & \hline \end{aligned}$ |  |
|  |  | OR |  |  |
| Earth \& Environmental Science <br> Earth \& Environmental Science | 2001 $2000+$ Elective | Physical Geology and $2000+$ Geology Elective | $4$ <br> 4 |  |

## ${ }^{\wedge}$ Physics Electives

| Physics Electives |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Subject | Course \# | Course Title | Hours | Attribute |
| Students are required to take three advanced physics electives selected from the following list: |  |  |  |  |
| Physics | 1004 | Introduction to Astronomy | 3 |  |
| Physics | 2501 | Computing for Scientists (F) | 3 |  |
| Physics | 3101 | Analytical Mechanics (F) | 3 |  |
| Physics | 3302 | Classical Electromagnetism (S) | 3 |  |
| Physics | 3701 | Introduction to Quantum Mechanics (S) | 3 |  |
| Physics | 4101 | Thermodynamics \& Kinetic Theory (F) | 3 |  |
| Physics | 4301 | Electronics (S) | 3 |  |
| Physics | 4302 | Optics (F) | 3 |  |
| Physics | 4701 | Introduction to Solid State Physics (S) | 3 |  |
| Physics | 4702 | Introduction to Atomic, Nuclear, \& Particle Physics (F) | 3 |  |

## Bachelor of Science

## Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writingintensive requirement: Physics 2796 and Physics 4796.
- Students must complete the General Education (GenEd) requirements.
o The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.


## 2. College Requirements

- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 45 Upper Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).


## 3. Major Requirements for Bachelor of Science (71-73 s.h.)

- Four (4) Mathematics courses are required (15 s.h.): Mathematics 1041, 1042, 2043 and 3041.
- Two (2) science or mathematics elective courses are required (6-8 s.h.): These two electives can be chosen from the departments of Biology, Chemistry, Engineering, Earth \& Environmental Science, Mathematics, or Physics in consultation with the faculty advisor.
- Fifteen (15) Physics courses are required (50 s.h.): Physics 1061 or 2021, 1062 or 2022, 2101, 2501, 2502, 2796, 3101, 3301, 3302, 3701, 4101, 4302, 4796 and two (2) additional Physics courses from the following list: 4301, 4701 or 4702.

Note: Physics 3091 is not available for major credit.
Suggested Semester By Semester Plan

| Year 1 - Fall Semester | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Subject | 1041 | Calculus I <br> or <br> Honors Calculus I | 4 |  |
| Mathematics | 1941 | Elementary Classical Physics I | 4 |  |
| Mathematics | 1061 |  | 4 |  |
| Physics |  |  | 7 |  |
| General Education / Elective Credits |  | $\mathbf{1 5}$ |  |  |
| Subtotal |  |  |  |  |
| Year 1 - Spring Semester |  |  |  |  |


| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Mathematics | 1042 | Calculus II or | 4 |  |
| Mathematics | 1942 | Honors Calculus II | 4 |  |
| Physics | 1062 | Elementary Classical Physics II | 4 |  |
| General Education / Elective Credits |  |  | 8 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 2-Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 2043 | Calculus III | 4 |  |
| Mathematics | 3041 | Differential Equations I | 3 |  |
| Physics | 2501 | Computing for Scientists (F) | 3 |  |
| General Education / Elective Credits |  |  | 6 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 2-Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Physics | 2101 | Classical Mechanics (S) |  |  |
| Physics | 2502 | Mathematical Physics (S) | 4 |  |
| Physics | 2796 | Introduction to Modern Physics (S) | 4 | WI |
| General Education / Elective Credits |  |  | 4 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 3-Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Physics | 3101 | Analytical Mechanics (F) | 3 |  |
| Physics | 3301 | Electricity \& Magnetism (F) | 4 |  |
| Science | Elective | Choose from Biology, Chemistry, Engineering, Earth \& Environmental Science, Mathematics, or Physics chosen in consultation with the faculty advisor. | 3-4 |  |
| General Education / Elective Credits |  |  | 5-4 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 3-Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Physics | 3302 | Classical Electromagnetism (S) |  |  |
| Physics | 3701 | Introduction to Quantum Mechanics ( $S$ ) | 3 |  |
| Science | Elective | Choose from Biology, Chemistry, Engineering, Earth \& Environmental Science, Mathematics, or Physics chosen in consultation with the faculty advisor. | 3-4 |  |
| General Education / Elective Credits |  |  | 6-5 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 4 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Physics | 4101 | Thermodynamics \& Kinetic Theory (F) | 3 |  |


| Physics | 4702* | Introduction of Atomic, Nuclear, \& Particle Physics (F) | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Physics | 4302 | Optics (F) | 3 |  |
| General Education / Elective Credits |  |  | 6 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 4 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Physics | 4701* | Introduction to Solid State Physics (S) |  |  |
|  |  | (Note: Physics 4701 is offered in evennumbered years.) |  |  |
| Physics | 4301* | Electronics (S) | 3 |  |
|  |  | (Note: Physics 4301 is offered in odd-numbered years.) |  |  |
| Physics | 4796 | Experimental Physics (S) | 3 | WI |
| General Education / Elective Credits |  |  | 10 |  |
| Subtotal |  |  | 16 |  |
| *Complete two of the three courses listed: Physics 4301, 4701 or 4702. |  |  |  |  |
|  |  |  |  |  |
| Credits in Coursework for B.S. in Physics |  |  | 71-73 |  |
| General Education / Elective Credits |  |  | 52-50 |  |
| Total Credits for B.S. Degree |  |  | 123 |  |

(F) - Fall only course.
(S) - Spring only course.

Students who complete CST majors typically receive a waiver for 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

## Interdisciplinary B.S. Degree in Mathematics and Physics

Dr. Tao Rongjia, Chair, Physics
Dr. Zbigniew Dziembowski, Faculty Advisor, Physics
215-204-7639
zbig.dziembowski@temple.edu
Dr. Edward Letzter, Chair, Mathematics
Dr. Boris Datskovsky, Director of Undergraduate Studies, Mathematics
215-204-7847
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The interdisciplinary program is jointly administered by the departments of Mathematics and Physics. For further discussion of the Interdisciplinary major requirements, please see Mathematics and Physics in the Undergraduate Bulletin.

## Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include Math 1022, for example.

## Minor Requirements

Students wishing to minor in Physics should take 8 semester hours of Calculus-based Physics I, II (Physics 1061-1062 or equivalent), Electricity and Magnetism (Physics 3301) or Introduction to Electromagnetic Fields and Waves (Electrical Engineering 3712), Introduction to Modern Physics (Physics 2796), and 6 additional semester hours of Physics courses at or above the 2000level, chosen with the approval of the undergraduate Physics advisor.

## Five-Year Master's Program

## The Combined Five-Year B.A. or B.S./M.A.

This program allows a talented student to obtain both a bachelor's and a master's degree in five years. A physics major may apply for the program during the junior or senior year. Please consult the advisor for details.

## Five-Year Master's/Secondary Education Certification Program

This is a combined program between the College of Science and Technology and the College of Education. For more information, see the following web site: www.temple.edu/bulletin/Academic_programs/schools_colleges/ed/intro/generalinfo/ed_generali nfo.shtm\#teacher

## Distinction in Major

A student who wishes to graduate with distinction in the major must complete all courses required for the physics major with a GPA of 3.5 or better, and carry out an independent study or undergraduate thesis project. Consult the undergraduate physics advisor for more details.

## TUteach PROGRAMS

Dr. Douglas Baird, Program Co-Director

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215-204-2888
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The Bachelor of Science (B.S.) with Teaching programs are part of Temple's innovative teachertraining program, "TUteach." The B.S. with teaching provides broad training in the chosen discipline, and prepares students for a career in secondary school teaching. Students who complete the B.S. with Teaching meet Pennsylvania teacher certification requirements via theoretical and practical courses in education specifically designed for science and mathematics majors. The education courses in the B.S. with teaching degree program include practice teaching in school district classrooms and emphasize inquiry-based approaches to learning.

Eight Bachelors of Science programs enable students to prepare for secondary education certification while mastering the content of their field. The programs are: Biology with Teaching, Chemistry with Teaching, Earth and Space Science with Teaching, General Science with Teaching, Mathematics with Teaching, Mathematics and Computer Science with Teaching, Mathematics and Technology with Teaching, and Physics with Teaching. The programs require that students complete the collegial Bachelor of Science requirements and a total of 124 credits.

The links below will provide more information with a list of courses required for the particular major.

## Biology with Teaching

Chemistry with Teaching
Earth \& Space Science with Teaching
General Science with Teaching
Mathematics with Teaching
Mathematics \& Computer Science with Teaching

## Mathematics \& Technology with Teaching Physics with Teaching

## TUteach - Biology

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## Biology with Teaching

The B.S. with Teaching in Biology is part of Temple's innovative "TUteach" teacher-training program. The B.S. with Teaching provides broad training in Biology, and prepares students for a career in secondary school teaching. The education courses in the B.S. with Teaching include supervised teaching in school district classrooms and emphasize inquiry-based approaches to learning. Students in the B.S. with Teaching degree program become eligible for a Pennsylvania teacher certification when they complete all the requirements for the degree that include theoretical and practical courses in education specifically designed for science and mathematics majors. In order to be recommended for Pennsylvania teacher certification, students must graduate with 1) a B.S with Teaching degree 2) a minimum overall 3.0 GPA and 3) earn passing scores on the state-required Praxis I and Praxis II tests.

Students are encouraged to stay on track to graduate with an overall GPA of 3.0 by meeting once each semester with a TUteach advisor and by meeting the prerequisite GPA for required courses. GPA and prerequisite course requirements insure that students are well prepared for the significant amounts of supervised classroom teaching required in advanced courses. Attention is specifically directed to the prerequisites required to enroll in Project-Based Instruction [Math Education (Secondary) 4189 or Science Education (Secondary) 4189], an advanced course required in all TUteach degrees and recommended to be taken in either the fifth or seventh semester. The prerequisites for this course include entering the course with a GPA of 3.0 and having earned passing scores on the PAPA Test ("Basic Knowledge:" reading, writing, and mathematics).

## Bachelor of Science

## Summary of Requirements for the Degree

## 1. University Requirements (124 total s.h.)

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writingintensive requirement: Biology 2296, Biology 3096, Biology 3396, Philosophy 2196 or Secondary Education 3796.
- Students must complete the General Education (GenEd) requirements.
o The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.

2. College Requirements

- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 45 Upper Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (90-93 s.h.)*

- Nine (9) Biology courses are required (31-34 s.h.): Biology 1111, 2112, 2296, 2227, 3091, 3096 and three (3) upper level Biology electives at the 2200 level or above (see course descriptions for exceptions).
- Four (4) Chemistry courses with labs are required (16 s.h.): Chemistry 1031/1033, 1032/1034, 2201/2203 and 2202/2204.
- Two (2) Mathematics courses are required (8 s.h.): Mathematics 1041 and 1042.
- Two (2) Physics courses are required (8 s.h.): Physics 2021 and 2022.
- Two (2) College of Science \& Technology courses are required (2 s.h.): College of Science \& Technology 1189 and 1289.
- Three (3) Education course are required (10 s.h.): Education 2179, 4388 and 4802.
- Two (2) Mathematics or Science Education (Secondary) courses are required (6 s.h.): Math/Science Education 2189 and 4189.
- One (1) Secondary Education course is required (3 s.h.): Secondary Education 3796.
- One (1) Special Education course is required (3 s.h.): Special Education 2231.
- One (1) Philosophy course is required (3 s.h.): Philosophy 2196.
* Note: The certification requirements need to meet Pennsylvania Department of Education standards and are subject to change. All students are strongly recommended to check with the TUteach Advisor in the College of Science and Technology, to affirm the requirements that pertain to their specific major. In addition, students should check the Undergraduate Bulletin web site for the most current information about these programs (Academic Programs section), or the TUteach web site at: https://tuteach.cst.temple.edu/.

It is also recommended that all students meet with an advisor before enrolling in classes specific to these majors and leading to certification as a teacher. This is to assure that a candidate's intended program of study will be compatible with the new requirements.

Note: A grade of C or higher in Chemistry 1031 and Chemistry 1032 is required to take Biology 1111 and Biology 2112. A grade of C or higher in Biology 1111 and Biology 2112 is required to take upper-level Biology courses, and a C- or higher is required unless otherwise specified in all
other courses for the major, including course prerequisites. Biology 3091 is not available for major credit.

Suggested Semester By Semester Plan

| Year 1-Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 1031 | General Chemistry I and | 3 |  |
| Chemistry | 1033 | General Chemistry I Laboratory or | 1 |  |
| Chemistry | 1951 | Honors General Chemistry I and | 3 |  |
| Chemistry | 1953 | Honors General Chemistry I Laboratory | 1 |  |
| Mathematics | 1041 | Calculus I or | 4 |  |
| Mathematics | 1941 | Honors Calculus I | 4 |  |
| College of Science \& Technology | 1189 | Step 1: Inquiry Approaches to Teaching | 1 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 1 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | 1111 | Introduction to Biology I or | 4 |  |
| Biology | 1911 | Honors Introduction to Biology I | 4 |  |
| Chemistry | 1032 | General Chemistry II and | 3 |  |
| Chemistry | 1034 | General Chemistry II Laboratory or | 1 |  |
| Chemistry | 1952 | Honors General Chemistry II and | 3 |  |
| Chemistry | 1954 | Honors General Chemistry II Laboratory | 1 |  |
| Mathematics | $1042$ | Calculus II or | 4 |  |
| Mathematics | 1942 | Honors Calculus II | 4 |  |
| College of Science \& Technology | 1289 | Step 2: Inquiry-Based Lesson Design with Strategies for English Learners | 1 |  |
| General Education / Elective Credits |  |  | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 2-Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | 2112 | Introduction to Biology II or | 4 |  |
| Biology | 2912 | Honors Introduction to Biology II | 4 |  |
| Chemistry | 2201 | Organic Chemistry I and | 3 |  |
| Chemistry | 2203 | Organic Chemistry I Laboratory or | 1 |  |
| Chemistry | 2211 | Organic Chemistry I for Majors and | 3 |  |
| Chemistry | 2213 | Organic Chemistry I Laboratory for Majors or | 1 |  |
| Chemistry | 2921 | Honors Organic Chemistry I and | 3 |  |
| Chemistry | 2923 | Honors Organic Chemistry I Laboratory | 1 |  |
| Education | 2179 | Knowing \& Learning in Mathematics \& Science | 3 |  |
| Special Education | 2231 | Introduction to Inclusive Education | 3 |  |


| Subtotal |  |  | 14 |  |
| :---: | :---: | :---: | :---: | :---: |
| Year 2 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | $\begin{aligned} & 2227 \\ & 2296 \end{aligned}$ | Principles of Ecology (S) or Genetics (S) | $\begin{aligned} & 3 \\ & 4 \end{aligned}$ | WI |
| Chemistry | 2202 | Organic Chemistry II and | 3 |  |
| Chemistry | 2204 | Organic Chemistry II Laboratory or | 1 |  |
| Chemistry | 2212 | Organic Chemistry for Majors II and | 3 |  |
| Chemistry | 2214 | Organic Majors Laboratory II or | 1 |  |
| Chemistry | 2922 | Honors Organic Chemistry II and | 3 |  |
| Chemistry | 2924 | Honors Organic Chemistry II Laboratory | 1 |  |
| Secondary Education | 3796 | Differentiated Literacy Instruction in the Disciplines, 7-12 | 3 | WI |
| General Education / Elective Credits |  |  | 7-6 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Year 3 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | 3096 | Cell Structure \& Function (F) | 4 | WI |
| Physics | 2021 | General Physics I | 4 |  |
| Philosophy | 2196 | Perspectives on Science \& Mathematics (F) | 3 | WI |
| General Education / Elective Credits |  |  | 6 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Year 3 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | $\begin{array}{r} 2296 \\ 2227 \\ \hline \end{array}$ | $\begin{array}{\|l} \hline \text { Genetics }(S) \\ \text { or } \\ \text { Principles of Ecology }(S) \\ \hline \end{array}$ | $4$ $3$ | WI |
| Biology | 3091 | Research Methods (S) | 3 |  |
| Physics | 2022 | General Physics II | 4 |  |
| ```Math Education (Secondary) or Science Education (Secondary)``` | 2189 | Classroom Interactions | 3 |  |
| General Education / Elective Credits |  |  | 4-3 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Year 4 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | Elective* | Upper-Level 2200+ Biology Elective | 3-4 |  |
| Biology | Elective* | Upper-Level 2200+ Biology Elective | 3-4 |  |
| ```Math Education (Secondary) or Science Education (Secondary)``` | 4189 | Project-Based Instruction (F) | 3 |  |
| General Education / Elective Credits |  |  | 8-6 |  |
| Subtotal |  |  | 17 |  |


| Year 4 - Spring Semester | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Elective* | Upper-Level 2200+ Biology Elective | $3-4$ |  |
| Biology | 4388 | TUteach Apprentice Teaching | 6 |  |
| Education | 4802 | TUteach Apprentice Teaching Seminar | 1 |  |
| Education |  |  | $1-0$ |  |
| General Education / Elective Credits |  |  | $\mathbf{1 1}$ |  |
| Subtotal |  |  |  |  |
|  |  | $\mathbf{9 0 - 9 3}$ |  |  |
| Credits in Coursework for B.S. in Biology with Teaching | $\mathbf{3 4 - 3 1}$ |  |  |  |
| General Education / Elective Credits | $\mathbf{1 2 4}$ |  |  |  |
| Total Credits for B.S. Degree |  |  |  |  |

(F) - Fall only course.
(S) - Spring only course.
*If the student has taken the necessary prerequisite courses, some of the Biology elective courses may be taken before the Fall semester of Year 4. While not required, Biology 3101 (Evolution) is highly recommended as one of three Biology electives.

Students who complete TUteach majors typically receive a waiver for 1 Human Behavior (GB), 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

## Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include Biology 1011, for example.

## Distinction in Major

To graduate with a Distinction in Biology with Teaching, students must meet the following requirements:

1. Achieve a 3.50 GPA or better for the aggregate of courses required for the B.S. in Biology with Teaching.
2. Achieve a 3.20 GPA or better in the biology coursework.
3. Achieve a 3.91 GPA in the following courses: Math/Science Education (Secondary) 2189: Classroom Interactions; Math/Science Education (Secondary) 4189: Project-Based Instruction; Education 4802: TUteach Apprentice Teaching Seminar; and Education 4388: TUteach Apprentice Teaching.
4. Write a final research paper either in a topic combining both major content and pedagogy or a topic focused on research in biology. They must present their research for evaluation and present at a departmental research poster session before graduation. Consult the undergraduate TUteach advisor for more details.

