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Undergraduate Catalog 2012-13

About This Bulletin

The Undergraduate Catalog is Washington University in St. Louis's catalog of undergraduate courses and degrees. The catalog includes undergraduate programs, degree requirements, course descriptions, pertinent university policies and faculty for students earning a degree through one of the four undergraduate schools: College of Arts & Sciences, Olin Business School, Sam Fox School of Design & Visual Arts (College of Architecture, College of Art) and School of Engineering & Applied Science.

The degree requirements and policies in the 2012-13 Undergraduate Catalog apply to students entering Washington University during the 2012-13 academic year.

The 2012-13 Undergraduate Catalog is entirely online but may be downloaded in PDF format for printing.

Every effort is made to ensure that the course information, applicable policies and other materials presented in the Catalog are accurate and correct. Washington University reserves the right to make changes at any time without prior notice. Therefore, the electronic version of the Catalog may change from time to time without notice. The governing document at any given time is the then-current version of the Catalog, as published online, and then currently applicable policies and information are those contained in that Catalog.

More information about the four undergraduate schools may be found by visiting their websites:

- College of Arts & Sciences: http://college.artsci.wustl.edu
- Olin Business School: http://www.olin.wustl.edu
- Sam Fox School of Design & Visual Arts (Colleges of Architecture and Art): http://samfoxschool.wustl.edu
- Engineering & Applied Science: http://engineering.wustl.edu

For the most current information about available courses and class scheduling, visit https://acadinfo.wustl.edu (WebSTAC). Questions concerning the Undergraduate Catalog may be addressed to Bulletin_Editor@wustl.edu.

For catalogs and course information pertaining to other Washington University in St. Louis schools and programs, please visit http://wustl.edu/academics/bulletins.html.

University Addresses

Office of Undergraduate Admissions
Room 135, S. Brookings Hall
Washington University in St. Louis
Campus Box 1089
One Brookings Drive
St. Louis, Missouri 63130-4899
(314) 935-6000

1-800-638-0700
Fax: (314) 935-4290
Website: admissions.wustl.edu
Email: admissions@wustl.edu

Student Financial Services
Room 75, N. Brookings Hall
Washington University in St. Louis
Campus Box 1041
One Brookings Drive
St. Louis, Missouri 63130-4899
(314) 935-5900
1-888-547-6670
Fax: (314) 935-4037
Website: sfs.wustl.edu
Email: financial@wustl.edu
About WUSTL

Who We Are Today

Washington University, a medium-sized, independent university, is dedicated to challenging its faculty and students alike to seek new knowledge and greater understanding of an ever-changing, multicultural world. The university is counted among the world’s leaders in teaching and research, and draws students and faculty to St. Louis from all 50 states and more than 100 nations.

The university offers more than 90 programs and almost 1,500 courses leading to bachelor's, master's and doctoral degrees in a broad spectrum of traditional and interdisciplinary fields, with additional opportunities for minor concentrations and individualized programs. For more information about the university, please visit: http://facts.wustl.edu/Pages/About.aspx.

Undergraduate Enrollment by School

http://facts.wustl.edu/Pages/Enrollments.aspx

Committed to Our Students: Mission Statement

The mission of Washington University is the promotion of learning — learning by students and by faculty. Teaching, the transmission of knowledge, is central to our mission, as is research, the creation of new knowledge. Faculty composed of scholars, scientists, artists and members of the learned professions serve society by teaching; by adding to the store of human art, understanding and wisdom; and by providing direct services, such as health care.

Our goals are to foster excellence in our teaching, research, scholarship and service; to prepare students with the attitudes, skills and habits of lifelong learning and with leadership skills, enabling them to be useful members of a global society; and to be an exemplary institution in our home community of St. Louis, as well as in the nation and in the world.

To this end, we intend to judge ourselves by the most demanding standards; to attract people of great ability from all types of backgrounds; to encourage faculty and students to be bold, independent and creative thinkers; and to provide the infrastructure to support teaching, research, scholarship and service for the present and for future generations.

Teaching and Learning at Washington University

A Statement of Best Practices and Expectations

Original statement endorsed by the Undergraduate Council, November 10, 1999.
Amended statement endorsed by the Undergraduate Council, February 2, 2010.

All members of the Washington University community share responsibility for creating an atmosphere conducive to learning. A collaborative learning environment involves the active participation of both instructors and students in the classroom and in activities outside the classroom. This environment requires:

• the best effort on the part of both faculty and students to enhance the learning experience for the benefit of all persons involved;

• the recognition that all present play important roles, all participants in the learning experience deserve respect for what they bring to it, and all should be sensitive to the importance of the others in this process;

• an atmosphere in the classroom of mutual respect for all persons regardless of political, ethnic, religious, gender, sexual orientation and disability considerations.

In response to changing classroom dynamics we the Undergraduate Council make the following recommendations:

Expectations and responsibilities of the faculty: The faculty member is involved in several major roles, including those of teacher, scholar-researcher and citizen in the university. For the unimpeded performance of these functions, the faculty member is guaranteed academic freedom. At the same time, the faculty member has clear responsibilities to the students and to the institution, particularly in her/his role as teacher. Instructors should provide the basic outlines for the learning experience and provide guidance as appropriate, generally in the form of a handout or easily accessible electronic document. Such guidance should normally involve:

• the presentation of a syllabus that:

  (A) clearly identifies the goals of the course and its prerequisites, a schedule of major assignments and examinations, explicit criteria for how student work will be evaluated;

  (B) contains a clear articulation of ground rules for classroom interaction and consequences for infringement (How much active participation is expected of the student? Is attendance required? If the course meets over the lunch hour, is it acceptable to eat during class? Is it acceptable to use laptop computers in class?);

  • reminding students of the university’s standards for academic integrity;

  • bringing new perspectives and insights to assigned readings and other text materials;

  • regularly meeting class and being punctual in starting and dismissing class;

  • prompt and responsible grading, with evaluative comments and opportunities for students to discuss their grades with the faculty member;
• adherence to the announced office hour schedule and offering as many avenues as possible for contact, including by telephone and email;
• the use of appropriate technology as relevant both in and outside the classroom to enhance communication between faculty and students;
• uploading course materials and sending emails in a timely manner;
• the oversight of Teaching Assistants, especially to ensure grading uniformity in large classes;
• facilitation of regular student evaluations of the faculty member’s teaching methods and materials, including mid-semester evaluations, as a means of creating an atmosphere of shared responsibility within the classroom;
• when possible, avoiding prohibitive costs when ordering textbooks and other course materials, and making electronic text available;
• adhering to the published final examination schedule to avoid interfering with students’ preparation for other classes.

Expectations and responsibilities of the students. Students must take responsibility for their own learning. Students also share with the instructor the responsibility for providing an environment conducive to learning. Students should personally:
• be actively engaged with the material and with the process of education;
• build their own knowledge and skills (faculty guide students to materials and methods, but the learning is up to the student);
• attend all classes, both lecture and discussion sessions, and participate in class discussions; leave class only for emergencies; use streaming video recording of lectures only for review, not as a substitute for class;
• be punctual in completing assignments;
• behave in the classroom in a manner that demonstrates respect for students and faculty;
• share responsibility for the flow of information concerning a course by regularly checking the course web page and university email;
• be familiar with and adhere to matters of academic integrity as identified by their school within the university;
• participate in objective and constructive evaluations of the instructor and of the course (this helps to clarify problems and strengths that will help the instructor to improve the course in subsequent semesters);
• conform to the rules for laptop use stated in the syllabus;
• refrain from the use of texting and cell phones.

Special student concerns. Students should take the initiative in discussing special arrangements with the instructor in a timely manner when for any reason they miss class. Students also should recognize that the collective needs of the faculty and other students in a course may outweigh individual preferences. Faculty should be sensitive to individual student needs for special arrangements:
• to accommodate disabilities, illnesses, family emergencies or academic or professional opportunities that interfere with usual class attendance or performance;
• when students miss class because of religious holidays.

Responsibilities of the university administration. For its part, the university administration must:
• continue to provide facilities and ensure adequate classroom and laboratory space that is stocked with sufficient appropriate equipment;
• give priority to supporting both faculty and students in teaching and learning;
• be responsive when normal communications between faculty and students break down by providing for a process for discussion and negotiations;
• facilitate communications among various constituents of the university;
• facilitate the flow of visitors to the classroom by notifying faculty of such matters in a timely fashion.

Where to get help
For instructors: The departmental chair, the Teaching Center, colleagues and the relevant dean’s office can offer very useful advice on teaching techniques, materials, and methods.

For students: The instructor, the TAs and Cornerstone: The Center for Advanced Learning can be counted on for guidance on how best to learn; the Writing Center can be a very helpful resource for all sorts of written assignments.

The general process of a student concern is to:
1. raise it first with the faculty member,
2. go to their four-year adviser, and
3. then to the department chair.

Disagreements that have not been resolved by this process can be addressed to the ombudsperson.

Class Size
More than three-fourths of Washington University’s undergraduate classes range from one to 24 students. We believe smaller classes help you learn more through stimulating group discussion. Many of your classes may be larger at first, but they generally become smaller as you progress in your chosen field.

Depending on the department you choose, your classes may be smaller or larger.
About WUSTL

Average Class Sizes by Level

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University College

University College is the evening division of Arts & Sciences and offers a wide range of courses in a variety of academic departments and interdisciplinary and professional areas of study. Part-time and full-time study in undergraduate degree programs, graduate degree programs, and certificate programs is available. In addition, University College offers several special credit programs, such as the College Credit Program for high school students, and special noncredit programs, such as short courses, writing workshops and career workshops. For more information, visit http://ucollege.wustl.edu/.

Trustees & Administration

Board of Trustees

Please visit the Board of Trustees website.

University Administration

In 1871, Washington University co-founder and then-Chancellor William Greenleaf Eliot sought a gift from Hudson E. Bridge, charter member of the university’s Board of Directors, to endow the chancellorship. Soon it was renamed the “Hudson E. Bridge Chancellorship.”

Led by the Chancellor, the officers of the University Administration are:

Officers of the University Administration

Academic Calendar

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<td>September 3</td>
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<td>October 19</td>
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<td>December 7</td>
<td>Friday</td>
<td>Last day of classes</td>
</tr>
<tr>
<td>December 13</td>
<td>Thursday</td>
<td>Final examinations begin</td>
</tr>
<tr>
<td>December 19</td>
<td>Wednesday</td>
<td>Final examinations end</td>
</tr>
</tbody>
</table>

Summer Semester 2013

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 20</td>
<td>Monday</td>
<td>First Summer Session begins</td>
</tr>
<tr>
<td>May 27</td>
<td>Monday</td>
<td>Memorial Day holiday</td>
</tr>
<tr>
<td>July 4</td>
<td>Thursday</td>
<td>Independence Day holiday</td>
</tr>
<tr>
<td>August 15</td>
<td>Thursday</td>
<td>Last Summer Session ends</td>
</tr>
</tbody>
</table>

Washington University recognizes the individual students’ choice in observing religious holidays that occur during periods when classes are scheduled. Students are encouraged to arrange with their instructors to make up work missed as a result of religious observance, and instructors are asked to make every reasonable effort to accommodate such requests.

Dates for the last days of classes and reading periods are given in Course Listings.

Campus Resources

Student Support Services

Cornerstone: The Center for Advanced Learning. Located on the first floor of Gregg Residence House on the South 40, Cornerstone is the hub of academic support at Washington University, providing students with help in a variety of forms, including course-specific mentors, study groups, advisers of the day and intensive intersession review programs in gateway courses such as chemistry, physics and mathematics. Other services include workshops on study skills, time management
and note-taking, as well as walk-in help desks for calculus and writing. Cornerstone also offers final exam work sessions and fee-based graduate and professional school entrance exam preparation courses. Take advantage of our Tech Lab, which features learning software unavailable anywhere else on campus, or use our classrooms and lounge to study or relax. Most services are free, and last year, about 2,100 students participated in one or more of our programs. For more information, visit our website at cornerstone.wustl.edu or call 314/935-5970.

Disability Resources. Cornerstone is also home to Disability Resources, the official source for students with disabilities or suspected disabilities. If you have received accommodations in the past or have any physical, learning or attention disorders, you may request accommodations and services to ensure equal access in the classroom. Visit our website at disability.wustl.edu or call Cornerstone at 314/935-5970 for more information. We are located within Cornerstone, on the first floor of Gregg Residence House on the South 40.

Office for International Students and Scholars. If you’re a student joining the university from a country other than the United States, this office can assist you through its orientation programs, by issuing certificates of eligibility (visa documents), and by offering a special program in the English Language Programs. In addition, the office provides personal and cross-cultural counseling and arranges social, cultural and recreational activities that foster international understanding on campus.

The Office for International Students and Scholars is in the Stix International House at 6470 Forsyth Boulevard. For more information, visit the website at oisshome.wustl.edu or call 314/935-5910.

Research Affiliations

Washington University is affiliated with the Central Institute for the Deaf, the Donald Danforth Plant Science Center, the Missouri Botanical Garden, the Newberry Library for Medieval and Renaissance Studies in Chicago and the Saint Louis Zoo. The university also owns Tyson Research Center — 2,000 acres located 20 miles west of the campus, which houses additional facilities for biology and physics. The Sam Fox School also houses the Newman Money Museum, a numismatic center.

In addition, the university has two interdisciplinary research institutes — the Division of Biology and Biomedical Sciences and the Center for Computational Biology — plus a number of interdisciplinary research centers on the Danforth and Medical campuses.

Student Health Services

Student Health Services staff members include licensed professionals in Medical Services, Mental Health Services and Health Promotion Services. Please visit us in Dardick House on the South 40, or visit our website at shs.wustl.edu for more information about each of our services and staff members.

Hours:
Monday, Tuesday and Thursday 8 a.m. – 6 p.m.
Wednesday 10 a.m. – 6 p.m.
Friday 8 a.m. – 5 p.m.
Saturday 9 a.m. – 1 p.m.

A nurse answer line is available to answer any medical questions a student may have when SHS is closed. For after-hours care, please call: 314/935-6666.

Medical Services. staff members provide care for the evaluation and treatment of an illness or injury, preventative health care and health education, and nutrition, physical therapy, travel medicine and women’s health services. All WUSTL students should seek treatment at SHS first. Any condition requiring specialized medical services will be referred to an appropriate community specialist. The student health insurance plan requires a referral any time care is not provided at SHS. Call 314/935-6666 or visit shs.wustl.edu to schedule an appointment for medical care, including allergy injections prescribed by your allergist, health consultations, for HIV or other STD testing, or for immunizations.

Appointments also are available for assessment, treatment and referral for students who are struggling with substance abuse.

The SHS pharmacy is available to all WUSTL students and their dependents who participate in the student health insurance plan. The pharmacy accepts most prescription insurance plans; please check with the pharmacist to see if your prescription plan is accepted at the pharmacy.

The SHS lab provides full laboratory services. Approximately 20 tests can be performed in the SHS lab. The remainder of all testing that is ordered by SHS is completed by Quest Diagnostics. Quest serves as our reference lab and is on the student health insurance plan as a preferred provider. The SHS lab can collect any test ordered by our providers.

All incoming students must provide proof of immunization for two measles, mumps, rubella vaccines after the age of one year old. (A titer may be provided in lieu of the immunizations.) A PPD skin test in the past six months is required for students entering the university from certain countries. This list of countries may be found on our website. We suggest all students also have Tetanus Diphtheria immunization within the past five years, Meningococcal vaccine, Hepatitis A vaccine series, Hepatitis B vaccine series and Varicella vaccine. Medical History Forms are available online at shs.wustl.edu. Failure to complete the required forms will delay registration.

Mental Health Services. staff members work with students to resolve personal and interpersonal difficulties, including conflicts with or worry about friends or family, concerns about eating or drinking patterns, and feelings of anxiety and depression. Although some concerns are more frequent than others, students’ experiences are as varied as the students themselves.
Staff members help each person figure out her or his own situation. Services include individual, group and couples counseling; crisis counseling; psychiatric consultation; and referral for off-campus counseling. Call 314/935-6666 or visit shs.wustl.edu to schedule an appointment.

**Health Promotion Services** staff members provide information and resources on issues of interest to WU students including alcohol and other drugs, weight and body image, sexual health, sleep, and stress; customize professional health education programs for groups; and work with groups of students dedicated to educating their peers about healthy decision making. Call 314/935-7139 for more information.

### Important Information About Health Insurance

Washington University has a student health fee designed to improve the health and wellness of the entire Washington University community. All full-time Washington University students are automatically enrolled in the Student Health Insurance Plan upon completion of registration. Specific fees and co-pays apply to students using Medical Services and Mental Health Services. More information is available at shs.wustl.edu.

### Campus Security

The Washington University campus is among the most attractive in the nation and enjoys a safe, relaxed atmosphere. Your personal safety and the security of your property while on campus is a shared responsibility. Washington University has made safety and security a priority through our commitment to a full-time professional police department, use of closed circuit television, card access, good lighting, shuttle services, emergency telephones and ongoing educational safety awareness programs. The vast majority of crimes that occur on college campuses are crimes of opportunity, which can be prevented.

The best protection against crime is an informed, alert campus community. Washington University has developed several programs to help make your experience here a safe and secure one. An extensive network of emergency telephones, including more than 100 “blue light” telephones, is connected directly to the University Police Department and can alert the police to your exact location. In addition to the regular shuttle service, an evening walking escort service or mobile Campus Circulator is available on the Danforth Campus.

The Campus2Home shuttle will provide a safe ride home for those living in four designated areas off campus — Skinker-DeBaliviere, Loop South, north of The Loop and just south of the campus — from 6:00 p.m. to 4:00 a.m. seven days a week. The shuttle leaves from both the Mallinckrodt Center and the Brookings Drive stops and takes passengers directly to the front doors of their buildings. Shuttle drivers then will wait and watch to make sure passengers get into their buildings safely.

The University Police Department is a full-service organization staffed by certified police officers who patrol the campus 24 hours a day throughout the entire year. The Police Department offers a variety of crime prevention programs including a high-security bicycle lock program, free personal-safety whistles, computer security tags, personal safety classes for women and men, property inventory services and security surveys. For more information on these programs, check out the police website at police.wustl.edu.

In compliance with the Campus Crime Awareness and Security Act of 1990, Washington University publishes online an annual report, Safety and Security on the Danforth Campus — A Guide for Students, Faculty and Staff, which is available to all current and prospective students on the Danforth Campus and university employees on the Danforth, North and West campuses at police.wustl.edu. To request a hard copy, contact the Washington University Police Department, Campus Box 1038, One Brookings Drive, St. Louis, MO 63130-4899, 314/935-9011.

### Admission Procedures

#### Freshman Admission

The admissions committee reviews and assesses each application personally. Admission to Washington University is both selective and competitive. Students who come to Washington University have challenged themselves academically and personally during their high school years and are required to have earned a high school diploma or equivalent. Your senior-year transcript should show that you continue to take demanding courses. Most applicants take advantage of honors, advanced placement and international baccalaureate courses, if offered by their high schools.

**Most candidates’ transcripts include:**

- four years of English
- four years of mathematics (Architecture, Business and Engineering strongly recommend calculus.)
- three to four years of history or social science
- three to four years of laboratory science (Engineering strongly recommends chemistry and physics.)
- at least two years of a foreign language
- both chemistry and physics, as well as the most challenging math programs available, for students who plan to do course work in sciences and/or premedicine

**Other important parts of your application:**

- grades and class rank (if your school ranks students)
- counselor and teacher recommendations
- essay
- extracurricular and community activities
• standardized test scores (Either SAT or ACT, writing is not required. SAT Subject tests are not required. Test results from any of your high school years are acceptable, though we encourage senior-year testing. We consider only the highest individual scores, whenever they occurred.)

Applying for Admission
For your application file to be complete, we must receive the following materials by the deadline for the decision plan you select:

• Pre-Application Data Sheet (This is our supplement; there is no supplemental essay. We encourage you to submit the Pre-Application Data Sheet as soon as possible; however, you may complete it before, after or with the Common Application.)
• Common Application OR Universal College Application
• $55 fee
• All supporting materials, including the personal essay, a teacher recommendation, school report for freshman admission or dean’s report for transfer admission, and official transcript.

Decision Plans
Washington University offers a binding Early Decision option, with a deadline of November 15 and notification by December 15 each year, and Regular Decision, with a deadline of January 15 and notification by April 1 each year.

If Washington University is your first choice, we encourage you to apply under Early Decision. Applying under Early Decision signifies a binding commitment that you will attend Washington University if admitted. This option requires you to submit a nonrefundable enrollment deposit within two weeks of receiving your letter of admission. If admitted, you must withdraw other applications. You may apply only to one school under a binding Early Decision plan.

If English Is Not Your Primary Language
Either TOEFL (Test of English as a Foreign Language) or IELTS (International English Language Testing System) is required of all international students for whom English is a second language and recommended for U.S. citizens whose second language is English. The tests administered in December of each year will be the last ones accepted for the following admission year.

Portfolios
In addition to the standard application materials mentioned above, applicants for the College of Architecture are encouraged and applicants for the College of Art are required to submit a portfolio of their work. All College of Art students submitting portfolios will be considered for the Conway or Proetz Scholarship in art.

Submit a digital portfolio, consisting of 12 to 15 pieces of recent work, which may include drawings, two- and three-dimensional pieces, or photographs. Submit images as a simple, non-timed PowerPoint presentation. Also include all of the work in the presentation in a separate folder as jpegs saved at no higher than 150 dpi resolution. Write your name and high school on the CD/DVD — DO NOT use a stick-on label. Remember to include an accompanying inventory/contact sheet showing thumbnails of all work on the CD/DVD. The inventory sheet also must include your name and high school. If preferred, you may include additional information such as title of work, medium, dimensions and date completed.

Deferred Enrollment
If you are an admitted student who has submitted the enrollment deposit and you wish to begin your studies at a later date, you may defer enrollment at Washington University for a period of one year with an option to extend for one additional year. Deferred enrollment is designed for students who wish to travel or work between high school and college. Courses taken during the deferred period normally will not be accepted for credit. Deferral should be requested in writing from the Office of Undergraduate Admissions. The Committee on Admissions will review your case and notify you of its decision. You must reapply for financial assistance during the application cycle immediately preceding the date of desired entry.

Please visit the Admissions website at http://admissions.wustl.edu/Pages/default.aspx.

Transfer Admission
Washington University welcomes the application of eligible transfer students as space and faculty resources permit. Students in college transfer programs at community and junior colleges, as well as students from four-year institutions, are encouraged to apply for admission.

If you are applying as a transfer student, you are expected to present a strong and consistent record of academic achievement. Because requirements for degrees vary from institution to institution, you are advised to consult with the Office of Undergraduate Admissions early in your academic career to minimize problems with the transfer of credits.

If you are admitted from an accredited institution, you will be given full credit for work satisfactorily completed with a grade of C or better, if the work is equivalent to that accepted for graduation at Washington University. You will be advised of the transferability of credits upon admission. Although credits earned in courses may transfer, the grades earned do not.

You should apply for transfer admission one semester in advance of the semester for which you wish to enroll. (Note: Students wishing to transfer for spring semester must have completed their fall semester and be able to provide final transcripts by the end of the calendar year. If final grades will
not be available until January, the student must apply for fall semester transfer.) We encourage first-semester students to complete a full year at the current college. For current application deadlines, please visit http://admissions.wustl.edu/apply/transfer/Pages/default.aspx.

Applicants must submit their high school transcripts, the application, official transcripts of all previous college work, standardized test scores (SAT or ACT taken during high school), two letters of recommendation, and the nonrefundable application fee to the Office of Undergraduate Admissions. For admissions information, please visit the Admissions website at http://admissions.wustl.edu/Pages/default.aspx.

If you wish to be considered for financial assistance, you must file the Financial Aid Profile or Washington University’s Family Financial Profile (FFP) (https://sfsweb.wustl.edu/sfs/applications/ftp_app.aspx?option=ua). Detailed information on financial support (p. 29) can be found in this Bulletin.

Transfer admission information for individual schools is listed as follows.

**Transferring into Arts & Sciences**

Each year, in both fall and spring semesters, a number of students from other colleges and universities transfer into the College of Arts & Sciences. Upon their admission the transfer student adviser reviews and evaluates their previous academic work. Full credit is normally granted for courses taken at accredited institutions provided that the university offers comparable courses and the student has completed the courses with a grade of C or better (please note: online course work does not transfer). In addition, transfer credit may be counted where applicable and upon approval toward major or minor requirements. Transfer students must be enrolled for at least four consecutive full-time semesters to satisfy the residency requirement. They must earn no fewer than 60 units during that time.

All transfer students are assigned an academic adviser. When they declare a major, they also meet with an adviser in the major department. The full range of curricular opportunities offered through the College is open to transfer students when prerequisites are satisfied. You should direct specific questions about transfer credit and course sequences at Washington University to the College of Arts & Sciences.

**Transferring into Architecture**

Places for transfer students are extremely limited and require strong performance in an arts and sciences curriculum, and preferably preparation in the visual arts — in particular, freehand drawing and 3-D design. If you have taken studio courses (design, drawing and others) at other schools, your application is best accompanied by a portfolio with samples of that work. Placement into the design studio sequence is determined by portfolio review.

A transfer applicant into the College of Architecture should consult with the associate dean of students of the Sam Fox School of Design & Visual Arts as early as possible to assist in appropriate placement. It is advisable that the transfer applicant have demonstrated experience in 2-dimensional and 3-dimensional design. Your previous work should parallel as closely as possible the course work outlined on the Architecture Degree Requirements (p. 63) page.

**Transferring into Art**

The number of studio art credits you already have earned, combined with an evaluation of your portfolio, determines the year and semester level at which you are admitted. You must have a minimum number of appropriate studio art credit units to be placed at a particular level in the program, as follows:

- 2nd semester, 1st year = 6 units
- 1st semester, 2nd year = 15 units
- 2nd semester, 2nd year = 21 units
- 1st semester, 3rd year = 30 units

As much as possible, the studio art courses taken at other institutions should correspond to the foundation drawing and design program at Washington University.

**Portfolio Requirements**

1. Submit a digital portfolio, consisting of 12 to 15 pieces of recent work, which may include drawings, 2- and 3-dimensional pieces, or photographs. Submit images as a simple, non-timed PowerPoint presentation. Also include all of the work in the presentation in a separate folder as jpegs saved at no higher than 150 dpi resolution. Write your name and high school on the CD/DVD — DO NOT use a stick-on label. Remember to include an accompanying inventory/contact sheet showing thumbnails of all work on the CD/DVD. The inventory sheet also must include your name and current school. If preferred, you may include additional information such as title of work, medium, dimension and date completed.

Include examples of work from basic drawing and design classes that indicate your technical and conceptual level of accomplishment — some drawing should be from direct observation. If possible, submit good examples of work in different media to demonstrate a range of art experiences. If applying to the third-year level, one-half of the work should be in the area of your intended major.

**Portfolio Instructions**

1. Portfolios should be mailed to the Office of Undergraduate Admissions. Portfolios will not be returned.

2. Original work can be presented only during a meeting with the associate dean of students in the Sam Fox School.
3. To assist in appropriate placement, an interview with the associate dean of students, while not required, is strongly recommended. You should plan to bring a transcript to the meeting.

**Transferring into Business**

The Olin Business School offers transfer enrollment in both fall and spring semesters. The strongest candidates for admission present a strong academic performance from a two-year or four-year college that mirrors most of our academic requirements for our students at the freshman and sophomore levels. For a sophomore transfer candidate, this would include microeconomics and an equivalent to Calculus II at the college level. For a junior-level transfer candidate, this also would include financial accounting, macroeconomics and perhaps managerial accounting. All transfers to Olin must have completed an equivalent to Calculus II at the college level. Students who are admitted to the Olin Business School should expect a written course evaluation from the transfer student adviser within two weeks of receiving their acceptance letter, indicating which courses will be accepted by Olin. A maximum of 60 credits will be accepted toward our undergraduate degree. Students must earn at least a C grade in the course for the units to transfer to Washington University. Courses taken online are not accepted as transfer credit. Grades will not transfer to Washington University.

All transfer students are assigned an academic adviser. Transfer students must be enrolled for at least four consecutive full-time semesters to satisfy the residency requirement.

Please see the degree requirements (p. 745) for the Bachelor of Science in Business Administration degree.

**Transferring into Engineering**

You may apply for admission for either the fall or the spring semester if you have completed a minimum of one year of college work elsewhere. You must demonstrate academic achievement (grade average of B+ or better) with strength in mathematics (calculus) and science (chemistry/physics). Transfer applicants to the School of Engineering & Applied Science should have completed one semester of an English composition course, two semesters of calculus-based physics and sufficient calculus (typically three semesters) to be prepared to take differential equations. Applicants interested in biomedical or chemical engineering also should have completed sufficient chemistry to be prepared to take organic chemistry. Applicants interested in biomedical engineering should have completed an introductory biology sequence on cellular, molecular and developmental biology and genetics. After completing the application process, an evaluation of your record will be made to determine the transferability of college credit. Grades earned do not transfer, and you must earn a letter grade of C or better for the course credit to transfer. For English composition, a letter grade of B or better is required for the course credit to transfer. Courses taken pass/fail do not transfer.

To be recommended for any bachelor’s degree, you must satisfy applicable requirements of the School of Engineering & Applied Science shown under Degree Requirements (p. 756). Please note that all students earning an undergraduate engineering degree are required to complete a minimum of 60 course units at Washington University.

**Pre-Matriculation Units**

Pre-matriculation units of credit are earned before your enrollment at Washington University as a first-year student, which can be applied toward a Washington University degree. A maximum of 15 units of pre-matriculation credit may be counted toward any undergraduate degree. These units will count toward graduation but will not meet general education requirements. Sources for pre-matriculation units of credit include Advanced Placement (AP) examinations, International Baccalaureate (IB), British Advanced (A) Levels, course credit earned by proficiency (e.g. back credit), and college credit earned after your junior year in high school.

A student in the College of Arts & Sciences may be awarded up to 15 units of credit from all sources — standardized placement tests and college course work — that were completed prior to enrollment as a first-year student at Washington University. The units of credit awarded from these sources do not apply toward the distribution requirements.

A student earning the Bachelor of Science in Business Administration (B.S.B.A.) in the Class of 2015 and beyond may apply a maximum of 15 pre-matriculation units to the B.S.B.A. degree. The units of credit awarded from these sources do not apply toward the distribution requirements. A transcript notation is made of all pre-matriculation units earned before enrollment in Washington University.

A student in the College of Art may apply a maximum of 15 pre-matriculation units to the Bachelor of Fine Arts (B.F.A.) degree. The units of credit awarded from these sources do not apply toward graduation requirements. A transcript notation is made of all pre-matriculation units earned before enrollment in Washington University.

A student should submit official score reports from AP examinations, College Board Achievement and Aptitude Tests, the International Baccalaureate (higher-level scores) and British A-Level examinations. All appropriate test scores will have course equivalents assigned to them and noted on the transcript. However, a maximum of 15 units of credit will be awarded provided credit has not been already designated as the result of college course work having been transferred as well.

Grades for courses taken at another college or university do not transfer. A maximum of 15 units of credit may be awarded for college course work done prior to matriculation provided...
no other pre-matriculation credits have been awarded. In the College of Arts & Sciences, Olin Business School and School of Engineering & Applied Science, course work completed at another college or university prior to matriculation must meet the following standards:

1. Enrolled in primarily by matriculated college students
2. Taught by college faculty
3. Taught on a college campus
4. Taken after the junior year in high school
5. The course is not on the high school transcript and did not count toward the high school diploma.
6. The course was taken at a fully accredited college or university.

The 15-unit cap does not apply to the other undergraduate schools. See below for more information about AP examinations and International Baccalaureate.

Secondary School Course Work
Washington University does not recognize credit for courses taken in high schools and taught by secondary instructors, even when offered under the aegis of a university. The university accepts credit for courses taken at and taught by faculty of a college or university, provided the course has not been credited toward the high school diploma.

The College of Arts & Sciences accepts credit only for college course work taken after the junior year of high school.

Proficiency and Placement Examinations
Superior results on proficiency and placement examinations allow you to enter advanced courses at the beginning of your college career, to fulfill some requirements for a major or a minor by examination rather than by course work, and to earn credit toward your degree. Students will have all accepted pre-matriculation work noted on their transcript so they may go directly into advanced courses.

Four types of examinations are recognized:

Washington University Placement Examinations.
These placement examinations are administered by various departments and have different requirements for advanced placement.

International Baccalaureate. If you have earned the International Baccalaureate diploma or you have successfully passed examinations in the program, you should consult a dean in your undergraduate division of the university about advanced placement and credit. Scores may be used for placement or granting of degree credit, according to the recommendations of the various departments. Subsidiary-level scores are not recognized.

British Advanced (A) Levels. These grades may be used for placement or granting of degree credit, according to the recommendations of the various departments.

Advanced Placement (AP) Examinations. These are used for placement, partial fulfillment of major or minor requirements, and the granting of degree credit, according to the recommendations of the various departments. Examinations are given by the College Board in May of each year for secondary school students who have been enrolled in a college-level course in the same subject or subjects of the exam. For the most current policy information, visit the website: college.artsci.wustl.edu/placement_credit.

You may obtain information about these exams from the College Board Advanced Placement Examinations, Box 592, Princeton, NJ 08540 or by calling 1-888/225-5427.