# TUteach - Chemistry 

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The B.S. with Teaching in Chemistry is part of Temple's innovative "TUteach" teacher-training
program. The B.S. with Teaching provides broad training in Chemistry, and prepares students for a career in secondary school teaching. The education courses in the B.S. with Teaching include supervised teaching in school district classrooms and emphasize inquiry-based approaches to learning. Students in the B.S. with Teaching degree program become eligible for a Pennsylvania teacher certification when they complete all the requirements for the degree that include theoretical and practical courses in education specifically designed for science and mathematics majors. In order to be recommended for Pennsylvania teacher certification, students must graduate with 1) a B.S with Teaching degree 2) a minimum overall 3.0 GPA and 3) earn passing scores on the state-required Praxis I and Praxis II tests.

Students are encouraged to stay on track to graduate with an overall GPA of 3.0 by meeting once each semester with a TUteach advisor and by meeting the prerequisite GPA for required courses. GPA and prerequisite course requirements insure that students are well prepared for the significant amounts of supervised classroom teaching required in advanced courses. Attention is specifically directed to the prerequisites required to enroll in Project-Based Instruction [Math Education (Secondary) 4189 or Science Education (Secondary) 4189], an advanced course required in all TUteach degrees and recommended to be taken in either the fifth or seventh semester. The prerequisites for this course include entering the course with a GPA of 3.0 and having earned passing scores on the PAPA Test ("Basic Knowledge:" reading, writing, and mathematics).

## Bachelor of Science

## Summary of Requirements for the Degree

## 1. University Requirements (124 total s.h.)

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writingintensive requirement: Chemistry 4196, the combination of Chemistry 3397/3398, Philosophy 2196 or Secondary Education 3796.
- Students must complete the General Education (GenEd) requirements.
o The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.


## 2. College Requirements

- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 45 Upper-Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (83-84 s.h.)*

- Ten (10) Chemistry courses with labs are required (36-37 s.h.): Chemistry 1031/1033, $1032 / 1034,2201 / 2203,2202 / 2204,3091,3103 / 3105,3001,3301,3302$ and a choice of 4196 or 3397/3398.
- Three (3) Mathematics courses are required (12 s.h.): Mathematics 1041, 1042 and 2043.
- Two (2) Physics courses are required (8 s.h.): Physics 1061 or 2021 and 1062 or 2022.
- Two (2) College of Science \& Technology courses are required (2 s.h.): College of Science \& Technology 1189 and 1289.
- Three (3) Education course are required (10 s.h.): Education 2179, 4388 and 4802.
- Two (2) Mathematics or Science Education (Secondary) courses are required (6 s.h.): Math/Science Education 2189 and 4189.
- One (1) Secondary Education course is required (3 s.h.): Secondary Education 3796.
- One (1) Special Education course is required (3 s.h.): Special Education 2231.
- One (1) Philosophy course is required (3 s.h.): Philosophy 2196.
* Note: The certification requirements need to meet Pennsylvania Department of Education standards and are subject to change. All students are strongly recommended to check with the TUteach Advisor in the College of Science and Technology, to affirm the requirements that pertain to their specific major. In addition, students should check the Undergraduate Bulletin web site for the most current information about these programs (Academic Programs section), or the TUteach web site at: https://tuteach.cst.temple.edu/.

It is also recommended that all students meet with an advisor before enrolling in classes specific to these majors and leading to certification as a teacher. This is to assure that a candidate's intended program of study will be compatible with the new requirements.

Suggested Semester By Semester Plan

| Year 1 - Fall Semester | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Subject | 1031 | General Chemistry I and | 3 |  |
| Chemistry | 1033 | General Chemistry I Laboratory | 1 |  |
| Chemistry |  | or | 3 |  |
| Chemistry | 1951 | Honors General Chemistry I and | 1 |  |
| Chemistry | 1953 | Honors General Chemistry I Laboratory |  |  |


| Mathematics <br> Mathematics | $\begin{aligned} & 1041 \\ & 1941 \end{aligned}$ | ```Calculus I or Honors Calculus I``` | 4 <br> 4 |  |
| :---: | :---: | :---: | :---: | :---: |
| College of Science \& Technology | 1189 | Step 1: Inquiry Approaches to Teaching | 1 |  |
| General Education / Elective Credits |  |  | 8 |  |
| Subtotal |  |  | 17 |  |
| Year 1 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry Chemistry | $\begin{aligned} & 1032 \\ & 1034 \end{aligned}$ | General Chemistry II and General Chemistry II Laboratory or | $\begin{aligned} & \hline \hline 3 \\ & 1 \end{aligned}$ |  |
| Chemistry | 1952 | Honors General Chemistry II and | 3 |  |
| Chemistry | 1954 | Honors General Chemistry II Laboratory | 1 |  |
| Mathematics <br> Mathematics | $\begin{aligned} & 1042 \\ & 1942 \end{aligned}$ |  | 4 4 |  |
| Physics Physics | $1 \begin{aligned} & 2021 \\ & 1061\end{aligned}$ | ```General Physics I (F) or Elementary Classical Physics I``` | 4 4 |  |
| College of Science \& Technology | 1289 | Step 2: Inquiry-Based Lesson Design with Strategies for English Learners | 1 |  |
| Special Education | 2231 | Introduction to Inclusive Education | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 2-Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 2201 | Organic Chemistry I and | 3 |  |
| Chemistry | 2203 | Organic Chemistry I Laboratory or | 1 |  |
| Chemistry | 2211 | Organic Chemistry I for Majors and | 3 |  |
| Chemistry | 2213 | Organic Chemistry I Laboratory for Majors or | 1 |  |
| Chemistry | 2921 | Honors Organic Chemistry I and | 3 |  |
| Chemistry | 2923 | Honors Organic Chemistry I Laboratory | 1 |  |
| Mathematics | 2043 | Calculus III | 4 |  |
| Physics Physics | $\begin{aligned} & 2022 \\ & 1062 \end{aligned}$ | ```General Physics II (S) or Elementary Classical Physics II``` | 4 4 |  |
| Education | 2179 | Knowing \& Learning in Mathematics \& Science | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 2 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |


| Chemistry | 2202 | Organic Chemistry II and | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Chemistry | 2204 | Organic Chemistry II Laboratory or | 1 |  |
| Chemistry | 2212 | Organic Chemistry II for Majors and | 3 |  |
| Chemistry | 2214 | Organic Chemistry II Laboratory for Majors or | 1 |  |
| Chemistry | 2922 | Honors Organic Chemistry II and | 3 |  |
| Chemistry | 2924 | Honors Organic Chemistry II Laboratory | 1 |  |
| Secondary Education | 3796 | Differentiated Literacy Instruction in the Disciplines, 7-12 | 3 | WI |
| General Education / Elective Credits |  |  | 10 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Year 3-Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 3103 | Techniques of Chemical Measurement I (F) | 3 |  |
| Chemistry | 3105 | Introduction to Chemical Research Techniques (F) | 1 |  |
| Chemistry | 3301 | Physical Chemistry Lecture I | 3 |  |
| Philosophy | 2196 | Perspectives on Science \& Mathematics (F) | 3 | WI |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Year 3 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 3091 | Research Methods (S) | 3 |  |
| Chemistry | 3302 | Physical Chemistry Lecture II | 3 |  |
| ```Math Education (Secondary) or Science Education (Secondary)``` | 2189 | Classroom Interactions | 3 |  |
| General Education / Elective Credits |  |  | 8 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Year 4 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 3001 | Inorganic Chemistry (F) | 3 |  |
| Chemistry <br> Chemistry | $\begin{aligned} & 4196 \\ & 3397 / 3998 \\ & \hline \end{aligned}$ | Techniques of Chemical Measurement II or <br> Physical Chemistry Laboratory I \& II | 5 <br> $2+2$ | WI WI |
| ```Math Education (Secondary) or Science Education (Secondary)``` | 4189 | Project-Based Instruction (F) | 3 |  |
| General Education / Elective Credits |  |  | 6-7 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Year 4 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Education | 4388 | TUteach Apprentice Teaching | 6 |  |
| Education | 4802 | TUteach Apprentice Teaching Seminar | 1 |  |
| General Education / Elective Credits |  |  | 1 |  |
| Subtotal |  |  | 8 |  |


|  |  |  |  |
| :--- | :--- | :--- | :--- |
| Credits in Coursework for B.S. in Chemistry with Teaching | $83-84$ |  |  |
| General Education / Elective Credits | $41-40$ |  |  |
| Total Credits for B.S. Degree | 124 |  |  |

(F) - Fall only course.
(S) - Spring only course.

Students who complete TUteach majors typically receive a waiver for 1 Human Behavior (GB), 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

## Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include Chemistry 1027, for example.

## Distinction in Major

To graduate with a Distinction in Chemistry with Teaching, students must meet the following requirements:

1. Achieve a 3.50 GPA or better for the aggregate of courses required for the B.S. in Chemistry with Teaching.
2. Achieve a 3.33 GPA or better in all the Chemistry courses in their major.
3. Achieve a 3.91 GPA in the following courses: Math/Science Education (Secondary) 2189: Classroom Interactions; Math/Science Education (Secondary) 4189: Project-Based Instruction; Education 4802: TUteach Apprentice Teaching Seminar; and Education 4388: TUteach Apprentice Teaching.

## TUteach - Earth \& Space Science

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## Earth \& Space Science with Teaching

The B.S. with Teaching in Earth \& Space Science is part of Temple's innovative "TUteach" teacher-training program. The B.S. with Teaching provides broad training in Earth \& Space Science, and prepares students for a career in secondary school teaching. The education courses in the B.S. with Teaching include supervised teaching in school district classrooms and emphasize inquiry-based approaches to learning. Students in the B.S. with Teaching degree program become eligible for a Pennsylvania teacher certification when they complete all the requirements for the degree that include theoretical and practical courses in education specifically designed for science and mathematics majors. In order to be recommended for Pennsylvania teacher certification, students must graduate with 1) a B.S with Teaching degree 2) a minimum overall 3.0 GPA and 3) earn passing scores on the state-required Praxis I and Praxis II tests.

Students are encouraged to stay on track to graduate with an overall GPA of 3.0 by meeting once each semester with a TUteach advisor and by meeting the prerequisite GPA for required courses. GPA and prerequisite course requirements insure that students are well prepared for the significant amounts of supervised classroom teaching required in advanced courses. Attention is specifically directed to the prerequisites required to enroll in Project-Based Instruction [Math Education (Secondary) 4189 or Science Education (Secondary) 4189], an advanced course required in all TUteach degrees and recommended to be taken in either the fifth or seventh semester. The prerequisites for this course include entering the course with a GPA of 3.0 and having earned passing scores on the PAPA Test ("Basic Knowledge:" reading, writing, and mathematics).

## Bachelor of Science

## Summary of Requirements for the Degree

1. University Requirements (124 total s.h.)

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writingintensive requirement: Earth \& Environmental Science 2096, Earth \& Environmental Science 3096, Philosophy 2196 and Secondary Education 3796.
- Students must complete the General Education (GenEd) requirements.
o The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.


## 2. College Requirements

- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 45 Upper Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (84-85 s.h.)*

- One (1) Chemistry course with a lab is required (4 s.h.): Chemistry 1031/1033.
- Nine (9) Earth \& Environmental Science courses are required (35 s.h.): Earth \& Environmental Science 2001, 2011, 2096, 3091 and 5 Earth \& Environmental Science electives numbered 2002 or above.
- One (1) Mathematics course is required (4 s.h.): Mathematics 1041.
- Two (2) Physics courses are required (7 s.h.): Physics 1004 and 1061.
- Two (2) Science foundation courses are required (7-8 s.h.): Select the science foundation courses from the following list: Biology 1111, Biology 2112, Chemistry 1032/1034, Chemistry 2201/2203, Mathematics 1042, Mathematics 2031 or Physics 1062.
- Two (2) College of Science \& Technology courses are required (2 s.h.): College of Science \& Technology 1189 and 1289.
- Three (3) Education courses are required (10 s.h.): Education 2179, 4388 and 4802.
- Two (2) Mathematics or Science Education (Secondary) courses are required (6 s.h.): Math/Science Education (Secondary) 2189 and 4189.
- One (1) Secondary Education course is required (3 s.h.): Secondary Education 3796.
- One (1) Special Education course is required (3 s.h.): Special Education 2231.
- One (1) Philosophy course is required (3 s.h.): Philosophy 2196.
* Note: The certification requirements need to meet Pennsylvania Department of Education standards and are subject to change. All students are strongly recommended to check with the TUteach Advisor in the College of Science and Technology, to affirm the requirements that pertain to their specific major. In addition, students should check the Undergraduate Bulletin web site for the most current information about these programs (Academic Programs section), or the TUteach web site at: https://tuteach.cst.temple.edu/.

It is also recommended that all students meet with an advisor before enrolling in classes specific to these majors and leading to certification as a teacher. This is to assure that a candidate's intended program of study will be compatible with the new requirements.

Suggested Semester By Semester Plan

| Year 1 - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Earth \& Environmental Science | 2001 | Physical Geology | 4 |  |
| Mathematics <br> Mathematics | $\begin{aligned} & 1041 \\ & 1941 \end{aligned}$ |  | 4 4 |  |
| College of Science \& Technology | 1189 | Step 1: Inquiry Approaches to Teaching | 1 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 1 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 1031 | General Chemistry I and | 3 |  |
| Chemistry | 1033 | General Chemistry I Laboratory or | 1 |  |
| Chemistry | 1951 | Honors General Chemistry I and | 3 |  |
| Chemistry | 1953 | Honors General Chemistry I Laboratory | 1 |  |
| College of Science \& Technology | 1289 | Step 2: Inquiry-Based Lesson Design with Strategies for English Learners | 1 |  |
| General Education / Elective Credits |  |  | 9 |  |
| Subtotal |  |  | 14 |  |
|  |  |  |  |  |
| Year 2 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Earth \& Environmental Science | 2011 | Mineralogy I (F) | 4 |  |
| Physics | 1061 | Elementary Classical Physics I | 4 |  |


| Education | 2179 | Knowing \& Learning in Mathematics \& Science | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Special Education | 2231 | Introduction to Inclusive Education | 3 |  |
| General Education / Elective Credits |  |  | 3 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Year 2 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Earth \& Environmental Science | 2096 | Climate Change: Oceans To Atmosphere (S) | 4 | WI |
| Physics | 1004 | Introduction to Astronomy | 3 |  |
| Science |  | Science Foundation Elective^ | 3-4 |  |
| Secondary Education | 3796 | Differentiated Literacy Instruction in the Disciplines, 7-12 | 3 | WI |
| General Education / Elective Credits |  |  | 3-2 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 3-Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Earth \& Environmental Science | 2002+ | Earth \& Environmental Science Elective* | 4 |  |
| Science |  | Science Foundation Elective^ | 4 |  |
| Philosophy | 2196 | Perspectives on Science \& Mathematics (F) | 3 | WI |
| General Education / Elective Credits |  |  | 6 |  |
| Subtotal |  |  | 17 |  |

Year 3 - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Earth \& Environmental Science | $2002+$ | Earth \& Environmental Science Elective* | 4 |  |
| Earth \& Environmental Science | $2002+$ | Earth \& Environmental Science Elective* | 4 |  |
| Earth \& Environmental Science | 3091 | Research Methods (S) | 3 |  |
| Math Education (Secondary) <br> or <br> Science Education (Secondary) | 2189 | Classroom Interactions | 3 |  |
| General Education / Elective Credits |  |  | 3 |  |
| Subtotal |  |  | $\mathbf{1 7}$ |  |

Year 4 - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Earth \& Environmental Science | $2002+$ | Earth \& Environmental Science Elective* | 4 |  |
| Earth \& Environmental Science | $2002+$ | Earth \& Environmental Science Elective* | 4 |  |
| Math Education (Secondary) <br> or <br> Science Education (Secondary) | 4189 | Project-Based Instruction (F) | 3 |  |
| General Education / Elective Credits |  |  | 6 |  |
| Subtotal |  |  | $\mathbf{1 7}$ |  |

Year 4 - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Education | 4388 | TUteach Apprentice Teaching | 6 |  |
| Education | 4802 | TUteach Apprentice Teaching Seminar | 1 |  |
| General Education / Elective Credits |  |  | 3 |  |
| Subtotal |  |  | $\mathbf{1 0}$ |  |


|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Credits in Coursework for B.S. in Earth \& Space Science with Teaching | $84-85$ |  |  |  |
| General Education / Elective Credits | $40-39$ |  |  |  |
| Total Credits for B.S. Degree | 124 |  |  |  |

(F) - Fall only course.
(S) - Spring only course.
*Earth \& Environmental Science electives must be numbered 2002 or above.

Students who complete TUteach majors typically receive a waiver for 1 Human Behavior (GB), 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

## ${ }^{\wedge}$ Science Foundation Electives

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Biology | 1111 | Introduction to Biology I <br> or <br> Honors Introduction to Biology I | 4 |  |
| Biology | 2112 | Introduction to Biology II <br> or <br> Honors Introduction to Biology II | 4 | 4 |
| Chemistry | $1032 / 1034$ | General Chemistry II \& Lab <br> or | 4 |  |
| Chemistry | $2201 / 2203$ | Organic Chemistry I \& Lab | 4 |  |
| Mathematics | 1042 | Calculus II | 4 |  |
| Mathematics | 2031 | Probability \& Statistics | 4 |  |
| Physics | 1062 | Elementary Classical Physics II |  |  |
| or |  |  |  |  |
| General Physics II (S) | 4 |  |  |  |

## Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include Chemistry 1027, for example.

## Distinction in Major

To graduate with a Distinction in Earth \& Space Science with Teaching, students must:

1. Achieve a 3.50 GPA or better for the aggregate of courses required for the major.
2. Achieve a 3.50 GPA or better in the content area courses required for the major.
3. Achieve a 3.91 GPA in the following courses: Math/Science Education (Secondary) 2189: Classroom Interactions; Math/Science Education (Secondary) 4189: Project-Based

Instruction; Education 4802: TUteach Apprentice Teaching Seminar; and Education 4388: TUteach Apprentice Teaching.

## TUteach - General Science

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The B.S. with Teaching in General Science is part of Temple's innovative "TUteach" teachertraining program. The B.S. with Teaching provides broad training in General Science, and prepares students for a career in secondary school teaching. The education courses in the B.S. with Teaching include supervised teaching in school district classrooms and emphasize inquirybased approaches to learning. Students in the B.S. with Teaching degree program become eligible for a Pennsylvania teacher certification when they complete all the requirements for the degree that include theoretical and practical courses in education specifically designed for
science and mathematics majors. In order to be recommended for Pennsylvania teacher certification, students must graduate with 1) a B.S with Teaching degree 2) a minimum overall 3.0 GPA and 3) earn passing scores on the state-required Praxis I and Praxis II tests.

Students are encouraged to stay on track to graduate with an overall GPA of 3.0 by meeting once each semester with a TUteach advisor and by meeting the prerequisite GPA for required courses. GPA and prerequisite course requirements insure that students are well prepared for the significant amounts of supervised classroom teaching required in advanced courses. Attention is specifically directed to the prerequisites required to enroll in Project-Based Instruction [Math Education (Secondary) 4189 or Science Education (Secondary) 4189], an advanced course required in all TUteach degrees and recommended to be taken in either the fifth or seventh semester. The prerequisites for this course include entering the course with a GPA of 3.0 and having earned passing scores on the PAPA Test ("Basic Knowledge:" reading, writing, and mathematics).

## Bachelor of Science

## Summary of Requirements for the Degree

1. University Requirements (124 total s.h.)

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writingintensive requirement: Biology 2296, Biology 3096, Biology 3396, Chemistry 4196, the combination of Chemistry 3397 and Chemistry 3398, Earth \& Environmental Science 4096, English 2696, Philosophy 2196, Philosophy 2596, Physics 2796, Physics 4796 and Secondary Education 3796.
- Students must complete the General Education (GenEd) requirements.
o The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.

2. College Requirements

- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 45 Upper Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (80-88 s.h.)*

- Two (2) Biology courses are required (8 s.h.): Biology 1011 and 1012.
- Two (2) Chemistry courses with labs are required (8 s.h.): Chemistry 1031/1033 and 1032/1034.
- One (1) Technical Writing course is required (3 s.h.): English 2696.
- One (1) Earth \& Environmental Science course is required (4 s.h.): Earth \& Environmental Science 1001 or 2001.
- One or Two (1-2) Mathematics course(s) are required (4-8 s.h.): Mathematics 1031 or the combination of Mathematics 1041 and 1042.
- Three (3) Physics courses are required (11 s.h.): Physics 1004, 1021 and 1022.
- Four (4) Upper-Level (2000+) elective science courses are required (12-16 s.h.): The four electives must be selected from the same department. The departments you can choose electives from are: Biology, Chemistry, Earth \& Environmental Science or Physics.
- Two (2) College of Science \& Technology courses are required (2 s.h.): College of Science \& Technology 1189 and 1289.
- Three (3) Education course is required (10 s.h.): Education 2179, 4388 and 4802.
- Two (2) Mathematics or Science Education (Secondary) courses are required (6 s.h.): Math/Science Education (Secondary) 2189 and 4189.
- One (1) Secondary Education course is required (3 s.h.): Secondary Education 3796.
- One (1) Special Education course is required (3 s.h.): Special Education 2231.
- One (1) Philosophy course is required (3 s.h.): Philosophy 2196.
- One (1) Research Methods course is required (3 s.h.): Biology 3091, Chemistry 3091, Earth \& Environmental Science 3091 or Physics 3091. The course must be selected from the same department as the four science electives.
* Note: The certification requirements need to meet Pennsylvania Department of Education standards and are subject to change. All students are strongly recommended to check with the TUteach Advisor in the College of Science and Technology, to affirm the requirements that pertain to their specific major. In addition, students should check the Undergraduate Bulletin web site for the most current information about these programs (Academic Programs section), or the TUteach web site at: https://tuteach.cst.temple.edu/.

It is also recommended that all students meet with an advisor before enrolling in classes specific to these majors and leading to certification as a teacher. This is to assure that a candidate's intended program of study will be compatible with the new requirements.

Note: In addition to the overall major residency requirements, half of the concentration area must be completed at Temple.

## Suggested Semester By Semester Plan

| Year 1-Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 1031 | General Chemistry I and | 3 |  |
| Chemistry | 1033 | General Chemistry I Laboratory or | 1 |  |
| Chemistry | 1951 | Honors General Chemistry I and | 3 |  |
| Chemistry | 1953 | Honors General Chemistry I Laboratory | 1 |  |
| Mathematics | $1031$ | Differential \& Integral Calculus or | 4 |  |
| Mathematics | 1041 or 1941 | Calculus I or Honors Calculus I | 4 |  |
| College of Science \& Technology | 1189 | Step 1: Inquiry Approaches to Teaching | 1 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 1 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Chemistry | 1032 | General Chemistry II and | 3 |  |
| Chemistry | 1034 | General Chemistry II Laboratory or | 1 |  |
| Chemistry | 1952 | Honors General Chemistry II and | 3 |  |
| Chemistry | 1954 | Honors General Chemistry II Laboratory | 1 |  |
| Mathematics | $\begin{aligned} & \hline 1042 \sim \text { or } \\ & 1942 \sim \end{aligned}$ | Calculus II or Honors Calculus II | 4~ |  |
| College of Science \& Technology | 1289 | Step 2: Inquiry-Based Lesson Design with Strategies for English Learners | 1 |  |
| General Education / Elective Credits |  |  | 6-10 |  |
| Subtotal |  |  | 15 |  |
| WNot required if Math 1031 is completed. |  |  |  |  |
|  |  |  |  |  |
| Year 2 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | 1011 | General Biology I (F) | 4 |  |
| Earth \& Environmental Science | $\begin{aligned} & 1001 \\ & 001 \end{aligned}$ | Introductory Geology or | 4 |  |
| Earth \& Environmental Science | 2001 | Physical Geology | 4 |  |
| Special Education | 2231 | Introduction to Inclusive Education | 3 |  |
| Education | 2179 | Knowing \& Learning in Mathematics \& Science | 3 |  |
| General Education / Elective Credits |  |  | 3 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Year 2 - Spring Semester |  |  |  |  |


| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Biology | 1012 | General Biology II (S) | 4 |  |
| Science | $2000+$ | Elective^ | $3-4$ |  |
| English | 2696 | Technical Writing | 3 | WI |
| Secondary Education | 3796 | Differentiated Literacy Instruction in the <br> Disciplines, 7-12 | 3 | WI |
| General Education / Elective Credits |  |  | $4-3$ |  |
| Subtotal |  |  | $\mathbf{1 7}$ |  |

## Year 3 - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Physics | 1021 | Introduction to General Physics I $(F)$ | 4 |  |
| Science | $2000+$ | Elective $\wedge$ | $3-4$ |  |
| Philosophy | 2196 | Perspectives on Science \& Mathematics (F) | 3 | WI |
| General Education / Elective Credits |  |  | $6-5$ |  |
| Subtotal |  |  | $\mathbf{1 6}$ |  |

Year 3 - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Physics | 1022 | Introduction to General Physics II (S) | 4 |  |
| Biology, Chemistry, Physics or <br> Earth \& Environmental Science | 3091 | Research Methods (S) | 3 |  |
| Math Education (Secondary) <br> or <br> Science Education (Secondary) | 2189 | Classroom Interactions | 3 |  |
| General Education / Elective Credits |  |  | 6 |  |
| Subtotal |  |  | $\mathbf{1 6}$ |  |

Year 4 - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Physics | 1004 | Introduction to Astronomy | 3 |  |
| Science | 2000+ | Elective^ | 3-4 |  |
| Science | 2000+ | Elective^ | 3-4 |  |
| ```Math Education (Secondary) or Science Education (Secondary)``` | 4189 | Project-Based Instruction (F) | 3 |  |
| General Education / Elective Credits |  |  | 5-3 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Year 4 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Education | 4388 | TUteach Apprentice Teaching | 6 |  |
| Education | 4802 | TUteach Apprentice Teaching Seminar | 1 |  |
| General Education / Elective Credits |  |  | 3 |  |
| Subtotal |  |  | 10 |  |
|  |  |  |  |  |
| Credits in Coursework for B.S. in General Science with Teaching |  |  | 80-88 |  |
| General Education / Elective Credits |  |  | 44-36 |  |
| Total Credits for B.S. Degree |  |  | 124 |  |

(F) - Fall only course.
(S) - Spring only course.
$\wedge$ The four science electives chosen to satisfy the science concentration must all be 2000 or above and taken in the same department. The research methods course must also be selected from the same department as the four electives. See major requirements above for details.

Students who complete TUteach majors typically receive a waiver for 1 Human Behavior (GB), 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

## Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include Chemistry 1027, for example.

## Distinction in Major

To graduate with a Distinction in General Science with Teaching, students must:

1. Achieve a 3.50 GPA or better for the aggregate of courses required for the B.S. in General Science with Teaching.
2. Achieve a 3.33 GPA or better in all the content area courses in the major.
3. Achieve a 3.91 GPA in the following courses: Math/Science Education (Secondary) 2189: Classroom Interactions; Math/Science Education (Secondary) 4189: Project-Based Instruction; Education 4802: TUteach Apprentice Teaching Seminar; and Education 4388: TUteach Apprentice Teaching.

## TUteach - Mathematics

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## Mathematics with Teaching

The B.S. with Teaching in Mathematics is part of Temple's innovative "TUteach" teachertraining program. The B.S. with Teaching provides broad training in Mathematics, and prepares students for a career in secondary school teaching. The education courses in the B.S. with Teaching include supervised teaching in school district classrooms and emphasize inquiry-based approaches to learning. Students in the B.S. with Teaching degree program become eligible for a Pennsylvania teacher certification when they complete all the requirements for the degree that include theoretical and practical courses in education specifically designed for science and mathematics majors. In order to be recommended for Pennsylvania teacher certification, students must graduate with 1) a B.S with Teaching degree 2) a minimum overall 3.0 GPA and 3) earn passing scores on the state-required Praxis I and Praxis II tests.

Students are encouraged to stay on track to graduate with an overall GPA of 3.0 by meeting once each semester with a TUteach advisor and by meeting the prerequisite GPA for required courses. GPA and prerequisite course requirements insure that students are well prepared for the significant amounts of supervised classroom teaching required in advanced courses. Attention is specifically directed to the prerequisites required to enroll in Project-Based Instruction [Math Education (Secondary) 4189 or Science Education (Secondary) 4189], an advanced course required in all TUteach degrees and recommended to be taken in either the fifth or seventh semester. The prerequisites for this course include entering the course with a GPA of 3.0 and having earned passing scores on the PAPA Test ("Basic Knowledge:" reading, writing, and mathematics).

There are several degree programs in mathematics. The Bachelor of Arts in Mathematics provides a solid mathematical foundation and also allows for the most flexibility. The Bachelor of Science in Mathematics provides an in-depth theoretical background focusing on the traditional core areas of mathematics. This program is suitable preparation for graduate study in mathematics. The Bachelor of Science in Mathematics with Teaching program is aimed at students interested in teaching mathematics at the high school level. This program combines a
solid mathematical foundation with the pedagogical training necessary for success as a high school teacher. This program also satisfies Pennsylvania's teacher certification requirements.

## Bachelor of Science

## Summary of Requirements for the Degree

## 1. University Requirements (124 total s.h.)

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writingintensive requirement: Math 3096, Math 3098, Math 4096, Philosophy 2196 or Secondary Education 3796.
- Students must complete the General Education (GenEd) requirements.
o The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.

2. College Requirements

- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 45 Upper Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (87 s.h.)*

- One (1) Computer \& Information Science course is required (4 s.h.): Computer \& Information Science 1053, 1057 or 1068.
- Fourteen (14) Mathematics courses are required (45 s.h.): Mathematics 1041, 1042, 2021, 2043, 2101, 3003, 3031, 3061, 3096, 3137, 3138, 4096 and two (2) Mathematics electives at the 3000 level or above (Mathematics 2111 can count for one of the Mathematics 3000+ electives, provided it is taken prior to Mathematics 3098 and 3141).
- Two (2) Physics courses are required (8 s.h.): Physics 1061 or 2021, and 1062 or 2022.
- Two (2) College of Science \& Technology courses are required (2 s.h.): College of Science \& Technology 1189 and 1289.
- Three (3) Education courses are required (10 s.h.): Education 2179, 4388 and 4802.
- Two (2) Mathematics or Science Education (Secondary) courses are required (6 s.h.): Math/Science Education (Secondary) 2189 and 4189.
- One (1) Secondary Education course is required (3 s.h.): Secondary Education 3796.
- One (1) Philosophy course is required (3 s.h.): Philosophy 2196.
- One (1) Special Education course is required (3 s.h.): Special Education 2231.
- One (1) Research Methods course is required (3 s.h.): Biology 3091, Chemistry 3091, Earth \& Environmental Science 3091 or Physics 3091.
* Note: The certification requirements need to meet Pennsylvania Department of Education standards and are subject to change. All students are strongly recommended to check with the TUteach Advisor in the College of Science and Technology, to affirm the requirements that pertain to their specific major. In addition, students should check the Undergraduate Bulletin web site for the most current information about these programs (Academic Programs section), or the TUteach web site at: https://tuteach.cst.temple.edu/.

It is also recommended that all students meet with an advisor before enrolling in classes specific to these majors and leading to certification as a teacher. This is to assure that a candidate's intended program of study will be compatible with the new requirements.

Suggested Semester By Semester Plan

| Year 1 - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics Mathematics | 1041 <br> 1941 |  | 4 4 |  |
| Computer \& Information Science | 1053 | Programming in Matlab or | 4 |  |
| Computer \& Information Science | 1057 | Computer Programming in C or | 4 |  |
| Computer \& Information Science | 1068 | Program Design \& Abstraction | 4 |  |
| College of Science \& Technology | 1189 | Step 1: Inquiry Approaches to Teaching | 1 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 1 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics <br> Mathematics | $\begin{aligned} & 1042 \\ & 1942 \end{aligned}$ | Calculus II or Honors Calculus II | 4 4 |  |
|  | $\begin{array}{r} 1061 \\ 2021 \end{array}$ | ```Elementary Classical Physics I or General Physics I``` | 4 4 |  |
| Physics | 2021 | General Physics I | 4 |  |
| College of Science \& Technology | 1289 | Step 2: Inquiry Based Lesson Design with Strategies for English Learners | 1 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 16 |  |


| Year 2-Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 2043 | Calculus III | 4 |  |
| Mathematics | 2101 | Linear Algebra | 3 |  |
| Physics | 1062 | Elementary Classical Physics II or | 4 |  |
| Physics | 2022 | General Physics II | 4 |  |
| Education | 2179 | Knowing \& Learning in Mathematics \& Science | 3 |  |
| Special Education | 2231 | Introduction to Inclusive Education | 3 |  |
| Subtotal |  |  | 17 |  |
| Year 2 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 2021 | Functions \& Modeling | 3 |  |
| Mathematics | 3003 | Theory of Numbers | 3 |  |
| Mathematics | $\begin{aligned} & \hline 2111 \\ & \text { or } \\ & \text { Math } \\ & \text { Elective } \\ & \hline \end{aligned}$ | Basic Concepts of Math or 3000+ Math Elective~ | $\begin{aligned} & \hline 3 \\ & 3 \end{aligned}$ |  |
| Math Education (Secondary) <br> or <br> Science Education (Secondary) | 2189 | Classroom Interactions | 3 |  |
| General Education / Elective Credits |  |  | 4 |  |
| Subtotal |  |  | 16 |  |
| ~Math 2111 can count for one of the Math 3000+ electives, provided it is taken prior to Math 3098 and Math 3141. |  |  |  |  |
|  |  |  |  |  |
| Year 3 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 3031 | Probability Theory I | 3 |  |
| Mathematics | 3137 | Real \& Complex Analysis I (F) | 3 |  |
| Secondary Education | 3796 | Differentiated Literacy Instruction in the Disciplines, 7-12 | 3 |  |
| Philosophy | 2196 | Perspectives on Science \& Mathematics (F) | 3 | WI |
| General Education / Elective Credits |  |  | 4 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 3 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 3096 | Introduction to Modern Algebra (S) | 3 | WI |
| Mathematics | 3138 | Real \& Complex Analysis II (S) | 3 |  |
| Biology, Chemistry, Physics or Earth \& Environmental Science | 3091 | Research Methods (S) | 3 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 4 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 3061 | Modern Geometry I (F) | 3 |  |
| Mathematics |  | 3000+ Math Elective | 3 |  |


| Math Education (Secondary) <br> or <br> Science Education (Secondary) | 4189 | Project-Based Instruction (F) | 3 |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
| General Education / Elective Credits |  |  | 8 |  |  |
| Subtotal |  |  | $\mathbf{1 7}$ |  |  |
|  |  |  |  |  |  |
| Year 4 - Spring Semester |  |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |  |
| Mathematics | 4096 | Senior Problem Solving (S) | 3 | WI |  |
| Education | 4388 | TUteach Apprentice Teaching | 6 |  |  |
| Education | 4802 | TUteach Apprentice Teaching Seminar | 1 |  |  |
| Subtotal |  |  | $\mathbf{1 0}$ |  |  |
|  |  |  |  |  |  |
| Credits in Coursework for B.S. in Mathematics with Teaching | $\mathbf{8 7}$ |  |  |  |  |
| General Education / Elective Credits | $\mathbf{3 7}$ |  |  |  |  |
| Total Credits for B.S. Degree | $\mathbf{1 2 4}$ |  |  |  |  |

(F) - Fall course only.
(S) - Spring course only.

Students who complete TUteach majors typically receive a waiver for 1 Human Behavior (GB), 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

## Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include Mathematics 1022, for example.

## Distinction in Major

To graduate with a Distinction in Mathematics with Teaching, students must:

1. Achieve a 3.50 GPA or better in the mathematics courses required for the B.S. in Mathematics with Teaching.
2. Achieve an overall GPA, including all college-level courses, of at least 3.25.
3. Complete Mathematics 3141, Mathematics 3142 and Mathematics 4051 instead of Mathematics 3137 and Mathematics 3138, as well as Mathematics 3098 instead of Mathematics 3096.
4. Achieve a GPA of 3.50 or higher in Mathematics 3141, Mathematics 3142, Mathematics 3098, Mathematics 4051 and any additional courses from the following list: Mathematics 3043, Mathematics 3044, Mathematics 3101, and any 4000-level course other than individual study.
5. Achieve a 3.91 GPA in the following courses: Math/Science Education (Secondary) 2189: Classroom Interactions; Math/Science Education (Secondary) 4189: Project-Based

Instruction; Education 4802: TUteach Apprentice Teaching Seminar; and Education 4388: TUteach Apprentice Teaching.

## TUteach - Mathematics \& Computer Science

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## Mathematics \& Computer Science with Teaching

The B.S. with Teaching in Mathematics and Computer Science is part of Temple's innovative "TUteach" teacher-training program. The B.S. with Teaching provides broad training in Mathematics and Computer Science, and prepares students for a career in secondary school teaching. The education courses in the B.S. with Teaching include supervised teaching in school district classrooms and emphasize inquiry-based approaches to learning. Students in the B.S. with Teaching degree program become eligible for a Pennsylvania teacher certification when they complete all the requirements for the degree that include theoretical and practical courses in education specifically designed for science and mathematics majors. In order to be recommended for Pennsylvania teacher certification, students must graduate with 1) a B.S with Teaching degree 2) a minimum overall 3.0 GPA and 3 ) earn passing scores on the state-required Praxis I and Praxis II tests.