SAT Subject Tests. These examinations in modern languages are administered by the College Board. They are required for study in certain languages.

College Level Examination Program (CLEP) scores are not accepted for credit or placement.

Washington University Placement Examinations (Back Credit)

EAST ASIAN LANGUAGES:
Credit is typically awarded for completing the following courses with a grade of B– or better. Native speakers are not eligible for back credit, so evidence of secondary or post-secondary study of the language is required.

Chinese
L04 211 = 3 units for 102D
L04 360 = 3 units for 102D and 3 units for 212

Japanese
L05 213 = 3 units for 104
L05 412 = 3 units for 104 and 3 units for 214

Korean
L51 217 = 3 units for 118D
L51 417 = 3 units for 118D and 3 units for 218

GERMANIC LANGUAGES AND LITERATURES (L21)
Students receive the following back credit after successfully completing these courses with a grade of B– or better.

L21 210D = 3 units for 102D
L21 301D = 3 units for 102D and 3 units for 210D
L21 302D = 3 units for 102D and 3 units for 210D
JEWISH, ISLAMIC AND NEAR EASTERN LANGUAGES:
Credit is typically awarded for completing the following courses with a grade of B– or better. Native speakers are not eligible for back credit. Evidence of secondary or post-secondary study of the language is required.

Arabic
L49 207D = 3 units for 108D
L49 307D = 3 units for 108D and 3 units for 208D

Biblical Hebrew
L35 384 = 3 units for L74 106D and 3 units for L74 214D

Modern Hebrew
L74 213D or 214D = 3 units for 106D
L74 320D or 322 = 3 units for 106D and 3 units for 322D
L74 4010 or 402 = 3 units for 214D and 3 units for 322D

Hindi
L73 201 = 3 units for 111D
L73 301 = 3 units for 111D and 3 units for 201

Persian
L47 216D = 3 units for 116D
L47 316 = 3 units for 116D and 3 units for 216D

MATHEMATICS (L24)
If a student completes one of the following courses with a grade of C+ (C– for a student who entered Fall 2002 and prior) or better at Washington University, they are eligible for back credit. Credit is not awarded twice for transfer or AP scores.

L24 128 = 3 units for 127
L24 132 = 3 units for 131
L24 233 = 3 units for 131 and 3 units for 132
L24 3200 = no credit, not in calculus sequence

ROMANCE LANGUAGES (L34, L36, L38)
No back credit is awarded for 102 or 301. Credit is awarded for the following courses with a grade B or better:

201D = 3 units for 102D
307D = 3 units for 101D and 3 units for 102D
308D = 3 units for 307D* and 3 units for 201D (credit awarded for placement, completion of the course is not required)

*L38 307D Spanish can only be used for elective credit, it cannot be used toward a Spanish major or minor.

RUSSIAN (L39)
Students can receive back credit for up to 6 credits contingent upon successfully completion (C+ or higher) of the next level.

L39 404, 405 or 431, 432 = 3 units for 322 and 3 units for 324
L39 322, 324 = 3 units for 211 and 3 units for 212
L39 211, 212 = 5 credits for 102

L39 102 = 5 credits for 101

International Baccalaureate

BIOLOGY (L41)
Grade 7, 6: 6 units of credit for L41 Biology 100A (elective credit). Students who plan to major in Biology or who are pre-med normally will enroll in Biol 2960 in the spring of freshman year and Biol 2970 in the fall of sophomore year.

Grade 5, 4, 3, 2, 1: No credit given.

BUSINESS/ORGANIZATION
No credit given.

CHEMISTRY (L07)
Those students who receive a 6 or 7 on the IB test in Chemistry will receive 3 units each of Chem 103 and 104. Receipt of these credits has no bearing on fulfillment of chemistry requirements for premedicine or any science major and cannot be used to satisfy prerequisites for Organic Chemistry. All students who wish to pursue a major or a preprofessional preparatory curriculum requiring general chemistry must take Chem 111A and 112A and the associated labs, Chem 151 and 152. Students who wish to exempt either the first or second semester of general chemistry, including the labs, must pass a placement exam administered by the Department of Chemistry during the first week of classes in the fall.

Grade 7, 6: 6 units of credit: 3 units each of Chem 103 and 104. These units do not replace Chem 111A or 112A. Chem 112A must be completed prior to registration in Chem 261 or 401 or any advanced courses in Chemistry.

Grade 5, 4, 3, 2, 1: No credit given.

CLASSICAL GREEK (L91)
No credit awarded. Placement determined by departmental examination. Students who place into Greek 317 may be awarded 6 back credits upon completion of Greek 317 with a grade of B or better.

DESIGN TECHNOLOGY (E81)
No credit given but a student can take the CSE 131 (formerly CS 101G) placement exam. Contact the CSE office at 935-6160 for more information.

ECONOMICS (L11)
For students entering Spring 2009 or earlier:
Contact the department’s Academic Coordinator (dottie@wustl.edu).

For students entering Summer 2009–Spring 2012:
Grade 7, 6: Placement in Econ 4011 or in any 300-level elective class, so long as the prerequisites — such as calculus — are met; no units of credit. Bypassing introductory courses may
be disadvantageous, particularly with a score of 6. If Econ 1011 and/or Econ 1021 are bypassed, additional elective(s) are required. Students should consult with the department’s Academic Coordinator.

Grade 6, 5, 4, 3, 2, 1: No credit given. Not recommended to bypass Econ 1011 or Econ 1021.

For students entering Summer 2012 or later:

Grade 7: 3 units of undergraduate general degree credit, contingent upon completion of Econ 4011 with a grade of B or better. The credit will not count toward the Economics major/minor. Placement into any economics course is permitted (assuming other prerequisites are met); however, bypassing introductory courses may be disadvantageous, and students are strongly encouraged to consult with the department’s Academic Coordinator. Bypassing Econ 1011 and/or Econ 1021 requires the completion of additional economics elective credit for the major/minor.

Grade 6, 5, 4, 3, 2, 1: No credit given. Not recommended to bypass Econ 1011 or Econ 1021.

ENGLISH COMPOSITION (L13) AND LITERATURE (L14)

Grade 7: 3 units of elective credit (L13 0001) contingent upon completing L59 100 with a grade of B or better. Please note, no credit is given for Writing or Literature courses.

Grade 6, 5, 4, 3, 2, 1: No credit given.

FRENCH (L34)

No credit awarded. Need to take the departmental placement exam. Students who place into and complete higher-level courses can earn up to 6 units of back credit for preceding courses.

GEOGRAPHY

No credit awarded.

GERMAN A1, GERMAN B (MODERN FOREIGN LANGUAGES) (L21)

Students should take the departmental placement exam. Students who place into and complete these courses with a B– or better will receive the following credit:

German 210D – 3 units for German 102D
German 301D – 3 units for German 102D, and 3 units for German 210D
German 302D – 3 units for German 102D, and 3 units for German 210D

HISTORY (L22)

American History

No credit awarded.

European History

No credit awarded.

African History

No credit awarded.

Islamic World History

No credit awarded.

South and Southeast Asia History

No credit awarded.

South Asia and Middle East History

No credit awarded.

ITALIAN (L78)

No credit awarded. Need to take the departmental placement exam. Students who place into and complete higher-level courses can earn up to 6 units of back credit for preceding courses.

LATIN (L10)

No credit awarded. Placement determined by departmental examination. Students who place into Latin 301 or above may be awarded 6 back credits upon completion of Latin 301 or above with a grade of B or better.

MATHEMATICS (L24)

Grade 7, 6: 3 units of credit for Math 131.

Grade 5, 4, 3, 2, 1: No credit awarded.

MUSIC (L27)

Grade 7, 6: 3 units of elective credit for students who do not major or minor in music.

Grade 5, 4, 3, 2, 1: No credit awarded.

NORWEGIAN

No credit awarded.

PHILOSOPHY (L30)

Grade 7, 6: 3 units of credit for Phil 125C.

Grade 5, 4, 3, 2, 1: No credit awarded.

PHYSICS (L31)

Grade 7: 6 units of credit for Physics 113A and 114A

Grade 6, 5: 3 units of credit for Physics 113A

Grade 4, 3, 2, 1: No credit awarded.

PSYCHOLOGY (L33)

Grade 7, 6: Waives the Psych 100B Introduction to Psychology requirement, but no college credit given.

No credit awarded.
SOCIAL ANTHROPOLOGY (L48)
Credit is evaluated on an individual basis by the Anthropology department.

SPANISH (L38)
No credit awarded. Need to take the departmental placement exam. Students who place into and complete higher-level courses can earn up to 6 units of back credit for preceding courses.

VISUAL/STUDIO ARTS (F20)
Grade 7: 3 units of elective credit
Grade 6, 5, 4, 3, 2, 1: No credit given.

British A-Level

ACCOUNTING (B50)
Advanced Level grades of A, B, C & D to be awarded 3 units of credit for ACCT 2610.

ARABIC (L49)
Please see departmental advanced placement policy (East Asian Languages and Cultures) for more information.

BIOLOGY (L41)
Grades of A or B to be awarded 3 units of credit equivalent to Biol 100A.

BUSINESS STUDIES (B53)
Advanced Level grades of A, B, C & D to be awarded 3 units of management elective credit (B53 0001).

CHEMISTRY (L07)
A grade of A to be awarded 3 units each for the following courses: L07 103 and L07 104.
A grade of B to be awarded 3 units for the following course: L07 103.

COMPUTER SCIENCE (E81)
No credit given but a student can take the CSE 131 (formerly CS 101G) placement exam. Contact the CSE office at 935-6160 for more information.

ECONOMICS (L11)
For students entering Spring 2009 or earlier:
Contact the department’s Academic Coordinator (dottie@wustl.edu).
For students entering Summer 2009 — Spring 2012:
No credit given. Students with a grade of A may elect to bypass Econ 1011 and/or Econ 1021 and proceed to Econ 4011, so long as the prerequisites, such as calculus, are met. Bypassing introductory courses may be disadvantageous. If Econ 1011 and/or Econ 1021 are bypassed, additional elective(s) are required.

Students should consult with the department’s Academic Coordinator.

For students entering Summer 2012 or later:
3 units of undergraduate general degree credit for students with a grade (on the A-level exam) of A, contingent upon completion of Econ 4011 with a grade of B or better. The credit will not count toward the Economics major/minor. Placement into any economics course is permitted (assuming other prerequisites are met); however, bypassing introductory courses may be disadvantageous, and students are strongly encouraged to consult with the department’s Academic Coordinator. Bypassing Econ 1011 and/or Econ 1021 requires the completion of additional economics elective credit for the major/minor.

ENGLISH (L13)
No credit or placement given.

FRENCH (L34)
A grade of A to be awarded 3 units for French 102D and 3 units of French 201D with 3 additional units being granted upon completion of a 300-level course (other than conversation). A grade of B to be awarded 3 units upon successful completion of a 300-level course.

GERMAN (L21)
Student should take the departmental placement exam. Students who place into and complete these courses with a B– or better will receive the following credit:
German 210D – 3 units for German 102D
German 301D – 3 units for German 102D, and 3 units for German 210D
German 302D – 3 units for German 102D, and 3 units for German 210D

HISTORY (L22)
Grades of A or B to be awarded 3 units of elective credit.

MATHEMATICS (L24)
Advanced level grades of A&B will be awarded 3 units of credit for Math 131 automatically.
An Advanced Level grade of C will only receive credit for Math 131 upon successful completion of Math 132 with a grade of C+ or better at Washington University.

MATHEMATICS (Further) (L24)
Advanced Level grades of A & B will be awarded 6 units of credit for Math 131 and Math 132 automatically. An Advanced Level grade of C will only receive credit for Math 131—132 upon successful completion of Math 233, with a grade of C+ or better at Washington University (or credit for Math 131 will be given for completion of Math 132). This course essentially covers all the material in Math 131—132 together with some extra physics and probability statistics.
MUSIC (L27)

A grade of A to be awarded 3 units each for the following courses: Music 102E, Music 103E, Music 104E.

A grade of B to be awarded 3 units each for the following courses: Music 101E and Music 102E.

PHYSICS (L31)

A grade of A on the physics A-level exam will earn 3 units of credit for Physics 113A and 3 units of credit for Physics 114A.

A grade of B on the physics A-level exam will earn 3 units of credit for Physics 113A.

PSYCHOLOGY (L33)

No credit given.

SPANISH (L38)

A grade of A to be awarded 3 units for Spanish 102D and 3 units of Spanish 201D with 3 additional units being granted upon completion of a 300-level course (other than conversation).

A grade of B to be awarded 3 units upon successful completion of a 300-level course.

Advanced Placement

ART HISTORY (L01) — Test: AHS

Grade 5: 3 units of credit for L01 Art-Arch 112 or 113 contingent upon the completion of a 300- or 400-level Art-Arch course with a grade of B or better. Students in the Sam Fox School must complete L01 Art-Arch 113. Three units of elective credit (L01 0001) contingent upon the completion of a 300- or 400-level Art-Arch course with a grade of B or better.

Grade 4: 3 units of credit for L01 Art-Arch 112 or 113 contingent upon the completion of a 300- or 400-level Art-Arch course with a grade of B or better. Students in the Sam Fox School must complete L01 Art-Arch 113. Three units of elective credit (L01 0001) contingent upon the completion of a 300- or 400-level Art-Arch course with a grade of B or better.

Grade 3, 2, 1: No credit given.

BIOLOGY (L41) — Test: BIO

Grade 5, 4: 6 units of credit for L41 Biol 100A (elective credit). Students who plan to major in Biology or who are premedicine normally will enroll in Biol 2960 in the spring of freshman year and Biol 2970 in the fall of sophomore year.

Grade 3, 2, 1: No credit given.

CHEMISTRY (L07) — Test: CHE

Those students who receive a 5 on the AP test in Chemistry will receive 3 units each of Chem 103 and 104. Those students who receive a 4 receive 3 units of Chem 103. Receipt of these credits has no bearing on fulfillment of chemistry requirements for premedicine or any science major and cannot be used to satisfy prerequisites for Organic Chemistry. All students who wish to pursue a major or a preprofessional preparatory curriculum requiring general chemistry must take Chem 111A and 112A and the associated labs, Chem 151 and 152. Students who wish to exempt either the first or second semester of general chemistry, including the labs, must pass a placement exam administered by the Department of Chemistry during the first week of classes in the fall.

Grade 5: 6 units of credit: 3 units each of Chem 103 and 104. These units do not replace Chem 111A or 112A. Chem 112A must be completed prior to registration in Chem 261 or 401 or any advanced courses in Chemistry.

Grade 4: 3 units of Chem 103. These units do not replace Chem 111A or 112A.

Grade 3, 2, 1: No credit given.

COMPUTER SCIENCE (E81) — A TEST

Grade 5, 4: 3 units of credit for CSE 131, only if the student passes the CSE 131 placement exam.

Grade 3, 2, 1: No credit given but a student can take the CSE 131 placement exam.

COMPUTER SCIENCE (E81) — AB TEST

Grade 5, 4: 3 units of credit for CSE 131.

Grade 3, 2, 1: No credit given, but a student can take the CSE 131 placement exam.

ECONOMICS–MICRO (L11) — Test: EMI

For students entering Spring 2009 or earlier:

Contact the department’s Academic Coordinator (dottie@wustl.edu).

For students entering Summer 2009–Spring 2012:

Grade 5, 4: Placement in Econ 4011 or in any 300-level class with an Econ 1011 prerequisite, so long as the other prerequisites, such as calculus, are met; no units of credit. Bypassing introductory courses may be disadvantageous, particularly with a score of 4. If Econ 1011 is bypassed, additional economics elective is required for the major/minor. Students should consult with the department’s Academic Coordinator.

Grade 3, 2, 1: No credit given. Not recommended to bypass Econ 1011.

For students entering Summer 2012 or later:

Grade 5: 3 units of undergraduate general degree credit, contingent upon completion of Econ 4011 with a grade of B or better. The credit will not count toward the Economics major/minor. Placement into any economics course having an Econ 1011 prerequisite is permitted; however, bypassing introductory courses may be disadvantageous, and students are encouraged to consult with the department’s Academic Coordinator.
Coordinator. Bypassing Econ 1011 requires the completion of additional economics elective credit for the major/minor.

Grade 4, 3, 2, 1: No credit given. Not recommended to bypass Econ 1011.

ECONOMICS-MACRO (L11) — Test: EMA
For students entering SP09 or earlier:
Contact the department’s Academic Coordinator (dottie@wustl.edu)

For students entering Summer 2009—Spring 2012:
Grade 5, 4: Placement in Econ 4021 or in any 300-level class with an Econ 1021 prerequisite, so long as the other prerequisites, such as calculus, are met; no units of credit. Bypassing introductory courses may be disadvantageous, particularly with a score of 4. If Econ 1021 is bypassed, additional economics elective is required for the major/minor. Students should consult with the department’s Academic Coordinator.