Students are encouraged to stay on track to graduate with an overall GPA of 3.0 by meeting once each semester with a TUteach advisor and by meeting the prerequisite GPA for required courses. GPA and prerequisite course requirements insure that students are well prepared for the significant amounts of supervised classroom teaching required in advanced courses. Attention is specifically directed to the prerequisites required to enroll in Project-Based Instruction [Math Education (Secondary) 4189 or Science Education (Secondary) 4189], an advanced course required in all TUteach degrees and recommended to be taken in either the fifth or seventh semester. The prerequisites for this course include entering the course with a GPA of 3.0 and having earned passing scores on the PAPA Test ("Basic Knowledge:" reading, writing, and mathematics).

## Bachelor of Science

## Summary of Requirements for the Degree

1. University Requirements (124 total s.h.)

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writingintensive requirement: Mathematics 3096, Mathematics 4096, Philosophy 2196 or Secondary Education 3796.
- Students must complete the General Education (GenEd) requirements.
o The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.


## 2. College Requirements

- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 45 Upper Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (94 s.h.)*

- Five (5) Computer \& Information Science courses are required (20 s.h.): Computer \& Information Science 1068, 1166, 2107, 2166, and 2168.
- Eleven (11) Mathematics courses are required (36 s.h.): Mathematics 1041 or 1941, 1042 or 1942, 2021, 2043, 2101, 3003, 3061, 3096, 3137, 3138 and 4096.
- Two (2) Physics courses are required (8 s.h.): Physics 1061 or 2021, and 1062 or 2022.
- Two (2) College of Science \& Technology courses are required (2 s.h.): College of Science \& Technology 1189 and 1289.
- Three (3) Education courses are required (10 s.h.): Education 2179, 4388 and 4802.
- Two (2) Mathematics or Science Education (Secondary) courses are required (6 s.h.): Math/Science Education (Secondary) 2189 and 4189.
- One (1) Secondary Education course is required (3 s.h.): Secondary Education 3796.
- One (1) Philosophy course is required (3 s.h.): Philosophy 2196.
- One (1) Special Education course is required (3 s.h.): Special Education 2231.
- One (1) Research Methods course is required (3 s.h.): Biology 3091, Chemistry 3091, Earth \& Environmental Science 3091 or Physics 3091.
* Note: The certification requirements need to meet Pennsylvania Department of Education standards and are subject to change. All students are strongly recommended to check with the TUteach Advisor in the College of Science and Technology, to affirm the requirements that pertain to their specific major. In addition, students should check the Undergraduate Bulletin web site for the most current information about these programs (Academic Programs section), or the TUteach web site at: https://tuteach.cst.temple.edu/.

It is also recommended that all students meet with an advisor before enrolling in classes specific to these majors and leading to certification as a teacher. This is to assure that a candidate's intended program of study will be compatible with the new requirements.

Suggested Semester By Semester Plan

## Year 1 - Fall Semester

| Subject | Course \# | Course Title | Hours |
| :--- | :--- | :--- | :--- |


| Computer \& Information Science | 1068 | Program Design \& Abstraction | 4 |  |
| :---: | :---: | :---: | :---: | :---: |
| Mathematics <br> Mathematics | $\begin{aligned} & 1041 \\ & 1941 \end{aligned}$ |  | 4 4 |  |
| Physics | 1061 | Elementary Classical Physics I | 4 |  |
| College of Science \& Technology | 1189 | Step 1: Inquiry Approaches to Teaching | 1 |  |
| General Education / Elective Credits |  |  | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 1 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Computer \& Information Science | 1166 | Mathematical Concepts in Computing I | 4 |  |
| Mathematics <br> Mathematics | $\begin{aligned} & 1042 \\ & 1942 \end{aligned}$ | Calculus II <br> or <br> Honors Calculus II | 4 4 |  |
| Physics | 1062 | Elementary Classical Physics II | 4 |  |
| College of Science \& Technology | 1289 | Step 2: Inquiry-Based Lesson Design with Strategies for English Learners | 1 |  |
| General Education / Elective Credits |  |  | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 2 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Computer \& Information Science | 2168 | Data Structures | 4 |  |
| Mathematics | 2043 | Calculus III | 4 |  |
| Mathematics | 2101 | Linear Algebra | 3 |  |
| Education | 2179 | Knowing \& Learning in Mathematics \& Science | 3 |  |
| General Education / Elective Credits |  |  | 3 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Year 2 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Computer \& Information Science | 2107 | Computer Systems \& Low-Level Programming | 4 |  |
| Mathematics | 2021 | Functions \& Modeling | 3 |  |
| Mathematics | 3003 | Theory of Numbers | 3 |  |
| Special Education | 2231 | Introduction to Inclusive Education | 3 |  |
| General Education / Elective Credits |  |  | 4 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Year 3-Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 3137 | Real \& Complex Analysis I (F) | 3 |  |
| Secondary Education | 3796 | Differentiated Literacy Instruction in the Disciplines, 7-12 | 3 | WI |
| Philosophy | 2196 | Perspectives on Science \& Mathematics (F) | 3 | WI |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 3 - Spring Semester |  |  |  |  |
| Subject | Course \# Course Title |  | Hours | Hours Attribute |


| Computer \& Information Science | 2166 | Mathematical Concepts in Computing II | 4 |  |
| :---: | :---: | :---: | :---: | :---: |
| Mathematics | 3096 | Introduction to Modern Algebra (S) | 3 | WI |
| Mathematics | 3138 | Real \& Complex Analysis II (S) | 3 |  |
| ```Math Education (Secondary) or Science Education (Secondary)``` | 2189 | Classroom Interactions | 3 |  |
| Biology, Chemistry, Physics or Earth \& Environmental Science | 3091 | Research Methods (S) | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 4 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 3061 | Modern Geometry I (F) | 3 |  |
| ```Math Education (Secondary) or Science Education (Secondary)``` | 4189 | Project-Based Instruction (F) | 3 |  |
| General Education / Elective Credits |  |  | 10 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 4 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 4096 | Senior Problem Solving (S) | 3 | WI |
| Education | 4388 | TUteach Apprentice Teaching | 6 |  |
| Education | 4802 | TUteach Apprentice Teaching Seminar | 1 |  |
| Subtotal |  |  | 10 |  |
|  |  |  |  |  |
| Credits in Coursework for B.S. in Mathematics/Computer Science with Teaching |  |  | 94 |  |
| General Education / Elective Credits |  |  | 30 |  |
| Total Credits for B.S. Degree |  |  | 124 |  |

(F) - Fall course only.
(S) - Spring course only.

Students who complete TUteach majors typically receive a waiver for 1 Human Behavior (GB), 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

## Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include Mathematics 1022, for example.

## Distinction in Major

To graduate with a Distinction in Mathematics and Computer Science with Teaching, a student should meet the following requirements:

1. Achieve a 3.50 GPA or better for the aggregate of courses required for the B.S. in Mathematics and Computer Science with Teaching.
2. Achieve a 3.50 GPA or better in the Mathematics and Computer Science with Teaching content courses required for the major.
3. Achieve an overall GPA, including all college-level courses, of at least 3.25.
4. Complete Mathematics 3141, Mathematics 3142 and Mathematics 4051 instead of Mathematics 3137 and Mathematics 3138, as well as Mathematics 3098 instead of Mathematics 3096.
5. A student must achieve a GPA of 3.50 or higher in Mathematics 3141, Mathematics 3142, Mathematics 3098, Mathematics 4051 and any additional courses from the following list: Mathematics 3043, Mathematics 3044, Mathematics 3101, and any 4000level course other than individual study.
6. Achieve a 3.91 GPA in the following courses: Math/Science Education (Secondary) 2189: Classroom Interactions; Math/Science Education (Secondary) 4189: Project-Based Instruction; Education 4802: TUteach Apprentice Teaching Seminar; Education 4388: TUteach Apprentice Teaching.

## TUteach - Mathematics \& Technology

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## Mathematics \& Technology with Teaching

The B.S. with Teaching in Mathematics and Technology is part of Temple's innovative "TUteach" teacher-training program. The B.S. with Teaching provides broad training in Mathematics and Engineering, and prepares students for a career in secondary school teaching. The education courses in the B.S. with Teaching include supervised teaching in school district classrooms and emphasize inquiry-based approaches to learning. Students in the B.S. with Teaching degree program become eligible for a Pennsylvania teacher certification when they complete all the requirements for the degree that include theoretical and practical courses in education specifically designed for science and mathematics majors. In order to be recommended for Pennsylvania teacher certification, students must graduate with 1) a B.S with Teaching degree 2) a minimum overall 3.0 GPA and 3) earn passing scores on the state-required Praxis I and Praxis II tests.

Students are encouraged to stay on track to graduate with an overall GPA of 3.0 by meeting once each semester with a TUteach advisor and by meeting the prerequisite GPA for required courses. GPA and prerequisite course requirements insure that students are well prepared for the significant amounts of supervised classroom teaching required in advanced courses. Attention is specifically directed to the prerequisites required to enroll in Project-Based Instruction [Math Education (Secondary) 4189 or Science Education (Secondary) 4189], an advanced course required in all TUteach degrees and recommended to be taken in either the fifth or seventh semester. The prerequisites for this course include entering the course with a GPA of 3.0 and having earned passing scores on the PAPA Test ("Basic Knowledge:" reading, writing, and mathematics).

## Bachelor of Science

## Summary of Requirements for the Degree

1. University Requirements (124 total s.h.)

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writingintensive requirement: Mathematics 3096, Mathematics 4096, Philosophy 2196 or Secondary Education 3796.
- Students must complete the General Education (GenEd) requirements.
o The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.

2. College Requirements

- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 45 Upper Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (94-96 s.h.)*

- Fourteen (14) Mathematics courses are required ( 45 s.h.): Mathematics 1041 or 1941, 1042 or 1942, 2021, 2043, 2101, 3003, 3031, 3061, 3096, 3137, 3138, 4096 and two (2) Mathematics electives at the 3000 level or above (Mathematics 2111 can count for one of the Mathematics 3000+ electives, provided it is taken prior to Mathematics 3098 and 3141).
- Two (2) Physics or Chemistry courses** are required (8 s.h.): Physics 1061 or 2021, and 1062 or 2022 OR Chemistry 1031/1033 and 1032/1034.
- Two (2) Engineering foundation courses are required (5 s.h.): Engineering 1102 and 1117.
- Two (2) Engineering concentration courses within the same track are required (6-8 s.h.):
o Track 1 - Environment: Earth \& Environmental Science 2001 and [Civil Engineering 2711 or Civil Engineering 3711]
o Track 2 - Robotics: Electrical Engineering 2312 \& 2313 and Electrical Engineering 2612 \& 2613
o Track 3 - Energy: Engineering 3571 and [Mechanical Engineering 4575 or Mechanical Engineering 4576]
o Track 4 - Bioengineering: Bioengineering 2001 and [Bioengineering 3725 or Biology 3334]
- Two (2) College of Science \& Technology courses are required (2 s.h.): College of Science \& Technology 1189 and 1289.
- Three (3) Education courses are required (10 s.h.): Education 2179, 4388 and 4802.
- Two (2) Mathematics or Science Education (Secondary) courses are required (6 s.h.): Math/Science Education (Secondary) 2189 and 4189.
- One (1) Secondary Education course is required (3 s.h.): Secondary Education 3796.
- One (1) Philosophy course is required (3 s.h.): Philosophy 2196.
- One (1) Special Education course is required (3 s.h.): Special Education 2231.
- One (1) Research Methods course is required (3 s.h.): Biology 3091, Chemistry 3091, Earth \& Environmental Science 3091 or Physics 3091.
* Note: The certification requirements need to meet Pennsylvania Department of Education standards and are subject to change. All students are strongly recommended to check with the TUteach Advisor in the College of Science and Technology, to affirm the requirements that pertain to their specific major. In addition, students should check the Undergraduate Bulletin web site for the most current information about these programs (Academic Programs section), or the TUteach web site at: https://tuteach.cst.temple.edu/.
** Note: Most Engineering concentration courses require either Chemistry or Physics as a prerequisite, so students should choose the course that best prepares them for their intended track.

It is also recommended that all students meet with an advisor before enrolling in classes specific to these majors and leading to certification as a teacher. This is to assure that a candidate's intended program of study will be compatible with the new requirements.

Suggested Semester By Semester Plan

| Year 1-Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics <br> Mathematics | $\begin{array}{r} 1041 \\ 1941 \\ \hline \end{array}$ | Calculus I <br> or <br> Honors Calculus I | $4$ <br> 4 |  |
| Physics <br> or <br> Chemistry | 1061 <br> $1031 / 1033$ <br> 1189 | Elementary Classical Physics I or <br> General Chemistry I and Lab | 4 <br> 4 |  |
| College of Science \& Technology | 1189 | Step 1: Inquiry Approaches to Teaching | 1 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 1 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics <br> Mathematics | $\begin{aligned} & 1042 \\ & 1942 \end{aligned}$ |  | $4$ <br> 4 |  |
| $\begin{aligned} & \hline \text { Physics } \\ & \text { or } \\ & \text { Chemistry } \\ & \hline \hline \end{aligned}$ | 1062 <br> $1032 / 1034$ | Elementary Classical Physics II or <br> General Chemistry II and Lab | 4 <br> 4 |  |


| College of Science \& Technology | 1289 | Step 2: Inquiry-Based Lesson Design with Strategies for English Learners | 1 |  |
| :---: | :---: | :---: | :---: | :---: |
| Engineering | 1102 | Introduction to Engineering | 3 |  |
| General Education / Elective Credits |  |  | 4 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 2 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 2043 | Calculus III | 4 |  |
| Mathematics | 2101 | Linear Algebra | 3 |  |
| Engineering | 1117 | Engineering Graphics | 2 |  |
| Education | 2179 | Knowing \& Learning in Mathematics \& Science | 3 |  |
| General Education / Elective Credits |  |  | 5 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Year 2 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 2021 | Functions \& Modeling | 3 |  |
| Mathematics | 3003 | Theory of Numbers | 3 |  |
| Mathematics | 3031 | Probability Theory I | 3 |  |
| Special Education | 2231 | Introduction to Inclusive Education | 3 |  |
| General Education / Elective Credits |  |  | 5 |  |
| Subtotal |  |  | 17 |  |

Year 3 - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Mathematics | 3137 | Real \& Complex Analysis I (F) | 3 |  |
| Mathematics |  | Mathematics Elective (3000+) | 3 |  |
| Engineering Concentration |  | Elective* | $3-4$ |  |
| Secondary Education | 3796 | Differentiated Literacy Instruction in the <br> Disciplines, 7-12 | 3 | WI |
| Philosophy | 2196 | Perspectives on Science \& Mathematics (F) | 3 | WI |
| General Education / Elective Credits |  |  | $1-0$ |  |
| Subtotal |  |  | $\mathbf{1 6}$ |  |

Year 3 - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Mathematics | 3096 | Introduction to Modern Algebra (S) | 3 | WI |
| Mathematics | 3138 | Real \& Complex Analysis II (S) | 3 |  |
| ```Math Education (Secondary) or Science Education (Secondary)``` | 2189 | Classroom Interactions | 3 |  |
| Biology, Chemistry, Physics or Earth \& Environmental Science | 3091 | Research Methods (S) | 3 |  |
| Engineering Concentration |  | Elective* | 3-4 |  |
| General Education / Elective Credits |  |  | 1-0 |  |
| Subtotal |  |  | 16 |  |

Year 4 - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Mathematics |  | Mathematics Elective (3000+) | 3 |  |
| Mathematics | 3061 | Modern Geometry I (F) | 3 |  |
| ```Math Education (Secondary) or Science Education (Secondary)``` | 4189 | Project-Based Instruction (F) | 3 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 4 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 4096 | Senior Problem Solving (S) | 3 | WI |
| Education | 4388 | TUteach Apprentice Teaching | 6 |  |
| Education | 4802 | TUteach Apprentice Teaching Seminar | 1 |  |
| Subtotal |  |  | 10 |  |
|  |  |  |  |  |
| Credits in Coursework for B.S. in Mathematics/Computer Science with Teaching |  |  | 94-96 |  |
| General Education / Elective Credits |  |  | 30-28 |  |
| Total Credits for B.S. Degree |  |  | 124 |  |

(F) - Fall course only.
(S) - Spring course only.
*NOTE: The two (2) Engineering concentration electives must be chosen from the same track. See major requirements above for details.

Students who complete TUteach majors typically receive a waiver for 1 Human Behavior (GB), 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

## Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include Math 1022, for example.

## Distinction in Major

To graduate with a Distinction in Mathematics and Technology with Teaching, a student should meet the following requirements:

1. Achieve a 3.50 GPA or better for the aggregate of courses required for the B.S. in Mathematics and Technology with Teaching.
2. Achieve a 3.50 GPA for the aggregate of CST content courses required for the B.S. in Mathematics and Technology with Teaching.
3. Achieve a 3.50 GPA for the aggregate of Engineering content courses required for B.S. in Mathematics and Technology with Teaching.
4. Achieve an overall GPA, including all college-level courses, of at least 3.25.
5. Complete Mathematics 3141, Mathematics 3142 and Mathematics 4051 instead of Mathematics 3137 and Mathematics 3138, as well as Mathematics 3098 instead of Mathematics 3096.
6. A student must achieve a GPA of 3.50 or higher in Mathematics 3141, Mathematics 3142, Mathematics 3098, Mathematics 4051 and any additional courses from the following list: Mathematics 3043, Mathematics 3044, Mathematics 3101, and any 4000level course other than individual study.
7. Achieve a 3.91 GPA in the following courses: Math/Science Education (Secondary) 2189: Classroom Interactions; Math/Science Education (Secondary) 4189: Project-Based Instruction; Education 4802: TUteach Apprentice Teaching Seminar; and Education 4388: TUteach Apprentice Teaching.

## TUteach - Physics

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## Physics with Teaching

The B.S. with Teaching in Physics is part of Temple's innovative "TUteach" teacher-training program. The B.S. with Teaching provides broad training in Physics, and prepares students for a career in secondary school teaching. The education courses in the B.S. with Teaching include supervised teaching in school district classrooms and emphasize inquiry-based approaches to learning. Students in the B.S. with Teaching degree program become eligible for a Pennsylvania teacher certification when they complete all the requirements for the degree that include theoretical and practical courses in education specifically designed for science and mathematics majors. In order to be recommended for Pennsylvania teacher certification, students must graduate with 1) a B.S with Teaching degree 2) a minimum overall 3.0 GPA and 3 ) earn passing scores on the state-required Praxis I and Praxis II tests.

Students are encouraged to stay on track to graduate with an overall GPA of 3.0 by meeting once each semester with a TUteach advisor and by meeting the prerequisite GPA for required courses. GPA and prerequisite course requirements insure that students are well prepared for the significant amounts of supervised classroom teaching required in advanced courses. Attention is specifically directed to the prerequisites required to enroll in Project-Based Instruction [Math Education (Secondary) 4189 or Science Education (Secondary) 4189], an advanced course required in all TUteach degrees and recommended to be taken in either the fifth or seventh semester. The prerequisites for this course include entering the course with a GPA of 3.0 and having earned passing scores on the PAPA Test ("Basic Knowledge:" reading, writing, and mathematics).

## Bachelor of Science

## Summary of Requirements for the Degree

## 1. University Requirements (124 total s.h.)

- Mathematics 0701 (4 s.h.) and/or English 0701 (4 s.h.), if required by placement testing.
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. Following is a list of courses that can be used to satisfy the writingintensive requirement: Earth \& Environmental Science 2096, Earth \& Environmental Science 4096, Philosophy 2196, Physics 2796, Physics 4796 and Secondary Education 3796.
- Students must complete the General Education (GenEd) requirements.
o The General Education Curriculum consists of approximately 25-26 s.h. See the General Education section of the Undergraduate Bulletin for the GenEd curriculum.


## 2. College Requirements

- 90 credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).
- 45 Upper Level (2000+) credits within the College of Science \& Technology (CST) or the College of Liberal Arts (CLA).

3. Major Requirements for Bachelor of Science (85 s.h.)*

- Three (3) Mathematics courses are required (12 s.h.): Mathematics 1041, 1042 and 2043.
- Eleven (11) Physics courses are required (38 s.h.): Physics 1061 or 2021, 1062 or 2022, 2101, 2502, 2796, 3091, 3301, 4796 and three (3) Physics electives. The three physics electives must be selected from the following list: Physics 0846, 2501, 3101, 3302, 3701, $4101,4301,4302,4701$ or 4702.
- Two (2) sequenced science courses outside the Department of Physics are required (8 s.h.): Biology 1011 and 1012, Biology 1111 and 2112, Chemistry 1031/1033 and 1032/1034 or Earth \& Environmental Science 2001 and an Earth \& Environmental Science 2002+ Elective.
- Two (2) College of Science \& Technology courses are required (2 s.h.): College of Science \& Technology 1189 and 1289.
- Three (3) Education courses are required (10 s.h.): Education 2179, 4388 and 4802.
- Two (2) Mathematics or Science Education (Secondary) courses are required (6 s.h.): Math/Science Education (Secondary) 2189 and 4189.
- One (1) Secondary Education course is required (3 s.h.): Secondary Education 3796.
- One (1) Special Education course is required (3 s.h.): Special Education 2231.
- One (1) Philosophy course is required (3 s.h.): Philosophy 2196.
* Note: The certification requirements need to meet Pennsylvania Department of Education standards and are subject to change. All students are strongly recommended to check with the TUteach Advisor in the College of Science and Technology, to affirm the requirements that pertain to their specific major. In addition, students should check the Undergraduate Bulletin web site for the most current information about these programs (Academic Programs section), or the TUteach web site at: https://tuteach.cst.temple.edu/.

It is also recommended that all students meet with an advisor before enrolling in classes specific to these majors and leading to certification as a teacher. This is to assure that a candidate's intended program of study will be compatible with the new requirements.

## Suggested Semester By Semester Plan

| Year 1 - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics <br> Mathematics | $\begin{aligned} & 1041 \\ & 1941 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Calculus I } \\ & \text { or } \\ & \text { Honors Calculus I } \\ & \hline \end{aligned}$ | $\overline{4}$ <br> 4 |  |
| Physics | 1061 | Elementary Classical Physics I | 4 |  |
| College of Science \& Technology | 1189 | Step 1: Inquiry Approaches to Teaching | 1 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 1 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics <br> Mathematics | $\begin{aligned} & 1042 \\ & 1942 \end{aligned}$ |  | $\overline{4}$ <br> 4 |  |
| Physics | 1062 | Elementary Classical Physics II | 4 |  |
| College of Science \& Technology | 1289 | Step 2: Inquiry-Based Lesson Design with Strategies for English Learners | 1 |  |
| General Education / Elective Credits |  |  | 7 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 2 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 2043 | Calculus III | 4 |  |
| Education | 2179 | Knowing \& Learning in Mathematics \& Science | 3 |  |
| Special Education | 2231 | Introduction to Inclusive Education | 3 |  |
| General Education / Elective Credits |  |  | 6 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 2 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Physics | 2101 | Classical Mechanics (S) | 3 |  |
| Physics | 2502 | Mathematical Physics (S) | 4 |  |
| Physics | 2796 | Introduction to Modern Physics (S) | 4 | WI |
| General Education / Elective Credits |  |  | 6 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Year 3 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Physics | 3301 | Electricity \& Magnetism (F) | 4 |  |
| Physics |  | Physics Elective^^ | 3 |  |
| Science |  | Sequenced Science Part 1^ | 4 |  |
| Secondary Education | 3796 | Differentiated Literacy Instruction in the Disciplines, 7-12 | 3 | WI |
| Philosophy | 2196 | Perspectives on Science \& Mathematics (F) | 3 | WI |
| Subtotal |  |  | 17 |  |
| Year 3 - Spring Semester |  |  |  |  |


| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Physics |  | Physics Elective^^ | 3 |  |
| Physics | 3091 | Research Methods (S) | 3 |  |
| Physics | 4796 | Experimental Physics (S) | 3 | WI |
| ```Math Education (Secondary) or Science Education (Secondary)``` | 2189 | Classroom Interactions | 3 |  |
| General Education / Elective Credits |  |  | 4 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 4 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Physics |  | Physics Elective^^ | 3 |  |
| Science |  | Sequenced Science Part 2^ | 4 |  |
| ```Math Education (Secondary) or Science Education (Secondary)``` | 4189 | Project-Based Instruction (F) | 3 |  |
| General Education / Elective Credits |  |  | 6 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 4 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Education | 4388 | TUteach Apprentice Teaching | 6 |  |
| Education | 4802 | TUteach Apprentice Teaching Seminar | 1 |  |
| General Education / Elective Credits |  |  | 3 |  |
| Subtotal |  |  | 10 |  |
|  |  |  |  |  |
| Credits in Coursework for B.S. in Physics with Teaching |  |  | 85 |  |
| General Education / Elective Credits |  |  | 39 |  |
| Total Credits for B.S. Degree |  |  | 124 |  |

(F) - Fall only course.
(S) - Spring only course.

Students who complete TUteach majors typically receive a waiver for 1 Human Behavior (GB), 2 Science \& Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.

## ${ }^{\wedge}$ Sequenced Science Options

Students are required to take a two-semester sequence of laboratory science electives not within physics. The science courses can be chosen from Biology, Chemistry or Earth \& Environmental Science from the following list:

| Science Electives |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | 1011 | General Biology I |  |  |
| and |  |  |  |  |
| Biology | 1012 | General Biology II | 4 |  |
|  |  | OR | 4 |  |


| Biology | 1111 | Introduction to Biology <br> and <br> Introduction to Biology | 4 |  |
| :--- | :--- | :--- | :---: | :---: |
| Biology | 2112 | OR |  |  |
|  | $1031 \& 1033$ | General Chemistry I and Lab <br> and <br> General Chemistry II and Lab | 4 |  |
| Chemistry | $1032 \& 1034$ | OR | 4 |  |
| Chemistry |  | Physical Geology <br> and <br> $2002+$ Earth \& Environmental Science Elective | 4 | 4 |
| Earth \& Environmental Science | 2001 |  |  |  |

## ^^Physics Electives

Students are required to take three advanced physics electives selected from the following list:

| Physics Electives |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Physics | 0846 | The Universe As We Know It | 3 | GS |
| Physics | 2501 | Computing for Scientists (F) | 3 |  |
| Physics | 3101 | Analytical Mechanics (F) | 3 |  |
| Physics | 3302 | Classical Electromagnetism (S) | 3 |  |
| Physics | 3701 | Introduction to Quantum Mechanics (S) | 3 |  |
| Physics | 4101 | Thermodynamics \& Kinetic Theory (F) | 3 |  |
| Physics | 4301 | Electronics (S) | 3 |  |
| Physics | 4302 | Optics $(F)$ | 3 |  |
| Physics | 4701 | Introduction to Solid State Physics $(S)$ | 3 |  |
| Physics | 4702 | Introduction to Atomic, Nuclear, \& Particle Physics $(F)$ | 3 |  |

## Calculation of Major GPA

The list of courses that are used to calculate major GPA is determined by the department. Students should consult with their academic advising unit for the applicable courses. In general, courses that could not apply toward the major as an elective or a required course are not counted for the major GPA. This would include Mathematics 1022, for example.

## Distinction in Major

To graduate with a Distinction in Physics with Teaching, students must:

1. Achieve a 3.50 GPA or better for the aggregate of courses required for the major.
2. Achieve a 3.50 GPA or better in the content area courses required for the major.
3. Achieve a 3.91 GPA in the following courses: Math/Science Education (Secondary) 2189: Classroom Interactions; Math/Science Education (Secondary) 4189: Project-Based

Instruction; Education 4802: TUteach Apprentice Teaching Seminar; and Education 4388: TUteach Apprentice Teaching.
4. Write a final research paper in a topic combining both major content and pedagogy. They must present their research for evaluation and present at a departmental research poster session before graduation. Consult the undergraduate TUteach advisor for more details.

## 3 + N PROGRAMS

The College of Science and Technology and Temple Professional School Programs (Temple University School of Medicine, Temple University Kornberg School of Dentistry, Temple University School of Podiatry, Temple University School of Pharmacy) agree to cooperate in providing an accelerated $3+4$ undergraduate/professional school education leading to a Bachelor of Arts degree in the College of Science and Technology and a Doctorate degree from the Professional School. Also, the College of Science and Technology and the Temple University College of Health Professions and Social Work agree to cooperate in providing an accelerated $3+3$ undergraduate/graduate education leading to a Bachelor of Arts degree in the College of Science and Technology and a Doctorate of Physical Therapy in the College of Health Professions and Social Work. The joint programs will each consist of a minimum of 90 semester hours of undergraduate coursework toward completion of a Bachelor of Arts degree in the College of Science and Technology at Temple University and the regular curriculum in the professional program.

Below are the links to more specific details on the agreements with Temple's Professional Schools:

Temple University School of Medicine

Temple University Kornberg School of Dentistry
Temple University School of Podiatry
Temple University School of Pharmacy
Temple University Doctorate of Physical Therapy

## 3 + 4 Dental Program

Students must meet the admissions requirements (http://dentistry.temple.edu/admissions/requirements) for early admission to the Temple University Kornberg School of Dentistry. If you are applying to other dental schools, please use the web to find admissions requirements.

## Guidelines for Completion of the Bachelor of Arts Degree in the College of Science \& Technology

- Bachelor of Arts candidates in the College of Science and Technology (CST) must complete all requirements for the major before entering the School of Dentistry with the exception of the following:

1. Biology majors may count up to three of the following first year School of Dentistry courses as Biology electives:

D277 (Physiology) so long as the student has not previously earned credit for Biology 3334; D100 (Dental Biochemistry and Nutrition) so long as the student has not previously earned credit for Biology 4375; D101 (General and Oral Histology) so long as the student has not previously earned credit for Biology 2235; D202 (Gross Anatomy) so long as the student has not previously earned credit for Biology 2233.
2. Chemistry majors may count the following first year School of Dentistry course as a Chemistry elective:

D100 (Dental Biochemistry and Nutrition) so long as the student has not previously earned credit for Biology 4375/Chemistry 4401.

- College of Science and Technology students may count up to 33 equivalent credit hours from the first year at the School of Dentistry as equivalents of upper-level credits in the College of Science and Technology or the College of Liberal Arts.
- College of Science and Technology students may count up to 33 equivalent credit hours from the first year at the School of Dentistry to fulfill their general credit hour requirements for the Bachelor of Arts degree in the College of Science and Technology.
- Appropriate course sequences for majors offered by the College of Science and Technology will be available in the Office of Student Services (1810 Liacouras Walk, Suite 203) or Pre-Professional Health Studies (1810 Liacouras Walk, Suite 100) and will be shared with prospective and current students.


## Suggested Semester-by-Semester Sequence for CST + Dental School 3+4 Program

Below is a suggested sequence of courses. Individual sequences will vary based on previous course work, AP credits, performance on University placement tests, and specific undergraduate major. Students who qualify for the 3+4 program will develop an individual program of study with the Pre-Professional Health Studies during their first semester at the University.

| Freshman Year - Fall Semester | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Subject | 1041 | Calculus I | 4 |  |
| Mathematics | 1031 | General Chemistry I | 3 |  |
| Chemistry | 1033 | General Chemistry I Laboratory | 1 |  |
| Chemistry | 0802,0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| English |  |  |  |  |


| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| :--- | :--- | :--- | :---: | :---: |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

## Apply to 3+4 Program

Freshman Year - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Mathematics | 1042 | Calculus II | 4 |  |
| Biology | 1111 | Introduction to Biology I | 4 |  |
| Chemistry | 1032 | General Chemistry II | 3 |  |
| Chemistry | 1034 | General Chemistry II Laboratory | 1 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

Sophomore Year - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Biology | 2112 | Introduction to Biology II | 4 |  |
| Chemistry | 2201 | Organic Chemistry I | 3 |  |
| Chemistry | 2203 | Organic Chemistry I Laboratory | 1 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | $08 \times x$ or 09xx | U.S. Society | 3 | GU |
| Major Course or Elective |  |  | 3 |  |
| Subtotal |  |  | $\mathbf{1 7}$ |  |

Sophomore Year - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :---: |
| Major Course |  |  | 4 |  |
| Chemistry | 2202 | Organic Chemistry II | 3 |  |
| Chemistry | 2204 | Organic Chemistry II Laboratory | 1 |  |
| GenEd | $08 x x$ or 09xx | Race \& Diversity | 3 | GD |
| GenEd | $08 x x$ or 09xx | Global/World Society | 3 | GG |
| Major Course or Elective |  |  | 3 |  |
| Subtotal |  |  | $\mathbf{1 7}$ |  |

Junior Year - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Major Course |  |  | 4 |  |
| Physics | 2021 | General Physics I | 4 |  |
| GenEd | $08 x x$ or 09xx | Arts | $3-4$ | GA |
| Major Course or Elective |  |  | $3-4$ |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

Junior Year - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Major Course |  |  | 4 |  |
| Physics | 2022 | General Physics II | 4 |  |
| Major Course or Elective |  |  | 4 |  |
| Major Course or Elective |  |  | $3-4$ |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

## First Year - Dental School

Approximately 34 credits of course work completed during the first year of Dental School will be applied to the CST major's total number of earned hours needed for the completion of the degree requirements for graduation. For some majors, course work will count as elective hours in the major; for all others, course work counts as elective hours toward the completion of the minimum of 123 credits for the undergraduate degree. In planning an undergraduate schedule it is essential to consult with an academic advisor.

| Minimum Total Hours for a Bachelor of Arts degree: | 123 |
| :--- | :--- |

## Notes:

1) Students in the Accelerated Program must have been pre-approved through the PreProfessional Health Studies (PPHS) and have signed an "Intent to Pursue" form during their first semester. This form must be on file with PPHS.
2) Because students in an accelerated program must meet both the course requirements for entry to professional school and the course requirements for their major, it is necessary for these students to consult with an advisor in their major as well as the PPHS as early in their academic career as possible. Failure to do so may make completing the required courses in the first 90 hours impossible.
3) The sequence presented here is a generic sequence; the actual sequence will depend on choice of major and number of AP credits applied from high school transcript.
4) With some exceptions, CST students must complete the requirements for their major within their first 90 hours; course work in the first year of professional school counts as elective hours toward degree completion.
5) Biology Majors - Some of the course work during the first year of Dental School can be counted for Biology electives as well as general electives for degree completion. Certain electives are excluded. Be sure to consult with an academic advisor.
6) Computer Science Majors - In order to complete the required courses in 3 years, Computer Science majors must have AP credit for Calculus I \& II, take an overload, or enroll in summer session classes.

## 3 + 4 Medical

Students who entered Temple University as Health Scholars are able to be considered for early admissions to the Temple University School of Medicine as BA/MD Accelerated Option candidates. The $3+4$ option is only with Temple University School of Medicine. If interested in applying to other schools, students will need to follow a $4+4$ option.

## Guidelines for Completion of the Bachelor of Arts Degree in the College of Science \& Technology

- Health Scholar Bachelor of Arts candidates in the College of Science and Technology (CST) must complete all requirements for the major before entering the School of Medicine with the exception of the following:

Biology majors may count up to three of the following first year Temple University School of Medicine courses as Biology electives:

MS1-Block1 (Human Gross Anatomy) as long as the student has not already received credit for Biology 2233; MS1-Block2 (Elements of Bioscience); MS1Blocks3\&4 (Biological Systems I\&II); MS1-Block5 (Body Systems III Neuroscience) as long as the student has not already received credit for Biology 3334 or Biology 3352; MS1-Block6 (Pathology - Pharmacology - Immunology).

- College of Science and Technology Health Scholars may count up to 33 equivalent credit hours from the first year at the School of Medicine as equivalents of upper-level credits in the College of Science and Technology or the College of Liberal Arts.
- College of Science and Technology Health Scholars may count up to 33 equivalent credit hours from the first year at the School of Medicine to fulfill their general credit hour requirements for the Bachelor of Arts degree in the College of Science and Technology.
- Appropriate course sequences for majors offered by the College of Science and Technology will be available in the Office of Student Services ( 1810 Liacouras Walk, Suite 203) and will be shared with prospective students and current Health Scholars. Advising on progress toward career goal and eventual presentation as a Health Scholar $(3+4$ or $4+4)$ will occur through Pre-Professional Health Studies (1810 Liacouras Walk, Suite 100).