Grade 3, 2, 1: No credit given. Not recommended to bypass Econ 1021.

For students entering Summer 12 or later:
Grade 5: 3 units of undergraduate general degree credit, contingent upon completion of Econ 4021 with a grade of B or better. The credit will not count toward the Economics major/minor. Placement into any economics course having an Econ 1021 prerequisite is permitted (assuming other prerequisites are met); however, bypassing introductory courses may be disadvantageous, and students are encouraged to consult with the department’s Academic Coordinator. Bypassing Econ 1021 requires the completion of additional economics elective credit for the major/minor.

Grade 4, 3, 2, 1: No credit given. Not recommended to bypass Econ 1021.

ENGLISH COMPOSITION (L13) AND LITERATURE (L14) — Test: ENG
Grade 5: 3 credits of elective credit (L13 0001) contingent upon completing L59 100 with a grade of B or better. Please note, no credit is given for writing or literature courses.

Grade 4, 3, 2, 1: No credit given.

ENGLISH COMPOSITION (L13) AND LITERATURE (L14) — Test: ENG
Grade 5: 3 credits of elective credit (L13 0001) contingent upon completing L59 100 with a grade of B or better. Please note, no credit is given for writing or literature courses.

Grade 4, 3, 2, 1: No credit given.

ENGLISH COMPOSITION (L13) AND LITERATURE (L14) — Test: ENG
Grade 5: 3 credits of elective credit (L13 0001) contingent upon completing L59 100 with a grade of B or better. Please note, no credit is given for writing or literature courses.

Grade 4, 3, 2, 1: No credit given.

ENVIRONMENTAL STUDIES (L82) — Test: ENV
Grade 5, 4: 3 units of elective credit (L82 0001) contingent upon completion of a 300 or 400 level Environmental Studies course with a grade of B or better

Grade 3, 2, 1: No credit given.

FRENCH LANGUAGE (L34) — Test: LNF
To receive Advanced Placement credit in French for a score of 3 or 4 you must complete a 300-level course with a grade of B or better.

Grade 5: 6 units of credit equivalent to L34 French 102D and 201D. Students may enroll in a 300-level course conducted in the language.

Grade 4: Automatically grants 3 credits for French 102D, and gives another 3 extra credits for French 201D contingent upon satisfactory completion of a 300-level course with a B or better — other than conversation — conducted in the language.

Grade 3: 6 units of credit equivalent to L34 French 102D and 201D, contingent upon completion of a 300-level course with a grade of B or better — other than conversation — conducted in the language.

Grade 2, 1: No credit given.

FRENCH LITERATURE (L34) — Test: LNF
To receive Advanced Placement credit in French for a score of 3 or 4 you must complete a 300-level course with a grade of B or better.

Grade 5: 6 units of credit equivalent to L34 French 102D and 201D. Students may enroll in a 300-level course conducted in the language.

Grade 4: Automatically grants 3 credits for French 102D, and gives another 3 extra credits for French 201D contingent upon satisfactory completion of a 300-level course with a B or better — other than conversation — conducted in the language.

Grade 3: 6 units of credit equivalent to L34 French 102D and 201D, contingent upon completion of a 300-level course with a grade of B or better — other than conversation — conducted in the language.

Grade 2, 1: No credit given.

GERMAN (L21) — Test: LNG
Grade 5: 3 units of credit for L21 German 102D and 3 units for L21 German 210D awarded automatically; students may enroll in a 300-level course: German 301D, 302D, 313, 340C (German Literature and the Modern Era and German Tutorial).

Grade 4: 3 units of credit for L21 German 102D awarded automatically; an additional 3 units of credit* for L21 German 210D awarded upon satisfactory completion of German 301D (B– or better).

*Please note: Students may receive this credit only if they start their language study at the 300-level.

Grade 3: 3 units of credit for L21 German 102D* and 3 units for L21 German 210D, awarded upon satisfactory completion of German 301D (B– or better).
*Please note: Students may receive this credit only if they start their language study at the 300-level.

Grade 2, 1: No credit given. Should take departmental placement exam.

**HISTORY**

American History — Test: HSA

(A grade of 5 on the AP exam can fulfill Introductory Course requirements for the History Major and Minor.) (L22)

Grade 5: 3 units of credit for History 163.
Grade 4: 3 units of elective credit for History 0001.
Grade 3, 2, 1: No credit given.

European History — Test: HSE

(A grade of 5 on the AP exam can fulfill Introductory Course requirements for the History Major and Minor.) (L22)

Grade 5: 3 units of credit for History 102.
Grade 4: 3 units of elective credit for History 0001.
Grade 3, 2, 1: No credit given.

World History — Test: HSW

(A grade of 5 on the AP exam can fulfill Introductory Course requirements for the History Major and Minor.) (L22)

Grade 5: 3 units of credit for History 164.
Grade 4: 3 units of elective credit for History 0001.
Grade 3, 2, 1: No credit given.

**LATIN (L10) — Test: LNL**

Grade 5, 4: 6 units (total) of credit for Latin 101 and 102, upon completion of Latin 3171 with a grade of B or better.
Grade 3, 2, 1: No credit given.

**MATHEMATICS (L24) — Test: MAB**

The Mathematics Department gives a placement exam, available online and also during the fall orientation period. We ask that all entering students planning to enroll in a calculus course (except those with an AP score of 5) take the placement exam. This gives us one more piece of information to try to ensure correct placement into the calculus sequence. Only an AP score of 5 receives automatic credit and placement into the calculus sequence.

Grade 5: 3 units of credit for Math 131. You will be placed into Math 132.
Grade 4: Take Math Placement test. You will probably be placed into Math 132.
Grade 3, 2, 1: Students with scores of less than 4 should consult with their advisers about placement based on the Math Department Placement Test, SAT scores and high school record. It will be helpful to the adviser if the student brings the title and the author’s name of the calculus book used in high school and a photocopy of its table of contents, indicating which chapters were covered.

Any student entering the Calculus 131–132–233 sequence can receive AP credit for earlier courses in this sequence by successful completion, with a grade of C+ or better at Washington University, of the next course in the sequence. Students who successfully complete Math 128, with a grade of C+ or better at Washington University, can receive AP credit for Math 127. In all cases, this assumes that the student does not already have credit for the preceding courses (for example: by transfer from another college or university). Students who have already received credit for Math 131 (132) cannot also receive credit for Math 127 (128).

**MUSIC LITERATURE/LISTENING (L27) — Test: MUL**

Grade 5: 3 units of elective credit for 0001.
Grade 4: 3 units of elective credit for 0001.
Grade 3, 2, 1: No credit given.

**MUSIC THEORY (L27) — Test: MUT**

Grade 5: 3 units of elective credit for 0001.
Grade 4: 3 units of elective credit for 0001.
Grade 3, 2, 1: No credit given.
PHYSICS (L31)

B Test — Test: PB

Grade 5: 3 units of elective credit for Physics 113A. This corresponds to the first semester in a two-semester, algebra-based introductory physics sequence. Students who require calculus-based physics for course or major requirements should enroll in Physics 117 or Physics 197 in the fall semester. Students who plan to major in physics or who have a strong interest in physics are encouraged to enroll in Physics 197.

Grade 4, 3, 2, 1: No credit given.

C Test (Mechanics) — Test: PCM

Grade 5: 4 units of credit for Physics 117. This corresponds to the first semester in a two-semester, calculus-based introductory physics sequence. Students may enroll in Physics 118, the second semester of this introductory calculus-based physics sequence, in the spring semester. Physics majors and students interested in an advanced treatment of introductory physics should enroll in Physics 197 in the fall semester, followed by Physics 198 in the spring semester. Students may not enroll in Physics 198 without first taking Physics 197.

Grade 4: 3 units of elective credit for Physics 113A. This corresponds to the first semester in a two-semester, algebra-based introductory physics sequence. Students who require calculus-based physics for course or major requirements should enroll in Physics 117 or Physics 197 in the Fall semester. Students who plan to major in physics or who have a strong interest in physics are encouraged to enroll in Physics 197.

Grade 3, 2, 1: No credit given.

C Test (Electricity and Magnetism) — Test: PCE

Grade 5: 4 units of credit for Physics 118. This corresponds to the second semester in a two-semester, calculus-based introductory physics sequence. Physics majors and students interested in an advanced treatment of introductory physics should enroll in Physics 197 in the fall semester, followed by Physics 198 in the spring semester.

Grade 4: 3 units of elective credit for Physics 113A. This corresponds to the second semester in a two-semester, algebra-based introductory physics sequence. Students who require calculus-based physics for course or major requirements should enroll in Physics 117 or Physics 197 in the fall semester. Students who plan to major in physics or who have a strong interest in physics are encouraged to enroll in Physics 197.

Grade 3, 2, 1: No credit given.

PSYCHOLOGY (L33)

Grade 5: Waives the Psych 100B Introduction to Psychology requirement, but no college credit given.

Grade 4, 3, 2, 1: No credit or placement given.

SPANISH LANGUAGE (L38) — Test: LNS

To receive Advanced Placement credit in Spanish for a score of 3 or 4 you must complete a 300-level course with a grade of B or better.

Grade 5: 6 units of credit equivalent to L38 Spanish 102D and 201D; students may enroll in a 300-level course conducted in the language.

Grade 4: Automatically grants 3 credits for Spanish 102D, and gives another 3 extra credits for Spanish 201D contingent upon satisfactory completion of a 300-level course with a B or better — other than conversation — conducted in the language.

Grade 3: 6 units of credit equivalent to L38 Spanish 102D and 201D, contingent upon satisfactory completion of a 300-level course with a B or better — other than conversation — conducted in the language.

Grade 2, 1: No credit given. Credit given for scores of 4 or 5.

SPANISH LITERATURE (L38) — Test: LNS

To receive Advanced Placement credit in Spanish for a score of 3 or 4 you must complete a 300-level course with a grade of B or better.

Grade 5: 6 units of credit equivalent to L38 Spanish 102D and 201D; students may enroll in a 300-level course conducted in the language.

Grade 4: Automatically grants 3 credits for Spanish 102D, and gives another 3 extra credits for Spanish 201D contingent upon satisfactory completion of a 300-level course with a B or better — other than conversation — conducted in the language.

Grade 3: 6 units of credit equivalent to L38 Spanish 102D and 201D, contingent upon satisfactory completion of a 300-level course with a B or better — other than conversation — conducted in the language.
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Grade 2, 1: No credit given. Credit given for scores of 4 or 5.

**STATISTICS (L24) — Test: STA**
Grade 5: Students with a 5 on the AP Statistics Exam will receive 3 units of credit for Math 2200.

**STUDIO 2-D DESIGN (F20) — Test: A2D**
Grade 5: 3 units of elective credit for Fine Arts 0001.
Grade 4, 3, 2, 1: No credit given.

**STUDIO 3-D DESIGN (F20) — Test: A3D**
Grade 5: 3 units of elective credit for Fine Arts 0001.
Grade 4, 3, 2, 1: No credit given.

**STUDIO DRAWING (F20) — Test: DRW**
Grade 5: 3 units of elective credit for Fine Arts 0001.
Grade 4, 3, 2, 1: No credit given.

**University Policies**

**Non-Discrimination Statement**
Washington University encourages and gives full consideration to all applicants for admission, financial aid and employment. The university does not discriminate in access to or treatment or employment in its programs and activities on the basis of race, color, age, religion, sex, sexual orientation, national origin, gender identity or expression, veteran status or disability. Inquiries about compliance should be addressed to the university’s Vice Chancellor for Human Resources, Washington University in St. Louis, Campus Box 1184, One Brookings Drive, St. Louis, MO 63130.

**Discriminatory Harassment**
Washington University is committed to having a positive learning and working environment for its students, faculty and staff. University policy prohibits discrimination on the basis of race, color, age, religion, gender, sexual orientation, gender identity or expression, national origin, veteran status, disability or genetic information. Harassment based on any of these classifications violates university policy and will not be tolerated. In some circumstances such harassment may also violate federal, state or local law. A copy of the discriminatory harassment policy statement is available on the Human Resources website.

**Sexual Harassment**
Washington University is committed to having a positive learning and working environment for its students, faculty and staff and will not tolerate sexual harassment. Sexual harassment is a form of discrimination that violates university policy. It is also illegal under state and federal law. This policy applies to all members of the Washington University community.

**Drug and Alcohol Policy**
Washington University is committed to maintaining a safe and healthful environment for members of the university community by promoting a drug-free environment as well as one free of the abuse of alcohol. Violations of this policy will be handled according to existing policies and procedures concerning the conduct of faculty, staff and students. This policy is adopted in accordance with the Drug-Free Workplace Act and the Drug-Free Schools and Communities Act.

**Tobacco-Free Policy**
Washington University is committed to providing a healthy, comfortable and productive work and learning environment for all students, faculty and staff. Research shows that tobacco use in general, including smoking and breathing secondhand smoke, constitutes a significant health hazard. The university strictly prohibits all smoking and other uses of tobacco products within all university buildings and on university property, at all times. A copy of our complete tobacco-free policy is available on the Human Resources website.

**Medical Examinations**
As an entering student, you must provide medical information to Student Health Services. This will include proof of a skin test for tuberculosis within six months prior to registration and a record of all current immunizations.

If you fail to comply with these requirements prior to registration, you will be required to take the examination at the Student Health Services and obtain vaccinations for measles, mumps and rubella, if there is no evidence of immunity. You will be assessed the cost of the examination and tests or vaccinations. You will be unable to complete registration for classes until all health requirements have been satisfied.

If you are unimmunized, you may be barred from classes and from all university facilities, including housing units, if in the judgment of the university your continued presence would pose a health risk to yourself or to the university community.

Medical and immunization information is to be given via the shs.wustl.edu website. All students who have completed the registration process should access the website and create a student profile by using their WUSTL key. Creating a student profile enables a student to securely access the medical history form. Fill out the form and follow the instructions for transmitting it to Student Health Services. Your information is treated securely and confidentially.

**Student Conduct**
The university Student Judicial Code addresses conduct expectations and discipline procedures for university students. The primary purpose of the behavior expectations set forth in the code is the protection of the campus community and the
maintenance of an environment conducive to learning and inquiry.

Disciplinary proceedings are meant to be informal, fair and expeditious. Charges of non-serious misconduct are heard by the judicial affairs officer. Serious or repeated allegations are heard by the campus-wide University Judicial Board.

Students may be accountable to both governmental authorities and to the university for acts that constitute violations of law and the Student Code.

For a complete copy of the university Student Judicial Code see *Bearings*, the student handbook, which is published each summer, or visit www.wustl.edu/policies/judicial.html.

**Undergraduate Student Academic Integrity Policy**

Effective learning, teaching and research all depend upon the ability of members of the academic community to trust one another and to trust the integrity of work that is submitted for academic credit or conducted in the wider arena of scholarly research. Such an atmosphere of mutual trust fosters the free exchange of ideas and enables all members of the community to achieve their highest potential.

In all academic work, the ideas and contributions of others must be appropriately acknowledged, and work that is presented as original must be, in fact, original. Faculty, students and administrative staff all share the responsibility of ensuring the honesty and fairness of the intellectual environment at Washington University.

**Scope and Purpose**

This statement on academic integrity applies to all undergraduate students at Washington University. Graduate students are governed by policies in each graduate school or division. All students are expected to adhere to the highest standards of behavior.

The purpose of the statement is twofold:

- To clarify the university’s expectations with regard to undergraduate students’ academic behavior, and
- To provide specific examples of dishonest conduct. The examples are only illustrative, NOT exhaustive.

**Violations of this policy include, but are not limited to:**

**1. Plagiarism**

Plagiarism consists of taking someone else’s ideas, words or other types of work product and presenting them as one’s own. To avoid plagiarism, students are expected to be attentive to proper methods of documentation and acknowledgment. To avoid even the suspicion of plagiarism, a student must always:

- Enclose every quotation in quotation marks and acknowledge its source.
- Cite the source of every summary, paraphrase, abstraction or adaptation of material originally prepared by another person and any factual data that is not considered common knowledge. Include the name of author, title of work, publication information and page reference.
- Acknowledge material obtained from lectures, interviews or other oral communication by citing the source (name of the speaker, the occasion, the place and the date).
- Cite material from the internet as if it were from a traditionally published source. Follow the citation style or requirements of the instructor for whom the work is produced.

**2. Cheating on an examination**

A student must not receive or provide any unauthorized assistance on an examination. During an examination a student may use only materials authorized by the faculty.

**3. Copying or collaborating on assignments without permission**

When a student submits work with his/her name on it, this is a written statement that credit for the work belongs to that student alone. If the work was a product of collaboration, each student is expected to clearly acknowledge in writing all persons who contributed to its completion.

Unless the instructor explicitly states otherwise, it is dishonest to collaborate with others when completing any assignment or test, performing laboratory experiments, writing and/or documenting computer programs, writing papers or reports, and completing problem sets.

If the instructor allows group work in some circumstances but not others, it is the student’s responsibility to understand the degree of acceptable collaboration for each assignment, and to ask for clarification if necessary.

To avoid cheating or unauthorized collaboration, a student should never:

- Use, copy or paraphrase the results of another person’s work and represent that work as his/her own, regardless of the circumstances.
- Refer to, study from or copy archival files (e.g. old tests, homework, solutions manuals or backfiles) that were not approved by the instructor.
- Copy another’s work, or to permit another student to copy his/her work.
- Submit work as a collaborative effort if he/she did not contribute a fair share of the effort.
4. Fabrication or falsification of data or records

It is dishonest to fabricate or falsify data in laboratory experiments, research papers or reports or in any other circumstances; to fabricate source material in a bibliography or "works cited" list; or to provide false information on a résumé or other document in connection with academic efforts. It is also dishonest to take data developed by someone else and present them as one’s own.

Examples of falsification include:
• Altering information on any exam, problem set or class assignment being submitted for a re-grade.
• Altering, omitting or inventing laboratory data to submit as one’s own findings. This includes copying laboratory data from another student to present as one’s own; modifying data in a write-up; and providing data to another student to submit as his/her own.

5. Other forms of deceit, dishonesty or inappropriate conduct

Under no circumstances is it acceptable for a student to:
• Submit the same work, or essentially the same work, for more than one course without explicitly obtaining permission from all instructors. A student must disclose when a paper or project builds on work completed earlier in his/her academic career.
• Request an academic benefit based on false information or deception. This includes requesting an extension of time, a better grade or a recommendation from an instructor.
• Make any changes (including adding material or erasing material) on any test paper, problem set or class assignment being submitted for a re-grade.
• Willfully damage the efforts or work of other students.
• Steal, deface or damage academic facilities or materials.
• Collaborate with other students planning or engaging in any form of academic misconduct.
• Submit any academic work under someone else’s name other than his/her own. This includes but is not limited to sitting for another person’s exam; both parties will be held responsible.
• Engage in any other form of academic misconduct not covered here.

This list is not intended to be exhaustive. To seek clarification, students should ask the professor or teaching assistant for guidance.

Reporting Misconduct

Faculty responsibility

Faculty and instructors are strongly encouraged to report incidents of student academic misconduct to the academic integrity officer in their school or college in a timely manner, so that the incident may be handled fairly and consistently across schools and departments. Teaching assistants are expected to report instances of student misconduct to their supervising instructors. Faculty members are expected to respond to student concerns about academic dishonesty in their courses.

Student responsibility

If a student observes others violating this policy, he/she is strongly encouraged to report the misconduct to the instructor, to seek advice from the academic integrity officer of the school or college that offers the course in question, or to address the student(s) directly.

Exam proctor responsibility

Exam proctors are expected to report incidents of suspected student misconduct to the course instructor and/or the Disability Resource Center, if applicable.

Procedure

Jurisdiction

This policy covers all undergraduate students, regardless of their college of enrollment. Cases will be heard by school-specific committees according to the school in which the class is listed, not the school in which the student is enrolled. All violations and sanctions will be reported to the student’s college of enrollment.

Administrative procedures

Individual undergraduate colleges and schools may design specific procedures to resolve allegations of academic misconduct by students in courses offered by that school, so long as the procedures are consistent with this policy and with the university Student Judicial Code.

Student rights and responsibilities in a hearing

A student accused of an academic integrity violation — whether by a professor, teaching/graduate assistant, academic integrity officer or student — is entitled to:
• Review the written evidence in support of the charge.
• Ask any questions.
• Offer an explanation as to what occurred.
• Present any material that would cast doubt on the correctness of the charge.
• Determination of the validity of the charge without reference to any past record of misconduct.

When responding to a charge of academic misconduct, a student may:
• Deny the charges and request a hearing in front of the appropriate academic integrity officer or committee.
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- Admit the charges and request a hearing to determine sanction(s).
- Admit the charges and accept the imposition of sanctions without a hearing.
- Request a leave of absence from the university. The academic integrity matter must be resolved prior to re-enrollment.
- Request to withdraw permanently from the university with a transcript notation that there is an unresolved academic integrity matter pending.

A student has the following responsibilities in resolving the charge of academic misconduct:
- Admit or deny the charge. This will determine the course of action to be pursued.
- Provide truthful information regarding the charges. It is a Student Judicial Code violation to provide false information to the university or anyone acting on its behalf.

Sanctions

If found not in violation of the Academic Integrity Policy

If the charges of academic misconduct are not proven, no record of the allegation will appear on the transcript.

If found in violation of the Academic Integrity Policy

If, after a hearing, a student is found to have acted dishonestly, or if a student has admitted to the charges prior to a hearing, the school’s academic integrity officer or committee may impose sanctions, including but not limited to the following:
- Issue a formal written reprimand.
- Impose educational sanctions, such as completing a workshop on plagiarism or academic ethics.
- Recommend to the instructor that the student fail the assignment. (A grade is ultimately the prerogative of the instructor.)
- Recommend to the instructor that the student fail the course.
- Recommend to the instructor that the student receive a course grade penalty less severe than failure of the course.
- Place the student on Disciplinary Probation for a specified period of time or until defined conditions are met. The probation will be noted on the student’s transcript and internal record while it is in force.
- In cases serious enough to warrant suspension or expulsion from the university, refer the matter to the University Judicial Board for consideration.

Additional educational sanctions may be imposed. This list is not intended to be exhaustive.

Withdrawing from the course will not prevent the academic integrity officer or hearing panel from adjudicating the case, imposing sanctions or recommending grade penalties, including a failing grade in the course.

A copy of the sanction letter will be placed in the student’s academic file.

Appeals

If a student believes the academic integrity officer or the committee did not conduct a fair hearing, or if a student believes the sanction imposed for misconduct is excessive, he/she may appeal to the University Judicial Board within 14 days of the original decision. Appeals are governed by Section VII C of the University Student Judicial Code.

Records

Administrative record-keeping responsibilities

It is the responsibility of the academic integrity officer in each school to keep accurate, confidential records concerning academic integrity violations. When a student has been found to have acted dishonestly, a letter summarizing the allegation, the outcome and the sanction shall be placed in the student’s official file in the office of the school or college in which the student is enrolled.

Additionally, each school’s academic integrity officer shall make a report of the outcome of every formal accusation of student academic misconduct to the Director of University Judicial Programs, who shall maintain a record of each incident.

Multiple offenses

When a student is formally accused of academic misconduct and a hearing is to be held by an academic integrity officer, a committee, or the University Judicial Board, the person in charge of administering the hearing shall query the director of Judicial Programs about the student(s) accused of misconduct. The director shall provide any information in his/her records concerning that student to the integrity officer. Such information will be used in determining sanctions ONLY if the student is found to have acted dishonestly in the present case. Evidence of past misconduct may not be used to resolve the issue of whether a student has acted dishonestly in a subsequent case.

Reports to faculty and student body

School and college academic integrity officers are encouraged to make periodic (at least annual) reports to the students and faculty of their school concerning accusations of academic misconduct and the outcomes, without disclosing specific information that would allow identification of the student(s) involved.
Statement of Intent to Graduate
You are required to file an Intent to Graduate at WebSTAC prior to the semester in which you intend to graduate. Additional information is available in your dean’s office and in the Office of the University Registrar.

Student Academic Records and Transcripts
The Family Educational Rights and Privacy Act of 1974 (FERPA) — Title 20 of the United States Code, Section 1232g, as amended — provides current and former students of the university with specific rights of access to and control over their student record information. In compliance with the statute, appropriate federal regulations and guidelines recommended by the American Association of Collegiate Registrars and Admissions Officers, the university has adopted procedures that implement these rights.

A copy of the university policies regarding educational records and the release of student record information is available from the Office of the University Registrar and the university website. Transcript requests may be submitted to the Office of the University Registrar through WebSTAC. Instructions and additional information are available online at registrar.wustl.edu.

Tuition & Fees
Tuition
Washington University relies on tuition income to pay more than 60 percent of the cost of undergraduate education. Most of the remaining cost is generously funded by gifts from the university’s alumni and friends and from income from the university’s endowment.

In setting the tuition rate, our emphasis is on being able to hire a high-caliber faculty and to offer extensive extracurricular opportunities.

Tuition for the 2012-13 academic year is $21,250 per semester for full-time study. Full-time study is considered to be 12 to 18 units. If you enroll in more than 21 units per semester, you will pay additional tuition of $1,771 for each credit unit beyond the 21. Freshman and sophomore architecture students who wish to enroll in more than 18 units per semester must have permission of the dean or associate dean and pay additional tuition of $1,771 for each credit beyond 18. Junior- and senior-year architecture students who wish to enroll in more than 16 units must have the permission of the dean or associate dean of the College of Architecture.

First-year, first-semester students register online after arriving on campus. For all subsequent semesters, continuing students have the chance to register in April for the fall semester and in November for the spring semester. You will be billed for tuition in July for the fall semester and in December for the spring semester. You must pay tuition by the date specified on the bill or you will incur a late fee.

If you cannot afford to pay the full tuition bill, you should explore the university’s extensive financial assistance opportunities, which are described in the Financial Support (p. 29) section of this Bulletin.

Many families prefer to pay educational expenses on a monthly basis. The interest-free monthly payment plan, TuitionPay, allows students and families to spread all or part of the academic year’s expenses over equal monthly payments. The Washington University Partners in Education with Parents (PEP) plan may provide tax savings for some families and offers monthly payment options over a period as long as 10 years at a competitive, fixed-interest rate. The PEP plan is described in the Financial Support (p. 29) section of this Bulletin.

Your family should begin planning for educational costs as soon as possible following the decision to enroll. It is important to allow sufficient time to complete financial arrangements prior to your registration.

Fees
Student Activities: The mandatory student activities fee is 1 percent of tuition; for the 2012-13 academic year, it is $212.50 per semester. This special fee may vary from year to year. You may obtain information about the fee from the Office of Student Activities.

Student Health: Washington University has a student health fee designed to improve the health and wellness of the entire Washington University community. The student health fee of no more than $390 is billed to the student tuition statement each semester. Students are automatically enrolled in the plan at the time of registration. More information about the fee and the plan is available at shs.wustl.edu.

Late Registration: You may register for classes through the end of the second week of the semester. If you register after the second week, you must do so in person in the dean’s office, and you may be assessed a late registration fee of $100 per week. A 5 percent late payment fee also may be assessed by the dean’s office if payment in full is not made with late registration.

The late registration fee is not applicable to graduate resident and nonresident candidates. Students in University College programs will incur a flat late fee of $30. Part-time engineering students will incur a late fee of $50 per week.

Returned Checks: The university assesses a service charge for handling and processing returned checks.

Enrollment Deposit
First-year students and transfer students are required to pay a deposit upon admission to Washington University. Your $200 enrollment deposit is not credited toward tuition and will be
forfeited if you do not complete one full semester at Washington University. However, after you graduate, or if you withdraw for any reason after the first semester, your deposit will be refunded (minus any unpaid bills, such as parking or library fines).

Withdrawals from the University and Refunds

The College of Arts & Sciences, the Olin Business School, the Sam Fox School of Design & Visual Arts and the School of Engineering & Applied Science have similar policies on withdrawals and refunds. During the first two weeks of a semester, a student may withdraw from all course work via the online registration system or by notifying the dean’s office in writing. After the second week of classes, a written request to be withdrawn from courses must be received by the dean’s office.

Tuition Refund Schedule (as of Fall 2010)

<table>
<thead>
<tr>
<th>Withdraw Date</th>
<th>Refund</th>
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<tbody>
<tr>
<td>1st or 2nd week of classes</td>
<td>100%</td>
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<tr>
<td>3rd or 4th week of classes</td>
<td>80%</td>
</tr>
<tr>
<td>5th or 6th week of classes</td>
<td>60%</td>
</tr>
<tr>
<td>7th or 8th week of classes</td>
<td>50%</td>
</tr>
<tr>
<td>9th or 10th week of classes</td>
<td>40%</td>
</tr>
<tr>
<td>After 10th week of classes</td>
<td>0%</td>
</tr>
</tbody>
</table>

Refunds are calculated based on the date the student notifies the university of withdrawal.

If a medical condition makes attendance for the balance of the semester impossible or medically inadvisable, the university will make a pro rata tuition refund, as of the date of withdrawal when that date occurs prior to the 12th week and the condition is verified by the Student Health Services or a private physician. The date of withdrawal may correspond to the date of hospitalization or the date on which the medical condition is determined.

If a Federal Title IV aid recipient withdraws from school before the end of the academic semester, Washington University must refund (send loan funds back to the lender) the unearned (amount of time in the academic semester that the student did not attend) amount of Title IV funds. Unearned Title IV funds will be returned to the Title IV program. Students will be responsible for any disbursed but unearned portion of their Title IV funds.

An example of a typical refund calculation can be obtained from Student Financial Services.

Changes in Fees

The university reserves the right to change the fees stated or to establish additional fees at any time without prior written notice. When fee changes or additions are made, they become effective with the next payment due.

Nonpayment of Fees

Nonpayment of tuition or other charges due the university or otherwise affecting the university will prohibit the student from receiving certain services. Students with outstanding financial obligations to the university will not be allowed to register or to obtain transcripts or official verification of enrollment.

Financial Support

Washington University bases most financial assistance on a careful assessment of two factors: financial need and academic promise. The university offers a limited number of academic scholarships and fellowships based solely on academic merit. You may apply for both kinds of support simultaneously. Other financing options and innovative plans, such as the Partners in Education with Parents and TuitionPay, the monthly payment plan, assist students and parents in financing the university’s costs.

About 60 percent of Washington University’s undergraduates receive need-based financial assistance, which is offered in combinations of scholarships and grants, long-term subsidized loans, and in many cases, part-time campus employment.

Your financial circumstances are considered individually in the financial assistance process. In evaluating the extent of each applicant’s need, the university considers many factors besides family income, such as the number of children in your family, the number in college at the same time, and unusual medical expenses. When you apply for financial assistance, you are considered for all types of assistance — grants, student loans and part-time employment.

The university strives to make attendance a financial reality for qualified students, even when financial need is great. Information about application procedures may be obtained from Student Financial Services.

Veterans. If you are seeking benefits from the Veterans Administration, you should contact the Office of the University Registrar at registrar.wustl.edu.

Scholarship Funds

Many scholarship funds, which are administered by Washington University, are provided by generous donors to assist the university in supporting financially needy and deserving students. These scholarships are included in financial assistance awards, and a separate application is not required. For scholarship information, please visit the Admissions website at: http://admissions.wustl.edu/scholarships/Pages/default.aspx.

In addition, general scholarship funds are available to undergraduates in any school. Qualifying for one or more of these scholarships does not affect eligibility for other scholarship support. Please visit each school’s section of this Bulletin or the school website for more information on scholarships.
Army ROTC Scholarships

High school seniors may compete for four-year Army Reserve Officers’ Training Corps (ROTC) scholarships; college students, for three- and two-year scholarships. These scholarships are awarded based on merit. Army ROTC scholarships provide the full amount of tuition and mandatory fees for undergraduate study at Washington University. Army ROTC scholarships also include support for textbook purchases and a monthly allowance during the period the student is in school on scholarship status. Some students who receive Army ROTC scholarships also receive stipends from the university for room and board. The source of the student’s stipend will be the university; federal or state government; or other scholarships, depending on the student’s eligibility for assistance. For more information, write the Military Science Department, Washington University in St. Louis, Campus Box 1206, One Brookings Drive, St. Louis, MO 63130-4899, or call 314/935-5521, or visit the Washington University Army ROTC website at www.rotc.wustl.edu. The Four-Year Scholarship application may be submitted through the Army ROTC National Headquarters website, www.goarmy.com/rotc/.

Air Force ROTC Scholarships

High school seniors may compete for two-, three- or four-year AFROTC scholarships, which cover up to full tuition at Washington University, plus a stipend and allowance for books. Extensive information and the electronic application portal can be found at www.afrotc.com. Informational interviews are required of qualified applicants.

Different types of Air Force ROTC merit-based scholarships are available to students studying at Washington University. However, a scholarship is not required to join ROTC or to successfully earn a commission. For scholarship details, contact AFROTC, Gateway Detachment 207 at 314/977-8332 or afrotc@slu.edu.

Corporation Awards to Children of Employees

An increasing number of companies have scholarship programs open to children of their employees. Inquiries about such plans should be made through your parents’ employer(s).

Loans

In addition to privately sponsored loan programs, Washington University participates in the federal student and parent loan programs. These loans provide reasonable interest rates and long-term repayment schedules; they make attendance possible for many of the university’s students.