## Suggested Semester-by-Semester Sequence for CST + Medical School 3+4 Program

Below is a suggested sequence of courses. Individual sequences will vary based on previous course work, AP credits, performance on University placement tests, and specific undergraduate major. Health Scholars who qualify for the $3+4$ program will develop an individual program of study with Pre-Professional Health Studies during their first semester at the University.

| Freshman Year - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 1041 | Calculus I | 4 |  |
| Chemistry | 1031 | General Chemistry I | 3 |  |
| Chemistry | 1033 | General Chemistry I Laboratory | 1 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Subtotal |  |  | 15 |  |
| Apply to 3+4 Program |  |  |  |  |
|  |  |  |  |  |
| Freshman Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 1042 | Calculus II | 4 |  |
| Biology | 1111 | Introduction to Biology I | 4 |  |
| Chemistry | 1032 | General Chemistry II | 3 |  |
| Chemistry | 1034 | General Chemistry II Laboratory | 1 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Subtotal |  |  | 15 |  |


| Sophomore Year - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | 2112 | Introduction to Biology II | 4 |  |
| Chemistry | 2201 | Organic Chemistry I | 3 |  |
| Chemistry | 2203 | Organic Chemistry I Laboratory | 1 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Major Course or Elective |  |  | 3 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Major Course or Elective |  |  | 3 |  |
| Chemistry | 2202 | Organic Chemistry II | 3 |  |
| Chemistry | 2204 | Organic Chemistry II Laboratory | 1 |  |
| Physics | 2021 | General Physics I | 4 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Junior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Major Course |  |  | 4 |  |
| Physics | 2022 | General Physics II | 4 |  |
| GenEd | 08xx or 09xx | Arts | 3 | GA |
| Major Course or Elective |  |  | 4 |  |
| Subtotal |  |  | 15 |  |
| Must take MCAT by January** |  |  |  |  |
|  |  |  |  |  |
| Junior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Major Course |  |  | 4 |  |
| Major Course or Elective |  |  | 4 |  |
| Major Course or Elective |  |  | 7 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| First Year - Medical School |  |  |  |  |
| Approximately 34 credits of course work completed during the first year of Medical School will be applied to the CST major's total number of earned hours needed for the completion of the degree requirements for graduation. For some majors, course work will count as elective hours in the major; for all others, course work counts as elective hours toward the completion of the minimum of 123 credits for the undergraduate degree. In planning an undergraduate schedule it is essential to consult with an academic advisor. |  |  |  |  |
|  |  |  |  |  |
| Minimum Total Hours for a Bachelor of Arts degree: |  |  | 123 |  |

** Students must also complete a Biochemistry prerequisite course prior to entering TUSM. They may choose from either Chemistry 4401 or Biology 4375 . Although not a requirement for taking the MCAT, it is recommended that students complete Biochemistry prior to taking the

MCAT. In addition, students must also complete an Introduction to Psychology (PSY 1001) AND Introduction to Sociology (SOC 1176) course prior to taking the MCAT.

## Notes:

1) Students in the Accelerated Program must have entered Temple University as Health Scholars through Pre-Professional Health Studies (PPHS) and have signed an "Intent to Pursue" form during their first semester. This form must be on file with PPHS.
2) Because students in an accelerated program must meet both the course requirements for entry to professional school and the course requirements for their major, it is necessary for these students to consult with an advisor in their major as well as PPHS as early in their academic career as possible. Failure to do so may make completing the required courses in the first 90 hours impossible.
3) The sequence presented here is a generic sequence; the actual sequence will depend on choice of major and number of Advanced Placement (AP) credits applied from the high school transcript.
4) With some exceptions, CST students must complete the requirements for their major within their first 90 hours; course work in the first year of professional school counts as elective hours toward degree completion.
5) Biology Majors - Some of the course work during the first year of Medical School can be counted for Biology electives as well as general electives for degree completion. Certain electives are excluded. Be sure to consult with an academic advisor.
6) Computer Science Majors - In order to complete the required courses in 3 years, Computer Science majors must have AP credit for Calculus I \& II, take an overload, or enroll in summer session classes.

## 3 + 4 Pharmacy

Students must meet the admissions requirements for early admission to the Temple University School of Pharmacy. If you are applying to other pharmacy schools, please use the web to find admissions requirements.

## Guidelines for Completion of the Bachelor of Arts Degree in the College of Science \& Technology

- Bachelor of Arts candidates in the College of Science and Technology (CST) must complete all requirements for the major before entering the School of Pharmacy with the exception of the following:

1. Biology majors may count up to three of the following first year Temple University School of Pharmacy courses as Biology electives:

Pharmaceutical Sciences (PS) P158 (Anti-infective Agents); PS P155 (Infectious Disease Management) so long as the student has not previously earned credit for Biology 3317; PS P151 (Medicinal Chemistry I) or PS P164 (Pharmacology I) so long as the student has not previously earned credit for Biology 4375; PS P152
(Medicinal Chemistry II) so long as the student has not previously earned credit for Biology 4376.
2. Chemistry majors may count the following first year Temple University School of Pharmacy course as a Chemistry elective:

PS P151 (Medicinal Chemistry I) so long as the student has not previously earned credit for Biology 4375/Chemistry 4401.

- College of Science and Technology students may count up to 33 equivalent credit hours from the first year at the School of Pharmacy as equivalents of upper-level credits in the College of Science and Technology or College of Liberal Arts.
- College of Science and Technology students may count up to 33 equivalent credit hours from the first year at the School of Pharmacy to fulfill their general credit hour requirements for the Bachelor of Arts degree in the College of Science and Technology.
- Appropriate course sequences for majors offered by the College of Science and Technology will be available in the Office of Student Services (1810 Liacouras Walk, Suite 203) or Pre-Professional Health Studies (1810 Liacouras Walk, Suite 100) and will be shared with prospective and current students.


## Suggested Semester-by-Semester Sequence for CST + Pharmacy School 3+4 Program

Below is a suggested sequence of courses. Individual sequences will vary based on previous course work, AP credits, performance on University placement tests, and specific undergraduate major. Students who qualify for the $3+4$ program will develop an individual program of study with Pre-Professional Health Studies during their first semester at the University.

| Freshman Year - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 1041 | Calculus I | 4 |  |
| Chemistry | 1031 | General Chemistry I | 3 |  |
| Chemistry | 1033 | General Chemistry I Laboratory | 1 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Freshman Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 1042 | Calculus II | 4 |  |
| Biology | 1111 | Introduction to Biology I | 4 |  |
| Chemistry | 1032 | General Chemistry II | 3 |  |
| Chemistry | 1034 | General Chemistry II Laboratory | 1 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Subtotal |  |  | 15 |  |
| Apply to 3+4 Program |  |  |  |  |
|  |  |  |  |  |
| Sophomore Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |


| Biology | 2112 | Introduction to Biology II | 4 |  |
| :---: | :---: | :---: | :---: | :---: |
| Chemistry | 2201 | Organic Chemistry I | 3 |  |
| Chemistry | 2203 | Organic Chemistry I Laboratory | 1 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Major Course or Elective |  |  | 3 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Major Course |  |  | 4 |  |
| Chemistry | 2202 | Organic Chemistry II | 3 |  |
| Chemistry | 2204 | Organic Chemistry II Laboratory | 1 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Major Course or Elective |  |  | 3 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Junior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Major Course |  |  | 4 |  |
| Physics | 2021 | General Physics I | 4 |  |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| Major Course or Elective |  |  | 3-4 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Junior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Major Course |  |  | 4 |  |
| Physics | 2022 | General Physics II | 4 |  |
| Major Course or Elective |  |  | 4 |  |
| Major Course or Elective |  |  | 3-4 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| First Year - Pharmacy School |  |  |  |  |
| Approximately 33 credits of course work completed during the first year of Pharmacy School will be applied to the CST major's total number of earned hours needed for the completion of the degree requirements for graduation. For some majors, course work will count as elective hours in the major; for all others, course work counts as elective hours toward the completion of the minimum of 123 credits for the undergraduate degree. In planning an undergraduate schedule it is essential to consult with an academic advisor. |  |  |  |  |
|  |  |  |  |  |
| Minimum Total Hours for a Bachelor of Arts degree: |  |  | 123 |  |

** Students are also required to complete an Anatomy \& Physiology two-course sequence prior to admission to Temple's Pharmacy School.

## Notes:

1) Students in the Accelerated Program must have been pre-approved through Pre-Professional Health Studies (PPHS) and have signed an "Intent to Pursue" form by their second semester. This form must be on file with PPHS.
2) Because students in an accelerated program must meet both the course requirements for entry to professional school and the course requirements for their major, it is necessary for these students to consult with an advisor in their major as well as PPHS as early in their academic career as possible. Failure to do so may make completing the required courses in the first 90 hours impossible.
3) The sequence presented here is a generic sequence; the actual sequence will depend on choice of major and number of AP credits applied from high school transcript.
4) With some exceptions, CST students must complete the requirements for their major within their first 90 hours; course work in the first year of professional school counts as elective hours toward degree completion.
5) Biology Majors - Some of the course work during the first year of Pharmacy School can be counted for Biology electives as well as general electives for degree completion. Certain electives are excluded. Be sure to consult with an academic advisor.
6) Computer Science Majors - In order to complete the required courses in 3 years, Computer Science majors must have AP credit for Calculus I \& II, take an overload, or enroll in summer session classes.

## 3 + 3 Physical Therapy

Students must meet the admissions requirements for early admission to Temple University's College of Health Professions and Social Work Doctorate of Physical Therapy program. If you are applying to other physical therapy programs, please use the web to find admissions requirements.

## Guidelines for the Completion of the Bachelor of Arts Degree from the College of Science \& Technology

- Bachelor of Arts candidates in the College of Science and Technology (CST) must complete all requirements for their major before entering the Doctor of Physical Therapy (DPT) Program in the College of Health Professions and Social Work (CHP) with the exception of the following:

Biology majors may count one of the following first year DPT Program courses as one of their three required Biology electives:

Physical Therapy (PHTH) 8521 (Neuroscience), PHTH 8522
(Rehabilitative Pathophysiology), and PHTH 8523 (Movement Science II).

- CST students may count up to 33 equivalent credit hours from the first year at the DPT Program in the CHP as equivalents of upper-level credits in the CST or College of Liberal Arts.
- CST students may count up to 33 equivalent credit hours from the first year at the DPT Program in the CHP to fulfill their general credit hour requirements for the B.A. degree in the CST.
- Appropriate course sequences for majors offered by the College of Science and Technology will be available in the Office of Student Services (1810 Liacouras Walk, Suite 203) or Pre-Professional Health Studies (1810 Liacouras Walk, Suite 100) and will be shared with prospective and current students.


## $3+4$ Podiatry

Students must meet the admissions requirements for early admission to the Temple University School of Podiatric Medicine. If you are applying to other podiatry schools, please use the web to find admissions requirements.

## Guidelines for Completion of the Bachelor of Arts Degree in the College of Science \& Technology

- Bachelor of Arts candidates in the College of Science and Technology (CST) must complete all requirements for the degree program before entering the School of Podiatric Medicine with the exception of the following:

1. Biology majors may use up to three of the following first year School of Podiatry courses as replacements for Biology electives:

Biomedical Studies (PBMS) P100 (Histology) as long as the student has not already gotten credit for Biology 2235 (0235); PBMS P102 (General Anatomy) as long as the student has not already gotten credit for Biology 2233 (0233); PBMS P104 (Neurosciences) as long as the student has not already gotten credit for Biology 3352 (0352) or Biology 3358; PBMS P110 (Biochemistry) as long as the student has not already gotten credit for Biology 4375 (0375); PBMS P111 (Physiology) as long as the student has not already gotten credit for Biology 3334 (0334).
2. Chemistry majors may use up to one of the following first year School of Podiatry courses as replacements for Chemistry electives: PBMS P110 (Biochemistry) as long as the student has not already gotten credit for Biology 4375 (0375) or Chemistry 4401 (0371).

- College of Science and Technology students may count up to 33 equivalent credit hours from the first year at the School of Podiatric Medicine as equivalents of upper-level credits in the College of Science and Technology or the College of Liberal Arts.
- College of Science and Technology students may count up to 33 equivalent credit hours from the first year at the School of Podiatric Medicine to fulfill their general credit hour requirements for the Bachelor of Arts degree in the College of Science and Technology.
- Appropriate course sequences for majors offered by the College of Science and Technology will be available in the Office of Student Services (1810 Liacouras Walk, Suite 203) or Pre-Professional Health Studies (1810 Liacouras Walk, Suite 100) and will be shared with prospective and current students.


## Suggested Semester-by-Semester Sequence for CST + Podiatry School 3+4 Program

Below is a suggested sequence of courses. Individual sequences will vary based on previous course work, AP credits, performance on University placement tests, and specific undergraduate major. Students who qualify for the $3+4$ program will develop an individual program of study with Pre-Professional Health Studies during their first semester at the University.

| Freshman Year - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 1041 | Calculus I | 4 |  |
| Chemistry | 1031 | General Chemistry I | 3 |  |
| Chemistry | 1033 | General Chemistry I Laboratory | 1 |  |
| English | 0802, 0812 or 0902 | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| Subtotal |  |  | 15 |  |
| Apply to 3+4 Program |  |  |  |  |
|  |  |  |  |  |
| Freshman Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Mathematics | 1042 | Calculus II | 4 |  |
| Biology | 1111 | Introduction to Biology I | 4 |  |
| Chemistry | 1032 | General Chemistry II | 3 |  |
| Chemistry | 1034 | General Chemistry II Laboratory | 1 |  |
| Intellectual Heritage | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Sophomore Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Biology | 2112 | Introduction to Biology II | 4 |  |
| Chemistry | 2201 | Organic Chemistry I | 3 |  |
| Chemistry | 2203 | Organic Chemistry I Laboratory | 1 |  |
| Intellectual Heritage | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Major Course or Elective |  |  | 3 |  |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Sophomore Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Major Course |  |  | 4 |  |
| Chemistry | 2202 | Organic Chemistry II | 3 |  |
| Chemistry | 2204 | Organic Chemistry II Laboratory | 1 |  |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |


| Major Course or Elective |  |  | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Subtotal |  |  | 17 |  |
| Junior Year - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Major Course |  |  | 4 |  |
| Physics | 2021 | General Physics I | 4 |  |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| Major Course or Elective |  |  | 3-4 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Junior Year - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Major Course |  |  | 4 |  |
| Physics | 2022 | General Physics II | 4 |  |
| Major Course or Elective |  |  | 4 |  |
| Major Course or Elective |  |  | 3-4 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| First Year - Podiatry School |  |  |  |  |
| Approximately 33 credits of course work completed during the first year of Podiatry School will be applied to the CST major's total number of earned hours needed for the completion of the degree requirements for graduation. For some majors, course work will count as elective hours in the major; for all others, course work counts as elective hours toward the completion of the minimum of 123 credits for the undergraduate degree. In planning an undergraduate schedule it is essential to consult with an academic advisor. |  |  |  |  |
|  |  |  |  |  |
| Minimum Total Hours for a Bachelor of Arts degree: |  |  | 123 |  |

** Students must also complete a Biochemistry prerequisite prior to entering Temple's School of Podiatric Medicine. They may choose from either Chemistry 4401 or Biology 4375. Although it is not a requirement for taking the MCAT, it is recommended that students complete Biochemistry prior to taking the MCAT. In addition, students must also complete an Introduction to Psychology (PSY 1001) AND Introduction to Sociology (SOC 1176) course prior to taking the MCAT.
** Students should be aware that some Podiatry schools will accept either MCAT or DAT (Dental Admissions Test) to meet entrance guidelines.

## Notes:

1) Students in the Accelerated Program must have been pre-approved through the Office of PreProfessional Health Studies (PPHS) and have signed an "Intent to Pursue" form during their first semester. This form must be on file with PPHS.
2) Because students in an accelerated program must meet both the course requirements for entry to professional school and the course requirements for their major, it is necessary for these students to consult with an advisor in their major as well as PPHS as early in their academic career as possible. Failure to do so may make completing the required courses in the first 90 hours impossible.
3) The sequence presented here is a generic sequence; the actual sequence will depend on choice of major and number of AP credits applied from high school transcript.
4) With some exceptions, CST students must complete the requirements for their major within their first 90 hours; course work in the first year of professional school counts as elective hours toward degree completion.
5) Biology Majors - Some of the course work during the first year of Podiatry School can be counted for Biology electives as well as general electives for degree completion. Certain electives are excluded. Be sure to consult with an academic advisor.
6) Computer Science Majors - In order to complete the required courses in 3 years, Computer Science majors must have AP credit for Calculus I \& II, take an overload, or enroll in summer session classes.

## SCHOOL OF TOURISM \& HOSPITALITY MANAGEMENT

Founded 1998
M. Moshe Porat, Dean

Elizabeth H. Barber, Associate Dean
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1810 North 13th Street
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215-204-8701
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## Accreditation

The baccalaureate degree program in Sport and Recreation Management is currently accredited by the National Recreation and Park Association/American Association for Leisure and Recreation (NRPA/AALR) Council on Accreditation.

## Goals \& Objectives

The total experience within the School of Tourism and Hospitality Management enables students to have an excellent fundamental education and exposure to working professionals, internships, and personalized placement services. As a result, students are given a competitive advantage in a job market projected to double in the next decade.

The School of Tourism and Hospitality Management offers two undergraduate major programs: (1) Sport and Recreation Management, and (2) Tourism and Hospitality Management. The focus of the undergraduate programs is to provide a broad educational foundation and to prepare students for entry into the sport and recreation management, leisure service, or tourism and hospitality occupations at the professional level.

The Sport and Recreation Management program prepares students interested in sport and recreation careers in the private/commercial sector, public recreation and park agencies, professional sports, athletics, youth sport agencies, voluntary agencies, campus services, armed forces, and corporate/industrial settings. The Tourism and Hospitality Management program prepares students for entry-level to mid-level positions in tourism, hospitality, and event management. The program prepares students to work in convention and visitors' bureaus, destination management organizations, conference centers, resorts, casinos, hotels, theme parks, theaters, and clubs. Both programs consist of coursework in the university's General Education (GenEd), the school major course requirements, the supplemental electives from related disciplines, and two supervised field experiences.

## Admissions

If you are applying for admission to Temple University as a freshman or a transfer student and wish to major in Sport and Recreation Management or Tourism and Hospitality Management, you should select the School of Tourism and Hospitality Management as your school/college. Then choose your major - Sport and Recreation Management or Tourism and Hospitality Management as your curriculum. Submit the required materials to the Office of Undergraduate Admissions. Once you apply, you will receive an AccessNet Username and Password to check your application status online on the Student TUportal System.

Information regarding the admissions process should be directed to the School's Senior Associate Director of Recruitment at sthm@temple.edu.

## Financial Aid \& Scholarships

Information regarding financial aid and scholarships is available from the Office of Student Financial Services at www.temple.edu/sfs/. For additional information pertaining to specific scholarships within the school's disciplines, refer to the Center for Student Services.

## Special Programs and/or Professional Certification

## Honors Laptop Community

Students admitted to the University Honors Program are eligible, by invitation only, to be part of the School of Tourism and Hospitality Management's Honors Laptop Community. Students participate in pre-approved Fox School of Business and Management Honors courses in pursuit of a Business Minor, with the added benefit of their own university-issued laptop computer.

## Student Association Information

Professional development begins with membership to associations/organizations for all STHM students. We encourage our students to consider joining one of the following groups during their academic tenure in the School of Tourism and Hospitality Management. For more information about each STHM Student Professional Organization, go to our Center for Student Services (CSS) web site at http://sthm.temple.edu/studserv/stud_orgs.html. Scholarship opportunities are
available within the associations for those who are active members. Please be reminded that, in most cases, students must be a member of the association for at least one year to be eligible for the available scholarships.