Partners in Education with Parents (PEP)

Partners in Education with Parents (PEP) is an innovative multiple-option program financed and operated by Washington University to help parents to pay university charges — tuition, fees and room and board.

PEP continues Washington University’s commitment to a partnership with the families of our students. This partnership includes a variety of choices to make parents’ contributions as affordable as possible. Parents may choose the Multiyear Option, Prepayment Option or Annual Option.

The PEP Multiyear Option allows families to borrow one initial amount at the start of the freshman year to cover all, or part of, all four years of tuition, fees and room and board charges. This option freezes the charges covered by PEP at the freshman-year rate, based on the percentage of costs covered by the PEP (participation rate). Families can benefit from the competitive, low-cost fixed interest rate and take up to 10 years to repay. There is no penalty for prepayment.

The PEP program also offers the choice to prepay, without borrowing from Washington University, all or part of the tuition, fees and room and board charges for all four undergraduate years at the freshman-year rate. This option, the Prepayment Option, assures families that the prepaid portion of college expenses is covered and will not be subject to later increases in university costs. You can also choose to prepay a portion of the charges and borrow the rest from Washington University. This combination works well for parents who may have saved for a portion or most of their student’s college expenses and who want to take advantage of the benefit of increasing their participation rate by using PEP to finance the remaining charges.

If the family prefers to borrow for college costs one year at a time, then the PEP Annual Option might be their best choice. Each year they can borrow an amount up to or equal to that year’s tuition, fees and room and board charges and take up to 10 years to repay. There is no penalty for prepayment and they can benefit from the competitive fixed interest rate.

Financing under the Multiyear or Annual Options requires no security or collateral from participants. A prospective participant must have a good credit rating and provide evidence of being able to meet the required monthly payments to be approved for a loan.

More information about Partners in Education with Parents is available from Student Financial Services, Washington University in St. Louis, Campus Box 1041, One Brookings Drive, St. Louis, MO 63130-4899; 314/935-4139 or 800/468-0569, fax 314/935-4037; e-mail: financial@wustl.edu; or the website at https://sfs.wustl.edu/newlyadmitted/Pages/PEP.aspx.

TuitionPay (Monthly Payment Plan)

TuitionPay, the monthly payment plan, provides for the payment of total annual university charges — tuition, fees and room and board — in nine or 10 monthly installments. Information about this plan is provided to all admitted students or may be obtained
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directly from Student Financial Services. For details, visit https://sfs.wustl.edu/newlyadmitted/Pages/TuitionPay.aspx.

Federal Work-Study

If you apply for financial assistance, you are considered for the Federal Work-Study program (FWS). FWS employees work an average of 10 to 12 hours a week on campus and typically earn $2,000 over the course of the academic year.

University Affiliations

Washington University is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools (http://www.ncahlc.org/ or 800/621-7440).

Washington University is a member of the Association of American Universities, the American Council on Education, the College Board and the Independent Colleges and Universities of Missouri.

The College of Arts & Sciences is a member of the Center for Academic Integrity, the Council of Colleges of Arts and Sciences and the American Association of College Registrars.

The College of Architecture was one of the eight founding members of the Association of Collegiate Schools of Architecture (ACSA) in 1912. The Graduate School of Architecture & Urban Design’s Master of Architecture degree is accredited by the National Architectural Accreditation Board (NAAB). The Sam Fox School of Visual Arts & Design (Art) is a founding member of, and is accredited by, the National Association of Schools of Art and Design.

The Olin Business School is a charter member of the Association to Advance Collegiate Schools of Business International (1921).

In the School of Engineering & Applied Science, many of the professional degrees are accredited by the Accreditation Board for Engineering and Technology.

The School of Law is accredited by the American Bar Association.

The School of Medicine is a member of the Liaison Committee on Medical Education.

George Warren Brown School of Social Work is accredited by the Council on Social Work Education.

The Mildred Lane Kemper Art Museum is nationally accredited by the American Association of Museums (AAM).

The University Libraries are a member of the Association of Research Libraries.

Reserve Officers Training Corps (ROTC)

Air Force ROTC — Aerospace Studies

Professor

Michael R. Hargis
Col., U.S.A.F.

Military Aerospace Science. Our Core Values: Integrity First, Service Before Self, Excellence In All We Do. Air Force operations are currently conducted in the technologically demanding environments of air, space and cyberspace.

AFROTC is a four-year officer development program, producing the leaders of tomorrow’s Air Force. The program’s purpose is to train and develop outstanding college students to earn commissions as U.S. Air Force Officers. Numerous Washington University students have participated in Air Force ROTC and gone on to distinguish themselves as Air Force aviators, engineers, physicians and astronauts.

In AFROTC, Washington University students have the opportunity to be challenged within a unique leadership environment, with the potential to earn a commission as a second lieutenant. Participation in Air Force ROTC is available to freshmen and possibly sophomore Washington University students and will not obligate a student to serve in the U.S. Air Force.

Air Force ROTC attracts the very best and brightest college students. The categorization of officer candidates within Air Force ROTC is based upon competitive selection criteria.

For more information, contact the AFROTC Detachment 207 in St. Louis at 314/977-8227 or www.slu.edu/organizations/afrotc; or 1-888-4-AFROTC or www.afrotc.com.

For AFROTC scholarship information, see the Scholarship (p. 29) page of this Bulletin.

Army ROTC

Military Science. Army ROTC is a program that develops leadership, management and training skills regardless of your career plans. Those who successfully complete the program will earn a commission as a second lieutenant in the U.S. Army, Army Reserve or Army National Guard.

All students are eligible to participate in Army ROTC courses. Introductory courses are available in which you will develop confidence, self-esteem and motivation. The intent is to develop and refine your leadership traits and skills to ensure success. Instruction also includes the role of the military in national defense strategy. Once you accept a scholarship or enter the advanced courses (300 and 400 levels), you incur a military obligation. Military Science course work taken in the Army ROTC
program does not count toward the A.B. degree in the College of Arts & Sciences. For more information, write the Military Science Department, Washington University in St. Louis, 700 Rosedale Ave., Suite 1120, St. Louis, MO 63112, or call 314/935-5521, or visit the Washington University Army ROTC website at www.rotc.wustl.edu.

For Army ROTC scholarship information, see the Scholarship (p. 29) page of this Bulletin.

Air Force ROTC — Aerospace Studies

I02 MAIR 101 Foundations of the United States Air Force I
A survey course designed to introduce students to the U.S. Air Force and Air Force Reserve Officer Training Corps. Featured topics include: mission and organization of the Air Force, officerhip and professionalism, military customs and courtesies, Air Force officer opportunities, group leadership problems, and an introduction to communication skills. Leadership Laboratory is mandatory for AFROTC cadets, and it complements this course by providing students with followership experiences and prepares them for Field Training. Classroom activity, one hour per week; Leadership Laboratory two hours per week. Aerospace Studies courses (MAIR 101 through MAIR 202) are basic courses designed to acquaint students with the United States Air Force and the opportunities available as an officer. Credit units.

I02 MAIR 102 Foundations of the United States Air Force II
A survey course designed to introduce students to the United States Air Force and Air Force Reserve Officer Training Corps. Featured topics include: mission and organization of the Air Force, officerhip and professionalism, military customs and courtesies, Air Force officer opportunities, group leadership problems, and an introduction to communication skills. Leadership Laboratory is mandatory for Air Force ROTC cadets, and it complements this course by providing students with followership experiences and prepares them for Field Training. Classroom activity, one hour per week; Leadership Laboratory two hours per week. Aerospace Studies courses (MAIR 101 through MAIR 202) are basic courses designed to acquaint students with the United States Air Force and the opportunities available as an officer. Credit units.

Air Force ROTC cadets and it complements this course by providing cadets with their first opportunity for applied leadership experiences and prepares them for Field Training. Classroom activity, one hour per week; Leadership Laboratory two hours per week. Aerospace Studies courses (MAIR 101 through MAIR 202) are basic courses designed to acquaint students with the United States Air Force and the opportunities available as an officer. Credit units.

I02 MAIR 201 Evolution of USAF Air and Space Power I
A survey course concerned with the beginnings of manned flight and the development of aerospace power in the United States, including the employment of air power in WWII, Korea, Vietnam, the Gulf War and the peaceful employment of U.S. air power in civic actions, scientific missions and support of space exploration. Leadership Laboratory is mandatory for Air Force ROTC cadets and it complements this course by providing cadets with their first opportunity for applied leadership experiences and prepares them for Field Training. Classroom activity, one hour per week; Leadership Laboratory two hours per week. Aerospace Studies courses (MAIR 101 through MAIR 202) are basic courses designed to acquaint students with the United States Air Force and the opportunities available as an officer. Credit units.

I02 MAIR 202 Evolution of USAF Air and Space Power II
A survey course concerned with the beginnings of manned flight and the development of aerospace power in the United States, including the employment of air power in WWI, WWII, Korea, Vietnam, the Gulf War and the peaceful employment of U.S. air power in civic actions, scientific missions and support of space exploration. Leadership Laboratory is mandatory for Air Force ROTC cadets and it complements this course by providing cadets with their first opportunity for applied leadership experiences and prepares them for Field Training. Classroom activity, one hour per week; Leadership Laboratory two hours per week. Aerospace Studies courses (MAIR 101 through MAIR 202) are basic courses designed to acquaint students with the United States Air Force and the opportunities available as an officer. Credit units.

I02 MAIR 301 Air Force Leadership Studies, Principles of Leadership and Management I
This course is a study in the anatomy of leadership, the need for quality and management leadership, the role of discipline in leadership situations and the variables affecting leadership. Case studies are used to examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts. Cadets deal with actual problems and complete projects associated with planning and managing the Leadership Laboratory. A mandatory Leadership Laboratory complements this course by providing advanced leadership experiences in officer-type activities, giving cadets opportunities to apply leadership and management principles of this course. Classroom activity, three hours per week; Leadership Laboratory two hours per week. Aerospace Studies courses (MAIR 301 through MAIR 402) are advanced courses designed to improve communication and management skills required of Air Force officers. Credit units.

I02 MAIR 302 Air Force Leadership Studies, Principles of Leadership and Management II
This course continues the study in the anatomy of leadership, the need for quality and management leadership, the role of discipline in leadership situations and the variables affecting leadership. Case studies are used to examine Air Force leadership and management situations as a means
of demonstrating and exercising practical application of the concepts. Cadets deal with actual problems and complete projects associated with planning and managing the Leadership Laboratory. A mandatory Leadership Laboratory complements this course by providing advanced leadership experiences in officer-type activities, giving cadets opportunities to apply leadership and management principles of this course. Classroom activity, three hours per week; Leadership Laboratory two hours per week. Aerospace Studies courses (MAIR 301 through MAIR 402) are advanced courses designed to improve communication and management skills required of Air Force officers. Credit units.

I02 MAIR 401 National Security Studies and Preparation for Active Duty I
Cadets learn about the role of the professional military leader in a democratic society; societal attitudes toward the armed forces; the requisites for maintaining adequate national defense structure; the impact of technological and international developments on strategic preparedness and the overall policy-making process; and military law. In addition, cadets study topics that prepare them for their first active-duty assignment as officers in the Air Force. A mandatory Leadership Laboratory complements this course. Leadership Laboratory provides advanced leadership experiences and gives cadets opportunities to develop and apply fundamental leadership and management skills while planning and conducting corps activities. Classroom activity three hours per week; Leadership Laboratory two hours per week. Aerospace Studies courses (MAIR 301 through MAIR 402) are advanced courses designed to improve communication and management skills required of Air Force officers. Credit units.

I02 MAIR 402 National Security Studies and Preparation for Active Duty II
Cadets learn about the role of the professional military leader in a democratic society; societal attitudes toward the armed forces; the requisites for maintaining adequate national defense structure; the impact of technological and international developments on strategic preparedness and the overall policy-making process; and military law. In addition, cadets study topics that prepare them for their first active-duty assignment as officers in the Air Force. A mandatory Leadership Laboratory complements this course. Leadership Laboratory provides advanced leadership experiences and gives cadets opportunities to develop and apply fundamental leadership and management skills while planning and conducting corps activities. Classroom activity three hours per week; Leadership Laboratory two hours per week. Aerospace Studies courses (MAIR 301 through MAIR 402) are advanced courses designed to improve communication and management skills required of Air Force officers. Credit units.

Army ROTC

I25 MILS 101C Introduction to Army ROTC
Make your first new peer group at college one committed to performing well and enjoying the experience. Increase self-confidence through team study and activities in basic drill, physical fitness, rappelling, leadership reaction course, first aid, making presentations and basic marksmanship. Learn fundamental concepts of leadership in a profession in both classroom and outdoor laboratory environments. Engineering students may petition Engineering Student Services (Lopata Hall 303) to have 2 units display on their transcripts; however, the units will not count toward their degree program. Credit units.

I25 MILS 102C Introduction to Leadership
Learn/apply principles of effective leading. Reinforce self-confidence through participation in physically and mentally challenging exercises with upper-division ROTC students. Develop communication skills to improve individual performance and group interaction. Relate organizational ethical values to the effectiveness of a leader. Engineering students may petition Engineering Student Services (Lopata Hall 303) to have 2 units display on their transcripts; however, the units will not count toward their degree program. Credit units.

I25 MILS 201C Introduction to Army ROTC
Learn/apply ethics-based leadership skills that develop individual abilities and contribute to the building of effective teams of people. Develop skills in oral presentations, writing concisely, planning of events, coordination of group efforts, advanced first aid, land navigation and basic military tactics. Learn fundamentals of ROTC's Leadership Development Program. Engineering students may petition Engineering Student Services (Lopata Hall 303) to have 3 units display on their transcripts; however, the units will not count toward their degree program. Credit units.

I25 MILS 202C Individual/Team Military Tactics
Introduction to individual and team aspects of military tactics in small unit operations. Includes use of radio communications, making safety assessments, movement techniques, planning for team safety/security and methods of pre-execution checks. Practical exercises with upper-division ROTC students. Learn techniques for training others as an aspect of continued leadership development. Engineering students may petition Engineering Student Services (Lopata Hall 303) to have 3 units display on their transcripts; however, the units will not count toward their degree program. Credit units.

I25 MILS 301C Leading Small Organizations I
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Series of practical opportunities to lead small groups, receive personal assessments and encouragement, and lead again in situations of increasing complexity. Uses small-unit defensive tactics and opportunities to plan and conduct training for lower-division students, both to develop such skills and as vehicles for practicing leading. Engineering students may petition Engineering Student Services (Lopata Hall 303) to have 3 units display on their transcripts; however, the units will not count toward their degree program.
Credit units.

I25 MILS 302C Leading Small Organizations II
Continues methodology of Military Science 301C. Analyze tasks, prepare written or oral guidance for team members to accomplish tasks. Delegate tasks and supervise. Plan for and adapt to the unexpected in organizations under stress. Examine and apply lessons from leadership case studies. Examine importance of ethical decision making in setting a positive climate that enhances team performance. Engineering students may petition Engineering Student Services (Lopata Hall 303) to have 3 units display on their transcripts; however, the units will not count toward their degree program.
Credit units.

I25 MILS 401C Leadership Challenges and Goal-Setting
Plan, conduct and evaluate activities of the Army ROTC cadet organization. Articulate goals and put plans into action to attain them. Assess organizational cohesion and develop strategies to improve it. Develop confidence in skills to lead people and manage resources. Learn/apply various Army policies and programs in this effort. Engineering students may petition Engineering Student Services (Lopata Hall 303) to have 3 units display on their transcripts; however, the units will not count toward their degree program.
Credit units.

I25 MILS 402C Transition to Lieutenant
Continues the methodology from Military Science 401C. Identify and resolve ethical dilemmas. Refine counseling and motivating techniques. Examine aspects of tradition and law as it relates to leading as an officer in the Army. Prepare for a future as a successful Army lieutenant. Engineering students may petition Engineering Student Services (Lopata Hall 303) to have 3 units display on their transcripts; however, the units will not count toward their degree program.
Credit units.

Majors

The following is an alphabetical list of all majors.