## STHM Student Association (SA)

The mission of the STHM Student Association is to introduce new students to all STHM has to offer, especially Student Professional Organizations, and to foster relationships between students and professionals.

## STHM Graduate Student Association (GSA)

The focus of the STHM Graduate Student Association (GSA) is to provide STHM graduate students with opportunities related to networking, information sharing, socializing, and support.

## American Hotel \& Lodging Association (AH\&LA)

Serving the hospitality industry for nearly a century, AH\&LA is the sole national association representing all sectors and stakeholders in the lodging industry, including individual hotel property members, hotel companies, student and faculty members, and industry suppliers. The Temple University chapter strives to set the foundation for the future hospitality careers of students through exposure and networking opportunities with industry professionals, and to open the door for students to delve into the hotel and lodging industry.

## Hospitality Sales and Marketing Association International (HSMAI)

HSMAI.tucc is a collegiate chapter under HSMAI. Members of the HSMAI Temple University Collegiate Chapter are mainly Temple University students and alumni who are interested in the profession of sales and marketing in the hospitality and tourism industries. The organization provides opportunities for students to network with professionals, as well as other collegiate chapters at monthly meetings, annual conferences, and special events! Any Tourism and Hospitality Management student looking to embark upon exposure to the Hospitality industry should join this association!

## Meeting Professionals International (MPI)

TempleMPI is a student professional organization in the School of Tourism and Hospitality Management. It is an organization that combines education and networking to assist students to succeed academically and professionally. Through fundraising, networking, and various other opportunities, it helps to create a positive name for itself as well as its organization. TempleMPI feels the need to create opportunities, instead of waiting for them. Join and let it help you shape your future.

## National Society of Minorities in Hospitality (NSMH)

NSMH is the premier professional organization for minority hospitality students. It addresses diversity and multiculturalism, as well as the career development of its student members. Temple University NSMH exposes students to opportunities in the industry nationwide. It provides events and programs that bring together college-level students with company sponsors, industry representatives, other hospitality organizations, advisors and mentors, and hospitality high school students. Temple has the primary local student chapter that is supported by the Multicultural Affairs Congress (MAC) of the Philadelphia Convention and Visitors Bureau (PCVB).

## Professional Convention Management Association (PCMA)

PCMA members represent about 6,000 meeting industry leaders, including corporate and independent meeting professionals, as well as industry suppliers, faculty, and students. Whether students are looking to build relationships locally or regionally, or to meet professionals in the field, there are a variety of resources, education, and networking events that open the doors to these professionals. The Temple PCMA chapter hosts a variety of events and programs.

## Rho Phi Lambda Professional Honorary Fraternity

Rho Phi Lambda is a National Honorary Recreation, Parks, and Leisure Services Fraternity. Rho Phi Lambda strives to recognize Sport and Recreation Management majors who have exemplified academic excellence in scholarship, leadership, and service. Membership in Rho Phi Lambda cultivates student professional development, through networking opportunities, scholarship eligibility, resume building, and campus and community service initiatives.

## Sport and Recreation Professional Association (SRPA)

SRPA is a bridge between sport academia and the sports industry. SRPA is Temple's original student-run organization designed specifically for Sport and Recreation Management majors. SRPA provides an excellent opportunity to network with students within the major and industry professionals through scheduled events, conferences, and semester meetings.

## Sport Marketing Association of Temple University (SMAT)

The purpose of the Sport Marketing Association of Temple University (SMAT) is to expose Sport and Recreation Management and Tourism and Hospitality Management majors in STHM to career professionals, particularly in the Sport Marketing industry. This is accomplished by providing networking opportunities, speakers, and volunteer opportunities to allow members to gain more knowledge about various careers in the Sport Marketing industry.

## Sport and Governance Association (SAGA)

Our purpose as the Sport and Governance Association is to expose our members to the following opportunities: networking events with established professionals in the sports law industry, informing our members about the potential careers available in our broad industry through guest speakers and information sessions, providing access to relevant information in preparation for the LSAT, while guiding our students in the process of becoming successful business professionals. As a member of the Sport and Governance Association, individuals will gain an understanding of all the legal implications of business.

## Special Facilities \& Programs

Center for Student Services (CSS) - The CSS encourages a collaborative relationship between advisor and student, ultimately empowering the student to make sound and responsible decisions concerning his or her education. The student takes an active role in the utilization of the services offered by the school, and the university at large, while the academic advisor strives to assist the student with his or her academic, cultural, emotional, and pre-professional needs.

Center for Student Professional Development (CSPD) - The CSPD links classroom learning to successful career development. The CSPD resources offer students the latest internship and
job opportunities through counseling on résumés, cover letters, interviewing skills, and selection criteria.

National Laboratory for Tourism \& eCommerce (NLTeC) - NLTeC at Temple University is multi-disciplinary, multi-departmental and multi-university. The primary mission of NLTeC is to conduct and facilitate high quality inter- and multi-disciplinary research and development in those areas of tourism impacted by technology. To this end, NLTeC provides a unique and powerful setting for scholars and practitioners to consider the nature and role of information technology in the tourism industry. Research by laboratory faculty, staff, and fellows includes the following areas: advertising, business, communications, computer science, education, environmental studies, geography, marketing, management information systems, psychology, and urban and regional planning.

Sport Industry Research Center (SIRC) - SIRC provides opportunities for academics, students, and practitioners to explore the potential of sport to impact the communities within which they exist. Through a series of initiatives, SIRC attempts to conduct and disseminate research, educate and train executives, and function as a think tank and informational resource for those involved in the sport industry. Included amongst the initiatives that SIRC is involved in are: executive workshops, doctoral student training, community-based programming, event management and program consulting, and academic dissemination of cutting-edge research and managerial best practices.

## Academic Advising

Jarvis Bailey, Student Services/Associate Director
Jarvis.Bailey@temple.edu
215-204-1754
Lauren Nicholson, Student Services/Undergraduate Academic Advisor lauren.nicholson@temple.edu
215-204-8759
Jessica Cook, Student Services/Undergraduate Academic Advisor jessica.cook@temple.edu
215-204-8912

## Services Provided Through the Center for Student Services (CSS)

Center for Student Services (CSS)
349 Speakman Hall (006-68)
1810 North 13th Street
Philadelphia, PA 19122
215-204-8905
The School of Tourism and Hospitality Management's advising unit, the CSS, provides
individualized information on placement exams and results, majors, minors, course sequence and
load, scheduling, career planning, and academic resources. As a result, students are better equipped to make well-informed decisions regarding their futures.

The CSS encourages a collaborative relationship between advisor and student, ultimately empowering the student to make sound and responsible decisions concerning his or her education. The student takes an active role in the utilization of the services offered by the school, and the university at large, while the academic advisor strives to assist the student with his or her academic, cultural, emotional, and pre-professional needs.

## Special Advising Policies and Procedures

The school utilizes group advising sessions; scheduled Saturday, evening, and virtual sessions; and walk-in sessions; however, students are encouraged to schedule individualized appointments to cater to their specific academic needs.

## Academic Policies \& Regulations

Please see Undergraduate Academic Policies in this Bulletin. Students are responsible for complying with all university-wide academic policies that apply to their individual academic status. Additional and unique policies, or exceptions for the School of Tourism and Hospitality Management, appear below.

All advising issues regarding academic policies and regulations should be directed to the School of Tourism and Hospitality Management's Center for Student Services (CSS) in 349 Speakman Hall, 1810 North 13th Street.

## Dean's List

Each fall and spring semester, those undergraduates who have met the credit hour and academic criteria for their school or college are placed on the Dean's List. See the Dean's List policy for specific GPA and credit-hour requirements.

## Doctrine of Responsibility

The School of Tourism and Hospitality Management (STHM) represents a high degree of scholastic excellence. In turn, we expect an enhanced level of responsibility and preparation from our students. STHM students represent the school in a variety of forums, including, but not limited to, the classroom, internships and workplace settings. These environments require professionalism, commitment, knowledge and mutual respect. This policy will assist students in their pursuit of excellence while earning their degrees in Sport and Recreation Management or Tourism and Hospitality Management. The STHM Doctrine of Responsibility can be found, in full, at www.sthm.temple.edu/current/documents/sthm-student-policy.pdf.

## Program Performance

Students not in good standing are subject to collegial warning and/or probation, or they may be academically dismissed and will be so notified by the Senior Vice Provost for Undergraduate Studies. See the University policy on Academic Standing for details on academic warning, academic probation, academic dismissal and reinstatement.

## Transfer between Colleges within the University

Students may initiate transfer to STHM from another school or college of the university if they are in academic good standing, holding a minimum cumulative GPA of 2.0.

## Change of Program Request

The Change of Program Request form can be picked up at any advising center or on the Senior Vice Provost for Undergraduate Studies web site. Students wishing to transfer into STHM should schedule an interview with the CSS to discuss the school's criteria. The Change of Program Request form is submitted for consideration during the interview. The student will then be notified of the decision by the CSS.

## School Graduation Requirements

The information below is for new freshmen and transfer students admitted fall 2013 or spring 2014. For information prior to this time, refer to the catalog year for your matriculation semester and year. Click on the Archived Bulletins link to see Bulletins from previous years.

Center for Student Services (CSS)
School of Tourism and Hospitality Management
349 Speakman Hall (006-68)
1810 North 13th Street
Philadelphia, PA 19122
215-204-8905

- Students seeking a Bachelor of Science degree from the School of Tourism and Hospitality Management (STHM) must complete 124 semester hours of coursework and have a cumulative GPA of 2.0 and a major GPA of 2.0.
- Certain courses may fulfill multiple requirements. In consultation with an advisor, students will be able to plan their curriculum more effectively.
- The total number of credit hours at graduation may vary for some students based on initial placement exams, transfer evaluations, individual curricular choices, and academic progress.
- Students are required to ensure that they have fulfilled the necessary prerequisites for any given course or course sequence. Students may read the entire policy in the section on university-wide Academic Policies.
- First Aid and CPR Certification are required.
- Completion of 250 Hours of STHM Industry-Related Hours is required.


## Student Contact Information

Jeffrey W. Montague<br>Assistant Dean<br>111 Speakman Hall (006-68)<br>1810 North 13th Street<br>Philadelphia, PA 19122<br>215-204-8701<br>jeffrey.montague@temple.edu<br>Jarvis Bailey<br>Student Services/Associate Director<br>349 Speakman Hall (006-68)<br>1810 North 13th Street<br>Philadelphia, PA 19122<br>215-204-1754<br>Jarvis.Bailey@temple.edu<br>Lauren Nicholson<br>Student Services/Undergraduate Academic Advisor<br>349 Speakman Hall (006-68)<br>1810 North 13th Street<br>Philadelphia, PA 19122<br>215-204-8759<br>lauren.nicholson@temple.edu<br>Jessica Cook<br>Student Services/Undergraduate Academic Advisor<br>349 Speakman Hall (006-68)<br>1810 North 13th Street<br>Philadlephia, PA 19122<br>215-204-8912<br>jessica.cook@temple.edu

Joris Drayer, Assistant Professor<br>Director of Programs in Sport and Recreation Management<br>362 Speakman Hall (006-68)<br>1810 North 13th Street<br>Philadelphia, PA 19122<br>215-204-1943<br>joris.drayer@temple.edu<br>Ceridwyn A. King, Assistant Professor<br>Director of Programs in Tourism and Hospitality Management<br>306 Speakman Hall (006-68)<br>1810 North 13th Street<br>Philadelphia, PA 19122<br>215-204-8730<br>ceridwyn.king@temple.edu

## Faculty

Elizabeth H. Barber, Ph.D., CHE
Associate Professor and Associate Dean

Debra K. Blair, Ed.D.
Assistant Professor and Director of Assessment
Chih-Chien Chen, Ph.D.
Assistant Professor

Brianna S. Clark, Ph.D.
Assistant Professor

Joris Drayer, Ph.D.
Associate Professor and Director of Programs in Sport and Recreation Management
Daniel R. Fesenmaier, Ph.D.
Professor and Director of the National Laboratory for Tourism \& $e$ Commerce
Julie Fesenmaier, M.A.
Assistant Professor

Daniel C. Funk, Ph.D.
Professor and Director of Research and Ph.D. Programs
Michael W. Jackson, H.S.D.
Professor

Jeremy S. Jordan, Ph.D.
Associate Professor and Director of the Sport Industry Research Center
R. Aubrey Kent, Ph.D.

Associate Professor and Chairperson
Ceridwyn A. King, Ph.D.
Assistant Professor and Director of Programs in Tourism and Hospitality Management
Thilo Kunkel, Ph.D.
Assistant Professor
Seulki Lee, Ph.D.
Assistant Professor
Joseph Mahan, Ph.D.
Assistant Professor

Joel G. Maxcy, Ph.D.
Associate Professor
Edward McWilliams, Ph.D.
Professor

Michael Ok, Ph.D.
Associate Professor

Richard Ridall, M.Ed.
Assistant Professor and Director of Industry Relations
Wesley S. Roehl, Ph.D.
Professor
Michael F. Sheridan, MTHM
Instructor
Yang Yang, Ph.D.
Assistant Professor
(For further faculty members, please see: http://directory.temple.edu/search/)

# Sport \& Recreation Management 

Jeffrey W. Montague, Assistant Dean<br>215-204-8701<br>jeffrey.montague@temple.edu

R. Aubrey Kent, Chairperson

215-204-3810
aubkent@temple.edu
Joris Drayer, Assistant Professor and Director of Programs in Sport \& Recreation Management 215-204-1943
joris.drayer@temple.edu

## University Requirements

All new students starting in the 2013-2014 academic year are required to complete the university's General Education (GenEd) curriculum (35-36 credits).

## School of Tourism \& Hospitality Management Foundation Requirements

All students must earn a C- or higher in all courses required in the School of Tourism and Hospitality Management (STHM) curriculum.

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Tourism \& Hospitality <br> Management | 1113 | Foundations of Leisure | 4 |  |
| Tourism \& Hospitality <br> Management | 2114 | Leisure \& Tourism for a Diverse Society | 3 |  |
| Tourism \& Hospitality <br> Management | 3185 | Internship I (180 Hours) <br> (Prerequisite: Completion of all STHM 1000- and 2000-level <br> courses) | 3 |  |
| Tourism \& Hospitality <br> Management | 4112 | Senior Professional Development Seminar <br>  <br> Hospitality Management 4296 [Capstone course]) | 3 |  |
| Tourism \& Hospitality <br> Management | 4185 | Internship II (600 Hours) (Prerequisite: Completion of all <br> coursework) | 12 |  |
| Total |  |  | $\mathbf{2 5}$ |  |

## Designated Writing Intensive Courses

All Temple students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are as follows:

| Subject | Course \# | Course Title | Hours | Attribute |
| :---: | :---: | :---: | :---: | :---: |
| Tourism \& Hospitality Management | 3296 | Marketing Management in Sport \& Recreation (Prerequisites: Economics 1101 and Marketing 2101) | 3 | WI |
| Tourism \& Hospitality Management | 4296 | Current \& Ethical Issues in Sport \& Recreation Management (Prerequisites: Senior level academic standing -- minimum 90 credits; <br> Co-requisite: Tourism \& Hospitality Management 4112) | 3 | WI |
| Total |  |  | 6 |  |

## Major Requirements

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Tourism \& Hospitality <br> Management | 1211 | Sport \& Society | 3 |  |
| Tourism \& Hospitality <br> Management | 2211 | Organizational Strategy in Sport \& Recreation | 3 |  |
| Tourism \& Hospitality <br> Management | 3211 | Management in Sport \& Recreation <br> (Prerequisite: Human Resource Management 1101) | 3 |  |
| Tourism \& Hospitality <br> Management | 3213 | Budget \& Finance Systems in Sport \& Recreation <br> (Prerequisite: Accounting 2101) | 3 |  |
| Tourism \& Hospitality <br> Management | 3216 | Economics of Sport \& Recreation <br> (Prerequisite: Economics 1101 and Accounting 2101) | 3 |  |
| Tourism \& Hospitality <br> Management | 3217 | Research in Sport \& Recreation | 3 |  |
| Tourism \& Hospitality <br> Management | 3296 | Marketing Management in Sport \& Recreation <br> (Prerequisites: Economics 1101 and Marketing 2101) | 3 | WI |
| Tourism \& Hospitality <br> Management | 4212 | Law \& Ethics in Sport \& Recreation | 3 |  |
| Capstone Course: | Current \& Ethical Issues in Sport \& Recreation Management <br> (Prerequisites: Senior level academic standing -- minimum <br> 90 credits; <br> Co-requisite: Tourism \& Hospitality Management 4112) | 3 | WI |  |
| Tourism \& Hospitality <br> Management | 4296 | The Total includes the two required Designated Writing <br> Intensive Courses listed above. | $\mathbf{2 7}$ |  |
| Total |  |  |  |  |

## Major Electives (12 Credits Required)

Students are required to take 12 Major Elective credits. They may take any 12 credits from the Concentration Requirement courses listed below. If students wish to have a "Concentration" designation on their transcripts, they must take 9 credits from one of the three categories listed below, and "declare" the concentration. They must then take one additional course to fulfill the 12 -credit Major Elective requirement.

## Optional Sport and Recreation Management Concentrations (9 Credits Required)

## Governance and Policy Concentration Requirements

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| All three required for Concentration: |  |  |  |  |
| Tourism \& Hospitality Management | 3221 | Athletics Administration | $\mathbf{9}$ |  |
| Tourism \& Hospitality Management | 3222 | Professional \& International Sport | 3 |  |
| Tourism \& Hospitality Management | 3225 | Recreation \& Leisure Service Management | 3 |  |

Sport and Recreation Promotion Concentration Requirements

| Subject | Course \# | Course Title |
| :--- | :--- | :---: |
| Select three for Concentration: | Hours | Attribute |
| Tourism \& Hospitality Management\|3224 | Media \& Communications in Sport \& Recreation | 3 |
| Tourism \& Hospitality Management 3226 | Consumer Behavior in Sport \& Recreation | 3 |
| Tourism \& Hospitality Management 3227 | Advanced Marketing for Sport \& Recreation | 3 |
| Tourism \& Hospitality Management 3228 | Sales Management in Sport \& Recreation | 3 |

Event Leadership Concentration Requirements

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Select three for Concentration: |  |  |  | $\mathbf{9}$ |
| Tourism \& Hospitality Management | 3411 | Program \& Special Event Planning | 3 |  |
| Tourism \& Hospitality Management | 3415 | Space Design \& Facility Management | 3 |  |
| Tourism \& Hospitality Management | 3425 | Sustainable Event Management | 3 |  |
| Tourism \& Hospitality Management | 3428 | Event Marketing \& Sponsorship (Prerequisites: | 3 |  |

## Fox School of Business \& Management Requirements

| Subject | Course | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Accounting | 2101 | Financial Accounting | 3 |  |
| Economics | 1101 | Macroeconomic Principles | 3 |  |
| Marketing | 2101 | Marketing Management (Prerequisite: Economics 1101) | 3 |  |
| Human Resource Management | 1101 | Leadership \& Organizational Management | 3 |  |
| These four classes complete the required lower-division courses of the Business Minor. |  |  |  |  |
| Total |  |  | $\mathbf{1 2}$ |  |

## School of Tourism \& Hospitality Management Non-Credit Requirements

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| First Aid Certification |  | Community-level or better | 0 |  |
| CPR Certification |  | Community-level or better | 0 |  |
| Industry Related Experience |  | Minimum 250 hours of participation required prior to <br> Tourism \& Hospitality Management 4112 <br> (Senior Professional Development Seminar) | 0 |  |
|  |  |  |  |  |

## Free Electives (12 Credits)

Students must take at least 12 credits of Free Electives. In some cases, this number needs to be increased to meet the 124 credits required for graduation. Students can use these Free Elective credits to take any courses at Temple University. (Please contact the STHM Center for Student Services [CSS] for additional information.)