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• African and African-American Studies (p. 143)
• American Culture Studies (p. 156)
• Ancient Studies (p. 267)
• Anthropology (p. 180)
• Applied Science (Chemical Engineering) (p. 825)
• Applied Science (Computer Science) (p. 779)
• Applied Science (Electrical Engineering) (p. 802)
• Applied Science (Mechanical Engineering) (p. 840)
• Applied Science (Systems Science and Engineering) (p. 802)
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• Biomedical Engineering (p. 764)
• Chemical Engineering (p. 825)
• Chemistry (p. 256)
• Chinese Language and Culture (p. 261)
• Classics (p. 267)
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• Comparative Arts (p. 273)
• Comparative Literature (p. 273)
• Computer Science (p. 779)
• Dance (p. 280)
• Drama (p. 289)
• Earth and Planetary Sciences (p. 302)
• East Asian Studies (p. 312)
• Economics (p. 319)
• Economics and Strategy (p. 722)
• Education (p. 326)
• Educational Studies (p. 326)
• Electrical Engineering (p. 802)
• Elementary Teacher Education (p. 326)
• English Literature (p. 340)
• Entrepreneurship (p. 722)
• Environmental Biology (p. 235)
• Environmental Earth Sciences (p. 302)
• Environmental Policy (p. 615)
• Environmental Studies (p. 359)
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• Film and Media Studies (p. 379)
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- French (p. 389)
- Germanic Languages and Literatures (p. 405)
- Healthcare Management (p. 722)
- Hebrew (Biblical and Modern) (p. 412)
- History (p. 418)
- Interdisciplinary Project in the Humanities (p. 451)
- International Business* (p. 722)
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- Italian (p. 494)
- Japanese Language and Culture (p. 499)
- Jewish, Islamic and Near Eastern Studies (p. 505)
- Latin American Studies/International and Area Studies (p. 524)
- Linguistics (p. 536)
- Marketing (p. 722)
- Mechanical Engineering (p. 840)
- Middle School Teacher Education (p. 326)
- Music (p. 554)
- Operations and Supply Chain Management (p. 722)
- Organization and Human Resources Management (p. 722)
- Painting (p. 73)
- Persian Language and Literature (p. 576)
- Philosophy (p. 580)
- Philosophy–Neuroscience–Psychology (p. 592)
- Photography (p. 73)
- Physics (p. 604)
- Political Economy (p. 613)
- Political Science (p. 615)
- Printmaking (p. 73)
- Psychology (p. 637)
- Religious Studies (p. 656)
- Romance Languages and Literatures (p. 667)
- Sculpture (p. 73)
- Second Major in Computer Science (p. 779)
- Second Major in Electrical Engineering Science (p. 802)
- Second Major in Systems Science (p. 802)
- Secondary Teacher Education (p. 326)
- Spanish (p. 674)
- Systems Science and Engineering (p. 802)
- Urban Studies (p. 693)
- Women, Gender, and Sexuality Studies (p. 703)

Minors

The following is a list of all minors from all departments and schools.

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- African and African-American Studies (p. 144)
- American Culture Studies (p. 157)
- Ancient Studies (p. 268)
- Anthropology (p. 182)
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- Archaeology (p. 213)
- Architectural History (p. 42)
- Architecture (p. 42)
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- Chinese Language and Culture (p. 262)
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- Computer Science (p. 782)
- Drama (p. 290)
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- Educational Studies (p. 328)
- Electrical Engineering (p. 806)
- Energy Engineering (p. 826)
- English (p. 340)
- Entrepreneurship (p. 722)
- Environmental Earth Sciences (p. 303)
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• Environmental Studies (p. 359)
• European Studies/International and Area Studies (p. 366)
• Fashion Design (p. 73)
• Film and Media Studies (p. 379)
• Finance (p. 722)
• French (p. 390)
• General Business (p. 722)
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• Germanic Languages and Literatures (p. 406)
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• Hebrew (p. 413)
• History (p. 419)
• Institutional Social Analysis (p. 448)
• International and Area Studies (p. 462)
• Italian (p. 494)
• Japanese Language and Culture (p. 500)
• Jazz Studies (p. 555)
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• Korean Language and Culture (p. 520)
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• Latin American Studies/International and Area Studies (p. 525)
• Leadership (p. 722)
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• Marketing (p. 722)
• Mathematics (p. 543)
• Mechanical Engineering (p. 841)
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• Physics (p. 605)
• Political Science (p. 618)
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• Russian Language and Literature (p. 670)
• Russian Studies/International and Area Studies (p. 670)
• Sculpture (p. 73)
• South Asian Languages and Culture (p. 415)
• Spanish (p. 674)
• Speech and Hearing (p. 691)
• Strategy (p. 722)
• Systems Science and Engineering (p. 806)
• Text and Tradition (p. 452)
• Textiles (p. 73)
• Urban Design (p. 42)
• Urban Studies (p. 694)
• Women, Gender, and Sexuality Studies (p. 703)
• World Music, Dance and Theater (p. 575)
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Sam Fox School of Design & Visual Arts

The Sam Fox School of Design & Visual Arts is a unique collaboration in architecture, art and design education, linking professional studio programs with one of the country’s finest university art museums in the context of an internationally recognized research university.

The Sam Fox School is composed of the College of Architecture, the Graduate School of Architecture & Urban Design, the College of Art, the Graduate School of Art and the Mildred Lane Kemper Art Museum.

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Throughout history, architects have played a leading role in forming the environment and in interpreting the aspirations of societies in all parts of the world. As a practical and useful art, architecture embraces aesthetic, ethical, social and technical responsibilities. Architecture responds to the way people live and, in turn, influences their lives.

Students considering an architectural education and architecture as a potential career express an excitement about design and building, as well as a commitment to the environment. If you plan to study architecture, you should have artistic ability and a good academic base. Personal interests in such areas as drawing, painting, photography, sculpture, building and the environment suggest a possible aptitude for architecture.

Architecture reflects culture; architects must know their culture deeply. To gain an understanding of all aspects of architecture and to develop the attitudes and skills necessary to deal with them, you must have a broad liberal arts education. This base of cultural understanding and critical thinking is combined with a curriculum that focuses intensely on the study of architecture.

Architecture is an absorbing, fascinating profession. Choosing architecture as a professional career requires a major educational commitment at the undergraduate level and to further study in a professional degree program. With a professional degree in architecture, you may choose to work in small or large architectural firms, in academia, in community or governmental organizations, with development teams, and in a variety of related fields.

Architecture at Washington University

Washington University established the Department of Architecture as part of the School of Engineering and Architecture in 1902. The School of Architecture became an independent division of the university in 1910.

In 1932, Givens Hall was constructed to house the school as a result of a generous gift in memory of Joseph W. and Kate Abbey Givens. The Art & Architecture Library and the Mildred Lane Kemper Art Museum are in the new Kemper Art Museum building. Steinberg Hall also houses studio and review space.

In 1967, the School of Architecture became one of the first schools in the United States to offer a pioneering six-year joint-degree (Bachelor of Arts and Master of Architecture) program. The 4+2 program now leads to a thorough four-year Bachelor of Science in Architecture degree, followed by two years of graduate study for the accredited professional Master of Architecture degree. In 2005, as part of the formation of the Sam Fox School of Design & Visual Arts, the School of Architecture was reorganized as the College of Architecture and the Graduate School of Architecture & Urban Design.

Equally, the college offers the four-year Bachelor of Design degree with a major in architecture — a strong, flexible undergraduate curriculum that also prepares you for graduate study in architecture, usually for three years. These undergraduate degree programs offer you the opportunity to gradually focus your undergraduate studies within the college and allow you to make an incremental commitment to a career in architecture.

The College of Architecture faculty are nationally and internationally renowned practitioners and researchers who are committed to your undergraduate experience. As your academic advisers, they work with the dean and associate dean to help you build an individualized curriculum, select specific courses and chart plans for your future career.

Undergraduate Degree Programs

For students matriculating in Fall 2011 and after:

The College of Architecture will offer course work leading to two undergraduate degrees: the Bachelor of Science in Architecture and the Bachelor of Design in Architecture. The requirements for both degrees will be the same through the junior year.

Students will begin with a Sam Fox School foundation drawing course taken with first-year students in the College of Art and two design courses particular to architecture. They will take required courses in the College of Arts & Sciences and electives in architecture and the Sam Fox School.

For the Bachelor of Science degree, students will continue to study architecture in depth through the senior year. For those in the Bachelor of Design program, the fourth year will offer flexibility in studying outside of architecture or pursuing other electives in architecture and art.

For students who have matriculated prior to Fall 2011:

The College of Architecture offers four-year undergraduate degree programs leading to either a Bachelor of Science in Architecture degree or a Bachelor of Arts degree with a major in architecture. These degrees are valuable for their flexible
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and broad-based curricular nature, founded deeply on the study of the arts and sciences, with a gradually intensifying focus on the study of architecture. For those wishing a vigorous, humanistic, open-ended undergraduate education, these degrees offer a foundation in the field of architecture as preparation for continued education in a professional degree program, employment options in architecturally related areas, or opportunities and accomplishment in any field valuing innovative, synthetic, conscientious thought and work.

Both undergraduate degrees are conferred by the College of Arts & Sciences. The requirements for both degree programs are the same through the 300 level (typically the junior year).

The first and second years of study are spent taking courses in the College of Arts & Sciences and completing introductory design studios and architecture history (100 and 200 levels) in the College of Architecture. The third year of study, common to both undergraduate degree programs, is an intensive year of architectural design studios, supported by course work in graphics (from conventional hand-drawing techniques to digital rendering), architectural history, theory and building technologies.

At the conclusion of the 300-level course work, students have several options. Satisfactory completion of the 300-level course work qualifies you for the Bachelor of Arts degree with a major in architecture. You can continue to take selected course work in the College of Architecture, including the 400-level architectural design studios. But you may also elect to devote your final year’s course work at Washington University to further study in the College of Arts & Sciences or other schools at the university, to participation in a term of study abroad, or to completion of a minor course of study or even a second major course of study (see Combined Studies).

Students may also elect to pursue more thorough advanced studies in architecture in their senior year, in a curriculum constituted by 400-level architectural design studios, structural analysis and design, and specific architectural history, theory, and urban issues seminars. Combined study options are also possible in this curriculum. Satisfactory completion of the full 400-level curriculum qualifies you for the Bachelor of Science in Architecture degree.

Continuing for graduate study — all years:

Students receiving the Bachelor of Science in Architecture degree can apply to two-year Master of Architecture programs. Students receiving the Bachelor of Design degree with a major in architecture usually will apply to three-year Master of Architecture programs (see Graduate Degree Programs (p. 63)).

If you enter the College of Architecture as a first-year student, you may complete both the bachelor’s and the master’s programs in minimum of six years, in a professional degree structure called the 4+2. Using the Bachelor of Science in Architecture degree as the initial basis, the 4+2 curriculum allows you to spend four years as an undergraduate and two years as a graduate student in the Master of Architecture curriculum (see the 4+2 Program (p. 63) information).

Further information on the particular requirements and curricular structures of the undergraduate degree programs is listed below.

Combined Studies

Washington University offers you the option to study across disciplines and to take advantage of the wide range of courses available. You may choose to major in architecture and minor in another subject, you may major in architecture and choose a second major in another area within the College of Arts & Sciences, or you may major in architecture and choose a second major in an area from a different undergraduate school.

Special Programs and Resources

Cooperative Program in Architecture

The Graduate School of Architecture & Urban Design has established agreements with a number of primarily undergraduate liberal arts schools in the United States to allow their students to take advantage of the Cooperative Program in Architecture. Cooperative Program students are able to begin their architectural studies at Washington University in their senior years while still enrolled as undergraduates. Their undergraduate degrees will come from the home institution where they reside for three years, yet they include within their four-year baccalaureate degree program one year of study at Washington University. For more information, contact: Cooperative Program in Architecture, Washington University in St. Louis, Campus Box 1079, One Brookings Drive, St. Louis MO 63130. Call 314/935-6227 or 800/295-6227 (continental U.S.) or e-mail wuarch@samfox.wustl.edu.

Study Abroad

A summer Architecture Study Abroad Program (Arch 484A) is available for sophomores and juniors in the College of Architecture. This six-week, 6-credit program takes students through significant European or South American cities, in a directed curriculum of urban and building analysis and appreciation. In the spring semester of the sophomore year, architecture students may apply for the college’s junior year, spring semester architecture program in Florence, Italy. In the fall of the senior year, architecture students can study a full architecture curriculum with the Denmark International Studies program in Copenhagen, Denmark. These course credits are approved for full transfer to degree studies in the College of Architecture. For more information, contact the Office of the Dean in the College of Architecture.

As an architecture student, you are eligible to participate in the university’s study abroad programs.
Independent Study

Opportunities for independent study are available to all graduate and undergraduate students. Registration in an independent study course requires sponsorship by an instructor and permission of the dean. A maximum of 5 units (graduate students), 3 units (juniors and seniors), and 1 unit (freshmen and sophomores) may be taken per semester. Independent study courses cannot replace architectural design studios or other required courses. An independent study proposal sheet approved by a faculty sponsor must be submitted to the Office of the Dean at registration time.

Summer School

The College of Architecture offers a limited number of courses during the summer, primarily ARCH 447A Structures I and ARCH 448A Structures II.

Graduate Degree Programs

The Graduate School of Architecture & Urban Design’s degree programs include a range of curricula for students with a variety of educational backgrounds, professional degree needs and career ambitions.

Most states require that an individual intending to become an architect hold an accredited professional degree. The National Architectural Accrediting Board (NAAB) accredits two types of degrees: (1) the Bachelor of Architecture (not offered by this College of Architecture), which requires a minimum of five years of study, and (2) the Master of Architecture, which requires a minimum of three years of study following an unrelated bachelor’s degree or two years of study following a related preprofessional bachelor’s degree. These professional degrees are structured to educate those who aspire to registration/licensure as architects.

The graduate school’s Master of Architecture degree (M.Arch.3 and M.Arch.2 programs) is an NAAB-accredited professional degree. The school’s NAAB-accreditation status was evaluated and confirmed in the spring of 2005.

Master of Architecture Degree

Students holding bachelor’s degrees in fields other than architecture are invited to apply to the graduate school’s accredited professional M.Arch.3 degree program. Elementary calculus and physics are required as prerequisites for enrollment. While the curriculum typically spans seven semesters, you may complete this professional studies program in a minimum of three years including two summers.

Students with the Bachelor of Arts degree with a major in architecture, including studios at both the 300 and 400 levels, or the equivalent, are placed within the M.Arch.3 curriculum on the basis of their previous design studio experience and overall academic record.

The Graduate School of Architecture & Urban Design welcomes graduates of other schools with the undergraduate degrees in architecture (Bachelor of Science in Architecture) or the equivalent as candidates for the accredited professional Master of Architecture degree program (M.Arch.2). This curriculum typically spans four semesters.

Postgraduate programs, for students already possessing accredited professional degrees (Bachelor of Architecture or the equivalent), include the three-term M.Arch.1 degree curriculum or the Master of Urban Design degree program.

Master of Urban Design Degree

Students with a professional degree or the equivalent in architecture, urban planning or landscape architecture may apply for admission to the program leading to the Master of Urban Design degree. This degree is awarded upon completion of a three-term graduate curriculum devoted to urban design in metropolitan conditions.

Master of Landscape Architecture Degree

In the fall of 2010, the college and Graduate School of Architecture & Urban Design at Washington University in St. Louis launched a new graduate program in landscape architecture leading to a professional Master of Landscape Architecture (M.L.A.). Two- and three-year degree options accommodate students with design and other undergraduate degrees. The landscape program further develops cross-disciplinary connections among architecture, urban design, and visual arts in the Sam Fox School of Design to grant M.L.A.U.D. and M.L.A./M.Arch. degrees.

This new program in landscape architecture focuses on the three subjects of design, ecology and urbanism. The transformative process of design — linking cultural, historical and technological investigations — forms the pedagogical basis for research. Ecology informs design practice to address a multiplicity of scales and natural systems within the environment. Urbanism serves as a terrain of contemporary landscape practice. As heirs to design, ecological and urban traditions, landscape architects are uniquely suited to articulate a spatial vision for today’s environment. This three-pronged approach is geared to develop the students’ critical and conceptual abilities, and prepare them to become leaders within professional and academic spheres.

The curriculum is centered on studio teaching supported by instruction in technology, history and theory. Following the core sequence of design studios and classes, students are encouraged to develop their own research interests through advanced design studios and electives. Interdisciplinary and international option studios will foster a multiplicity of perspectives leading to a research-based degree project (thesis or independent study). In addition, students have opportunities to
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further their investigations within and beyond the school through teaching and research assistantships and scholarships.

The landscape architecture program draws on a unique set of institutional, regional and international resources available at the Sam Fox School. St. Louis will function as a laboratory for understanding and testing ecological and urban theories at the local scale, from brownfield reclamation to urban agriculture systems. Washington University’s outstanding programs in environmental studies, environmental engineering and American Culture Studies will expand curricular offerings in ecology, technology and landscape studies, and the internationally renowned Missouri Botanical Garden will serve as an exceptional tool of research and teaching. Finally, through the extensive international offerings of the school in Barcelona, Buenos Aires, Helsinki, Seoul and Tijuana, students will be able to experience different landscapes, cultures and cultures of practice.