Suggested Semester by Semester Plan

| Year 1 - Fall Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject | Course \# | Course Title | Hours | Attribute |
| Tourism \& Hospitality Management | 1113 | Foundations of Leisure | 4 |  |
| English | $\begin{aligned} & 0802,0812 \text { or } \\ & 0902 \end{aligned}$ | Analytical Reading \& Writing | 4 | GW |
| GenEd | 08xx or 09xx | Race \& Diversity | 3 | GD |
| GenEd | 08xx or 09xx | Human Behavior | 3 | GB |
| GenEd | 08xx or 09xx | U.S. Society | 3 | GU |
| Subtotal |  |  | 17 |  |
|  |  |  |  |  |
| Year 1 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Tourism \& Hospitality Management | 1211 | Sport \& Society | 3 |  |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| GenEd | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Human Resource Management | 1101 | Leadership \& Organizational Management | 3 |  |
| Subtotal |  |  | 16 |  |
|  |  |  |  |  |
| Year 2 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Tourism \& Hospitality Management | 2114 | Leisure \& Tourism for a Diverse Society | 3 |  |
| Free Elective |  | Free Elective 1 | 3 |  |
| GenEd | 08xx or 09xx | Arts | 3-4 | GA |
| GenEd | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Economics | 1101 | Macroeconomic Principles | 3 |  |
| Subtotal |  |  | 15-16 |  |
|  |  |  |  |  |
| Year 2 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Tourism \& Hospitality Management | 2211 | Organizational Strategy in Sport \& Recreation | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08xx or 09xx | Global/World Society | 3 | GG |
| Accounting | 2101 | Financial Accounting | 3 |  |
| Marketing | 2101 | Marketing Management | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 3-Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |


| Tourism \& Hospitality Management | 3185 | Internship I | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Tourism \& Hospitality Management | 3211 | Management in Sport \& Recreation | 3 |  |
| Tourism \& Hospitality Management | 3216 | Economics of Sport \& Recreation | 3 |  |
| Tourism \& Hospitality Management | 3217 | Research in Sport \& Recreation | 3 |  |
| Free Elective |  | Free Elective 2 | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 3 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Tourism \& Hospitality Management | 3213 | Budget \& Finance Systems in Sport \& Recreation | 3 |  |
| Tourism \& Hospitality Management | 3296 | Marketing Management in Sport \& Recreation | 3 | WI |
| STHM Major Elective |  | Major Elective 1 | 3 |  |
| STHM Major Elective |  | Major Elective 2 | 3 |  |
| Free Elective |  | Free Elective 3 | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 4 - Fall Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Tourism \& Hospitality Management | 4112 | Senior Professional Development Seminar | 3 |  |
| Tourism \& Hospitality Management | 4212 | Law \& Ethics in Sport \& Recreation | 3 |  |
| Tourism \& Hospitality Management | 4296 | Current \& Ethical Issues in Sport \& Recreation Management | 3 | WI |
| STHM Major Elective |  | Major Elective 3 | 3 |  |
| STHM Major Elective |  | Major Elective 4 | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Year 4 - Spring Semester |  |  |  |  |
| Subject | Course \# | Course Title | Hours | Attribute |
| Tourism \& Hospitality Management | 4185 | Internship II | 12 |  |
| Free Elective |  | Free Elective 4 | 3 |  |
| Subtotal |  |  | 15 |  |
|  |  |  |  |  |
| Degree Total |  |  | 124 |  |

## OPTIONS

## Business Minor

See Advisor. (www.fox.temple.edu/cms_academics/dept/advising/minors/)

## General Business Studies Minor

See Advisor. (www.fox.temple.edu/cms_academics/dept/advising/minors/)

# Certificate of Specialization, Geography of Tourism 

See Advisor. (www.temple.edu/gus/undergraduate/minors/index.htm)
Certificate of Specialization, Geography of Sport, Recreation and Tourism Planning

See Advisor. (www.temple.edu/gus/undergraduate/minors/index.htm)

## Tourism \& Hospitality Management

Jeffrey W. Montague, Assistant Dean<br>215-204-8701<br>jeffrey.montague@temple.edu<br>R. Aubrey Kent, Chairperson<br>215-204-3810<br>aubkent@temple.edu<br>Ceridwyn King, Assistant Professor and Director of Programs in Tourism \& Hospitality Management<br>215-204-8730<br>ceridwyn.king@temple.edu

## University Requirements

All new students starting in the 2013-2014 academic year and beyond are required to complete the university's General Education (GenEd) curriculum (35-36 credits).

## School of Tourism \& Hospitality Management Foundation Requirements

All students must earn a C- or higher in all courses required in the School of Tourism and Hospitality Management (STHM) curriculum.

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Tourism \& Hospitality Management | 1113 | Foundations of Leisure | 4 |  |
| Tourism \& Hospitality Management | 2114 | Leisure \& Tourism for a Diverse Society | 3 |  |
| Tourism \& Hospitality Management | 3185 | Internship I (180 Hours) <br> (Prerequisite: Completion of all STHM 1000- and <br> 2000-level courses) | 3 |  |
| Tourism \& Hospitality Management | 4112 | Senior Professional Development Seminar <br> (Prerequisite: Senior standing; Co-requisite: <br> Capstone course) | 3 |  |


| Tourism \& Hospitality Management | 4185 | Internship II (600 Hours) <br> (Prerequisite: Completion of all coursework) | 12 |  |
| :--- | :--- | :--- | :---: | :---: |
| Total |  |  | $\mathbf{2 5}$ |  |

## Designated Writing Intensive Courses

All Temple students must take a minimum of two writing-intensive courses. The specific writing-intensive courses required for this major are as follows:

| Subject | Course \# | Course Title | Hours | Attribute |  |
| :--- | :--- | :--- | :--- | :---: | :---: |
| Tourism \& Hospitality Management | 3396 | Marketing in Tourism \& Hospitality <br> (Prerequisites: Economics 1101 and Marketing <br> 2101) | 3 | WI |  |
| Choose one: |  |  |  |  |  |
| Tourism \& Hospitality Management | 4396 | Hospitality Management Systems <br> (Prerequisites: Senior level academic standing -- <br>  <br> Hospitality Management 4112) | 3 | WI |  |
| Tourism \& Hospitality Management | 4397 | Designing Tourism Experiences <br> (Prerequisites: Senior level academic standing -- <br>  <br> Hospitality Management 4112) | 3 | WI |  |
| Tourism \& Hospitality Management | 4398 | Strategic Management \& Innovation in Tourism <br>  <br> Hospitality Management 3311; Co-requisite: <br> Tourism \& Hospitality Management 4112) | 3 | WI |  |
| Total |  |  | $\mathbf{6}$ |  |  |

## Major Requirements

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Tourism \& Hospitality Management | 1311 | The Business of Tourism \& Hospitality | 3 |  |
| Tourism \& Hospitality Management | 2311 | Global Issues in Tourism \& Hospitality <br> Management | 3 |  |
| Tourism \& Hospitality Management | 3311 |  <br> Hospitality (Prerequisite: Human Resource <br> Management 1101) | 3 |  |
| Tourism \& Hospitality Management | 3312 |  <br> Hospitality Management <br> (Prerequisite: Economics 1101) | 3 |  |
| Tourism \& Hospitality Management | 3313 | Financial Issues in Tourism \& Hospitality <br> (Prerequisite: Accounting 2101 \& Economics <br> $1101)$ | 3 |  |
| Tourism \& Hospitality Management | 3315 | Tourism \& Hospitality Sales | 3 |  |
| Tourism \& Hospitality Management | 3396 | Marketing in Tourism \& Hospitality <br> (Prerequisites: Economics 1101 and Marketing <br> 2101) | 3 | WI |
| Tourism \& Hospitality Management | 4312 | Legal Issues in Tourism \& Hospitality | 3 |  |
| Choose one Capstone course depending on Concentration: |  |  |  |  |


| Tourism \& Hospitality Management | 4396 | Hospitality Management Systems <br> (Prerequisites: Senior level academic standing -- <br>  <br> Hospitality Management 4112) | 3 | WI |
| :--- | :--- | :--- | :---: | :---: |
| Tourism \& Hospitality Management 4397 | Designing Tourism Experiences <br> (Prerequisites: Senior level academic standing -- <br>  <br> Hospitality Management 4112) | 3 | WI |  |
| Tourism \& Hospitality Management | 4398 | Strategic Management \& Innovation in Tourism <br>  <br> Hospitality Management 3311; Co-requisite: <br> Tourism \& Hospitality Management 4112) | 3 | WI |
| Total |  | The Total includes the two required Designated <br> Writing Intensive Courses listed above. | $\mathbf{2 7}$ |  |

## Major Electives (12 Credits Required)

Students are required to take 12 Major Elective credits. They may take any 12 credits from the Concentration Requirement courses listed below. If students wish to have a "Concentration" designation on their transcripts, they must take 9 credits from one of the three categories listed below, and "declare" the Concentration. They must then take one additional course to fulfill the 12-credit Major Elective requirement.

## Optional Tourism and Hospitality Management Concentrations (9 Credits Required)

## Hospitality Operations Concentration Requirements

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Select three for Concentration: | $\mathbf{9}$ |  |  |  |
| Tourism \& Hospitality Management | 3320 | Special Topics in Hospitality Management | 3 |  |
| Tourism \& Hospitality Management | 3324 | Hospitality Operations | 3 |  |
| Tourism \& Hospitality Management | 3325 | Food \& Beverage Management | 3 |  |
| Tourism \& Hospitality Management | 3328 | Gaming \& Casino Management | 3 |  |
| Tourism \& Hospitality Management | 3329 | Revenue Management in Tourism \& Hospitality <br> Management | 3 |  |
| Tourism \& Hospitality Management | 3425 | Sustainable Event Management | 3 |  |

## Destination Management Concentration Requirements

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Select three for Concentration: |  |  |  | $\mathbf{9}$ |
| Tourism \& Hospitality Management | 3321 | Tourism Planning \& Development | 3 |  |
| Tourism \& Hospitality Management | 3322 | Destination Management Organizations | 3 |  |
| Tourism \& Hospitality Management | 3327 | Advanced Destination Marketing Systems <br> (Prerequisite: Tourism \& Hospitality <br> Management 3396) | 3 |  |
| Tourism \& Hospitality Management | 3330 | Special Topics in Destination \& Event <br> Management | 3 |  |

## Event Leadership Concentration Requirements

| Subject | Course $\#$ | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Select three for Concentration: | $\mathbf{9}$ |  |  |  |
| Tourism \& Hospitality Management 3411 | Program \& Special Event Planning | 3 |  |  |
| Tourism \& Hospitality Management 3415 | Space Design \& Facility Management | 3 |  |  |
| Tourism \& Hospitality Management 3425 | Sustainable Event Management | 3 |  |  |
| Tourism \& Hospitality Management 3428 | Event Marketing \& Sponsorship <br> (Prerequisite: Economics 1101 and Marketing 2101) | 3 |  |  |

Fox School of Business \& Management Requirements

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :--- | :--- |
| Accounting | 2101 | Financial Accounting | 3 |  |
| Economics | 1101 | Macroeconomic Principles | 3 |  |
| Marketing | 2101 | Marketing Management (Prerequisite: Economics 1101) | 3 |  |
| Human Resource Management | 1101 | Leadership \& Organizational Management | 3 |  |
| These four classes complete the required lower-division courses of the Business Minor. |  |  |  |  |
| Total |  | $\mathbf{1 2}$ |  |  |

School of Tourism \& Hospitality Management Non-Credit Requirements

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| First Aid |  | Community Level or better | 0 |  |
| Certification |  | Community-level or better | 0 |  |
| CPR Certification |  | Minimum 250 hours of participation required prior to Tourism <br> \& Hospitality Management 4112 (Senior Professional <br> Development Seminar) | 0 |  |
| Industry-Related | Experience |  |  |  |

## Free Electives (12 Credits)

Students must take at least 12 credits of Free Electives. In some cases, this number needs to be increased to meet the 124 credits required for graduation. Students can use these Free Elective credits to take any courses at Temple University. (Please contact the STHM Center for Student Services [CSS] for additional information.)

## Suggested Semester by Semester Plan

| Year 1 - Fall Semester | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Subject | Foundations of Leisure | 4 |  |  |
| Tourism \& Hospitality Management | 1113 | 4 | GW |  |
| English | 0802,0812 or <br> 0902 | Analytical Reading \& Writing |  |  |
| GenEd | $08 x x$ or 09xx | Race \& Diversity | 3 | GD |
| GenEd | $08 x x$ or 09xx | Human Behavior | 3 | GB |
| GenEd | $08 x x$ or 09xx | U.S. Society | 3 | GU |
| Subtotal |  |  | $\mathbf{1 7}$ |  |
|  |  |  |  |  |

Year 1 - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Tourism \& Hospitality Management | 1311 | The Business of Tourism \& Hospitality | 3 |  |
| GenEd | 08xx or 09xx | Quantitative Literacy | 4 | GQ |
| GenEd | 0851 or 0951 | Mosaic: Humanities Seminar I | 3 | GY |
| GenEd | 08xx or 09xx | Science \& Technology I | 3 | GS |
| Human Resource Management | 1101 | Leadership \& Organizational Management | 3 |  |
| Subtotal |  | $\mathbf{1 6}$ |  |  |

Year 2 - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Tourism \& Hospitality Management | 2114 | Leisure \& Tourism for a Diverse Society | 3 |  |
| Free Elective |  | Free Elective 1 | 3 |  |
| GenEd | $08 x x$ or 09xx | Arts | $3-4$ | GA |
| GenEd | 0852 or 0952 | Mosaic: Humanities Seminar II | 3 | GZ |
| Economics | 1101 | Macroeconomic Principles | 3 |  |
| Subtotal |  |  | $\mathbf{1 5 - 1 6}$ |  |

Year 2 - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Tourism \& Hospitality Management | 2311 | Global Issues in Tourism \& Hospitality <br> Management | 3 |  |
| GenEd | 08xx or 09xx | Science \& Technology II | 3 | GS |
| GenEd | 08 xx or 09xx | Global/World Society | 3 | GG |
| Accounting | 2101 | Financial Accounting | 3 |  |
| Marketing | 2101 | Marketing Management | 3 |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

Year 3 - Fall Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Tourism \& Hospitality Management | 3185 | Internship I | 3 |  |
| Tourism \& Hospitality Management | 3311 |  <br> Hospitality | 3 |  |
| Tourism \& Hospitality Management | 3312 |  <br> Hospitality Management | 3 |  |
| Tourism \& Hospitality Management | 3315 | Tourism \& Hospitality Sales | 3 |  |
| Free Elective |  | Free Elective 2 | 3 |  |
| Subtotal |  |  | $\mathbf{1 5}$ |  |

Year 3 - Spring Semester

| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Tourism \& Hospitality Management | 3313 | Financial Issues in Tourism \& Hospitality | 3 |  |
| Tourism \& Hospitality Management | 3396 | Marketing in Tourism \& Hospitality | 3 | WI |
| STHM Major Elective |  | Major Elective 1 | 3 |  |
| STHM Major Elective | Major Elective 2 | 3 |  |  |
| Free Elective | Free Elective 3 | 3 |  |  |
| Subtotal |  | $\mathbf{1 5}$ |  |  |
|  |  |  |  |  |
| Year 4 - Fall Semester |  |  |  |  |


| Subject | Course \# | Course Title | Hours | Attribute |
| :--- | :--- | :--- | :---: | :---: |
| Tourism \& Hospitality Management | 4112 | Senior Professional Development Seminar | 3 |  |
| Tourism \& Hospitality Management | 4312 | Legal Issues in Tourism \& Hospitality | 3 |  |
| Tourism \& Hospitality Management | $43 x x$ | Capstone Course | 3 | WI |
| STHM Major Elective |  | Major Elective 3 | 3 |  |
| STHM Major Elective | Major Elective 4 | 3 |  |  |
| Subtotal |  | $\mathbf{1 5}$ |  |  |
|  |  |  |  |  |
| Year 4 - Spring Semester | Course \# | Course Title | Hours | Attribute |
| Subject | Internship II | 12 |  |  |
| Tourism \& Hospitality Management | 4185 | Free Elective 4 | 3 |  |
| Free Elective |  |  | $\mathbf{1 5}$ |  |
| Subtotal |  |  |  |  |
|  |  | $\mathbf{1 2 4}$ |  |  |
| Degree Total |  |  |  |  |

## OPTIONS

## Business Minor

See Advisor. (www.fox.temple.edu/cms_academics/dept/advising/minors/)
General Business Studies Minor

See Advisor. (www.fox.temple.edu/cms_academics/dept/advising/minors/)

## Certificate of Specialization, Geography of Tourism

See Advisor. (www.temple.edu/gus/undergraduate/minors/index.htm)
Certificate of Specialization, Geography of Sport, Recreation and Tourism Planning
See Advisor. (www.temple.edu/gus/undergraduate/minors/index.htm)


[^0]:    Freshman Year - 1st Semester

[^1]:    4 Finance 3551 replaces International Business 3101 (Fundamentals of International Business) in the upper division foundation. This course is not calculated in the major GPA.
    $\wedge$ This major capstone is taken in the final semester, and all prerequisites must be met. This course is currently only offered in the Spring semester.

[^2]:    *pending approval

[^3]:    * This course has a prerequisite(s). Visit the Course Catalog at https://www.temple.edu/apply/common/catcheck.asp.

[^4]:    *Students who place out of Italian 1002 will need one additional elective; those who place out of Italian 1003 will need two additional electives.

[^5]:    * Students following the Management track may take the elective Advertising 1004: Introduction to Marketing for credit, in place of Advertising 2151: Visual Communication.

[^6]:    *NOTE: IS\&T majors are required to have completed Mathematics 1022. They can choose either Mathematics 1031 or Mathematics 1041.