Combined Degree Programs

The Graduate School of Architecture & Urban Design offers the following combined degree programs at the graduate level:

• Master of Architecture — Master of Urban Design
• Master of Architecture — Master of Business Administration
• Master of Architecture — Master of Social Work
• Master of Architecture — Master of Construction Management
• Cooperative 3+4 Program

Information on these combined degree programs can be obtained from the respective school’s Office of Graduate Admissions. In all cases, application must be made separately to each graduate or professional program.

Information and Applications

An application to the graduate programs should include a portfolio of student work in the visual arts (drawing, painting, sculpture, etc.) or architectural design work if you have completed architectural design studio courses, along with your transcript or record from the institution you attended, and letters of recommendation. The Test of English as a Foreign Language (TOEFL) is required of international applicants along with verification of availability of funds.

For more information about graduate degree programs and requirements, contact the Director of Graduate Admissions, Graduate School of Architecture & Urban Design, Sam Fox School of Design & Visual Arts, Washington University in St. Louis, Campus Box 1079, One Brookings Drive, St. Louis, MO 63130-4899, or send e-mail to: wuarch@samfox.wustl.edu.

Dean

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E. Desmond Lee Professor for Community Collaboration
AIA, MArch, Yale University

Director, Graduate Programs

Kathryn Dean
JoAnne Stolaroff Cotsen Professor
MArch, Oregon School of Architecture and Allied Arts

Chair, Graduate Architecture

Heather Woofter
Associate Professor
MArch, Harvard University

Chair, Master of Urban Design Program

John Hoal
Associate Professor
PhD, Washington University

Chair, Master of Landscape Architecture Program

Dorothée Imbert
Professor
MArch, MLA, University of California–Berkeley

Director of International Programs

Adrian Luchini
Raymond E. Maritz Professor
MArch, Harvard University

Director, Undergraduate Programs

Igor Marjanovic
Director Undergraduate Programs/Associate Professor
MArch, University of Illinois at Chicago

Endowed Professors

Paul Donnelly, FAIA
Rebecca and John Voyles Professor of Architecture
MS, Columbia University

Christof Jantzen
I-CARES Professor of Practice
MArch, Southern California Institute of Architecture

Adrian Luchini
Raymond E. Maritz Professor of Architecture
MArch, Harvard University

Robert McCarter
Ruth & Norman Moore Professor
MArch, Columbia University
Professors
Iain A. Fraser
Professor
AIA, MFA, MArch, Washington University

Stephen P. Leet
BArch, University of Kentucky

Eric Mumford
PhD, Princeton University

Associate Professors
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Robert Hansman
BFA, University of Kansas

Sung Ho Kim
MSci, Massachusetts Institute of Technology

Zeuler Lima
PhD, Universidade de São Paulo

Peter MacKeith
Associate Dean, Sam Fox School of Design & Visual Arts

Assistant Professors
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MArch, Harvard University

Derek Hoeferlin
Assistant Professor
MArch, Tulane University

Seng Kuan
Assistant Professor
Ph.D., Harvard University

Natalie Yates
MLA, Louisiana State University

Christine Yogiaman
MArch, Columbia University

Affiliate Associate Professors
Jeffrey Berk
Dipl Arch, Universidad de Buenos Aires

Gerardo Caballero
MArch, Washington University

Gustavo Cardon
Dipl Arch, Universidad Nacional de Rosario, Argentina

Fernando Williams
Dipl Arch, Universidad de Buenos Aires

Senior Lecturers
Janet Baum
MArch, Harvard University

Catalina Freixas
Dipl Arch, Universidad de Buenos Aires

Philip Holden
MArch, Washington University

George Johannes
MArch, Washington University

Richard Janis
MArch, Washington University

Don Koster
MArch, Washington University

Gay Goldman Lorberbaum
MArch, Washington University

Michael Repovich
MArch, Washington University

R. Phillip Shinn
BSE, Princeton University

Lindsey Stouffer
MFA, Washington University

William Wischmeyer
MArch, Washington University

Lecturers
Charles Brown
MArch, Washington University

Dennis Burke
MArch, Washington University

Esley Hamilton
MArch, Washington University

Kevin Le
MArch, Washington University

Pablo Moyano
MArch, Washington University

James J. Scott
JD, Saint Louis University

Professors Emeriti
Gerald Gutenschwager

James Harris

Sheldon S. Helfman

Udo Kultermann
Full-Time Positions
Faculty members have nine- or 11-month full-time renewable appointments. These may be tenured or nontenured positions and are titled professor, associate professor and assistant professor of architecture.

Visiting Positions
Faculty members have full-time appointments for a limited period of time, usually no less than a semester and no more than one full academic year. These are nontenured positions and are titled visiting professor, visiting associate professor, visiting assistant professor of architecture and visiting architect.

Part-Time Positions
Faculty members, who usually are practicing architects, have less than full-time appointments. These individuals may teach as many as two courses each semester or as few as one course, one semester a year. These are nontenured positions and are titled affiliate professor, affiliate associate professor, affiliate assistant professor of architecture and lecturer.

Bachelor of Science in Architecture Degree
The major requirements for the Bachelor of Science in Architecture degree are as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 311</td>
<td>Architectural Design I</td>
<td>6</td>
</tr>
<tr>
<td>ARCH 312</td>
<td>Architectural Design II</td>
<td>6</td>
</tr>
<tr>
<td>ARCH 411</td>
<td>Architectural Design III</td>
<td>6</td>
</tr>
<tr>
<td>ARCH 412</td>
<td>Architectural Design IV</td>
<td>6</td>
</tr>
<tr>
<td>ARCH 3283</td>
<td>Architectural History I: Premodern Encounters in World Architecture</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 3284</td>
<td>Architectural History II: Architecture Since 1880</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 333</td>
<td>Case Studies in 20th-Century Architecture</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 346</td>
<td>Building Systems I</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 447A</td>
<td>Structures I</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 448A</td>
<td>Structures II</td>
<td>3</td>
</tr>
<tr>
<td>Total units</td>
<td></td>
<td>42</td>
</tr>
</tbody>
</table>

Additionally, Bachelor of Science in Architecture candidates are required to complete at least one course from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 438</td>
<td>Environmental Systems I</td>
</tr>
<tr>
<td>ARCH 439</td>
<td>Environmental Systems II</td>
</tr>
</tbody>
</table>

and to complete at least one architectural elective from the following groups:

- Urban Issues Electives group, or
- Architectural History/Theory Electives group.

For additional information on current requirements, please see the Degree Requirements (p. 63) page.

The Minor in Architecture
With the new curriculum in place, there will be changes in the minor. Please consult with the Associate Dean of Students for current requirements.

Units required: 18

Required courses:
6 units minimum of introductory design chosen from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>ARCH 111</td>
<td>Introduction to Design Processes I</td>
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<tr>
<td>ARCH 112</td>
<td>Introduction to Design Processes II</td>
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<tr>
<td>ARCH 211</td>
<td>Introduction to Design Processes III</td>
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<tr>
<td>ARCH 212</td>
<td>Introduction to Design Processes IV</td>
</tr>
<tr>
<td>ARCH 209</td>
<td>Design Process</td>
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For additional information on current requirements, please see the Degree Requirements (p. 63) page.
Architecture

3 units minimum of history chosen from the following:

- ARCH 3283 Architectural History I: Premodern Encounters in World Architecture
- ARCH 3284 Architectural History II: Architecture Since 1880

Elective courses: 3 units chosen from the following:

- ARCH 111A Introduction to Architecture I
- ARCH 112A Introduction to Architecture II
- ARCH 211A Issues in Design I
- ARCH 212A Issues in Design II
- Arch 302 Freehand Drawing
- ARCH 333 Case Studies in 20th-Century Architecture
- Other elective courses as approved by the Associate Dean

The Minor in Urban Design

Minor Degree Adviser: Patty Heyda, heyda@samfox.wustl.edu

The Minor in Urban Design is for students who will be receiving either a Bachelor of Science in Architecture degree or a Bachelor of Arts degree with a Major in Architecture or a Bachelor of Design with a Major in Architecture. Students interested in the Minor should contact the designated Minor Degree Adviser.

Units Required: 18* including:

6 units of foundational course work:
- Sam Fox Commons X10 307 Community Building, Building Community (3 units)
- ARCH 241 Community Dynamics (3 units)

6 units of design course work:
- ARCH 312/ARCH412  Urban Design Focused Studio (6 units)

6 units of advanced course work:
- ARCH 654 Metropolitan Landscapes (3 units)
- ARCH 656 Metropolitan Urbanism (3 units)
- Or an approved MUD track elective (3 units)

*12 units must be in the Minor only and cannot be double-counted toward another major or minor.

The Minor in Architectural History

Minor Degree Adviser: Seng Kuan, skuan@samfox.wustl.edu

The Minor in Architectural History is open to all students at Washington University in St. Louis, regardless of their major. Students interested in the Minor should contact the designated Minor Degree Adviser.

Units Required: 18* including:

6 units of architectural history survey:
- ARCH 3283 Architectural History I (3 units)

ARCH 3284 Architectural History II (3 units)

3 units of methodology course work:
- ARCH 4XX Theories and Methods of Historical Research (3 units)
- or
- Another methodology-based course approved by the Minor Adviser

9 units of architectural history and theory electives (300 level or above):
- ARCH 3823 Rethinking Renaissance Visual Culture — Florence Summer Program (3 units)
- ARCH 3xx (3 units)
- Elective Architectural History and theory courses approved by the Minor Adviser

*12 units must be in the Minor only and cannot be double-counted toward another major or minor.

The Minor in Landscape Architecture

Minor Degree Advisers: Dorothée Imbert (imbert@samfox.wustl.edu) and Natalie Yates (yates@samfox.wustl.edu)

The Minor in Landscape Architecture is for students who will be receiving either a Bachelor of Science in Architecture degree or a Bachelor of Arts degree with a Major in Architecture or a Bachelor of Design with a Major in Architecture. Students interested in the Minor should contact the designated Minor Degree Advisers.

Minor Degree candidates are required to complete 18 units* including:

6 units of design course work:
- ARCH 312/412 Landscape Architecture Focused Studio (6 units)

3 units of history course work:
- LAND 570 Landscape Architecture History/Theory I: 1850 to 1970 (3 units)
- LAND 571 Landscape Architecture History/Theory II: Prehistory to 1850 (3 units)
- LAND 572 Landscape Architecture History/Theory III: History of Regional and Urban Planning (3 units)
- Or other history/theory courses as approved by the Minor Adviser

3 units of natural systems course work:
- LAND 551 Principles of Ecology (3 units)
Architecture

Or other natural systems elective courses as approved by the Minor Adviser.

6 units of landscape architecture electives:

- Sam Fox Commons X10 307 Community Building, Building Community (3 units)
- LAND 462 Landscape on Structure (3 units)
- LAND 480 Mapping the Metropolitan Mississippi (3 units)
- LAND 573 Territorial Contexts (3 units)

Or other elective courses in Landscape Architecture as approved by the Minor Adviser

*12 units must be in the Minor only and cannot be double-counted toward another major or minor.

**Additional Information**

Students should check the current course descriptions carefully to verify their eligibility to enroll in courses that have specific prerequisites.

**X10 Xcore:** Sam Fox foundation and commons courses

**X20 Xelec:** Sam Fox elective courses

College of Art and College of Architecture majors will have enrollment priority in X10 and X20 courses.

**Design & Visual Arts — Core (X10)**

**X10 XCORE 101. Drawing I**

An introductory course that teaches the student to recognize and manipulate fundamental elements of composition, line, form, space, modeling and color. Emphasis is placed on working accurately from observation, with an introduction to other methodologies. Students work in a variety of media. Demonstrations and illustrated lectures supplement studio sessions and outside projects. Credit 3 units.

**X10 XCORE 102. Drawing II**

Continuing as an introductory course that teaches the student to recognize and manipulate fundamental elements of composition, line, form, space, modeling and color. This course is an intensive studio course that builds on the perceptual and conceptual skills and experiences developed in Drawing I. A main objective is to develop a higher level of critical and studio practice. Credit 3 units.

**X10 XCORE 181. Practices in Architecture + Art + Design**

This course offers first-year students in architecture and art an introduction to the subjects, theories and methodologies of the disciplines of art, design, architecture, landscape architecture and urban studies. Examples drawn from a range of historical periods as well as contemporary practice highlight distinct processes of thinking and working in each discipline, as well as areas of intersection and overlap. Part one of two. Credit 1 unit.

**X10 XCORE 182. Practices in Architecture + Art + Design**

This course offers first-year students in architecture and art an introduction to the subjects, theories and methodologies of the disciplines of art, design, architecture, landscape architecture and urban studies. Examples drawn from a range of historical periods as well as contemporary practice highlight distinct processes of thinking and working in each discipline, as well as areas of intersection and overlap supplemented by a series of presentations by faculty. Part two of two. Credit 1 unit.

**X10 XCORE 301. From Propaganda to Decoration**

This is a studio course that is conceptually driven and anchored in the philosophical terrain of the print multiple. The fundamental attributes of the multiple, including its accessibility and repeatability, are from private to public and from political to aesthetic. Given this orientation, we examine the place where the public and private spheres meet. Considering urban communication and social space, reproduction and distribution, gifting and exchange, private practice and public intervention, this course uses the print multiple as a starting point to explore a continuum that runs from propaganda to decoration. Credit 3 units.

**X10 XCORE 302. Drawing II**

Continuing as an introductory course that teaches the student to recognize and manipulate fundamental elements of composition, line, form, space, modeling and color. This course is an intensive studio course that builds on the perceptual and conceptual skills and experiences developed in Drawing I. A main objective is to develop a higher level of critical and studio practice. Credit 3 units.

**X10 XCORE 303. Visualizing Information**

This project-based studio course brings students from diverse backgrounds in Art, Architecture and Design together to learn to compose information-rich surfaces. The course explores principles of information design on paper initially, and offers the opportunity to extend some applications to the screen. Course topics include content organization, visual structure, hierarchy, typography, color, sequencing, audience and usability. Students have the chance to select subject and media for some of their projects. Projects are supplemented with readings and lectures about contemporary information design, with some historical references. This course combines the rigor of a disciplinary classroom with the flexibility of a multidisciplinary one. Topics likely to emerge in the interdisciplinary conversation include information in three-dimensional spaces, communicating information with a particular voice or editorial perspective, analytical versus poetic information design, function, audience, and programming. All of these are supported, and students develop a set of tools that can be adapted to their own disciplinary work in a meaningful way. Credit 3 units.

**X10 XCORE 305. Topics in Visual Culture: Commercial Modernism in America, 1865–1965**

This survey course explores contributions to and expressions of visual modernism within the commercial tradition in the United States. Lectures, readings and screenings engage the intertwined histories of commerce, technology, society and...
X10 XCORE 307. Community Building
This course looks at the intersection of the built fabric and the social fabric. Using St. Louis as the starting point, this course takes students out of the classroom and into a variety of neighborhoods — old, new, affluent, poor — to look at the built environment in a variety of contexts and through a variety of lenses. Almost every week for the first half of the semester, students visit a different area (or areas), each trip highlighting some theme or issue related to the built environment (architecture, planning, American history, investment and disinvestment, community character and values, race, transportation, immigrant communities, future visions, etc.). Running parallel to this, students are involved in an ongoing relationship with one particular struggling neighborhood, in which students attend community meetings and get to know and become involved with the people in the community in a variety of ways. Students learn to look below the surface, beyond the single obvious story, for multiple stories, discovering their complexity, contradictions and paradoxes. They also come to consider the complex ways in which architecture and the built environment can affect or be affected by a host of other disciplines. Credit 3 units.

X10 XCORE 309. Convergences: Studies in Art & Architecture
This interdisciplinary course examines the convergence of artistic and architectural ideas, techniques and practices through selected historical and contemporary studies. Emphases range from the figure of the artist/architect (Michelangelo and Leonardo, for example, to Le Borbusier and Libeskind), to critical reflections (Vasari, Gennough, Serra) to boundary-crossing practices (Whiteread, Webster, Irwin, Kin, Judd, Miss) to collaborations and collaborative works (Ando/Kelly/Serra and the Pulitzer Foundation). The course emphasizes empathy and productive work across artistic disciplines. Field trips to the Pulitzer Foundation for the Arts (St. Louis) and the Chinati Foundation (Marfa, Texas) are planned. Credit 3 units.

X10 XCORE 311. Materials & Mechanisms: Site Specific Design Installation
In this course, students are guided to explore the nature of materials and simple mechanisms (mechanically driven kinetics) in the making of art and/or utilitarian objects. This course investigates the qualities of materials and how they might be used thoughtfully to develop a conceptual and physical experience for an audience or user. Specific materials, at times, are assigned, yet students have the opportunity to self-select materials based on project needs. Throughout the semester, students balance designing with finding — the process of playfully exploring materials and methods without preconception of a final resolution. Looking for possibilities can lead to unexpected discoveries. Credit 3 units.

X10 XCORE 313. An Ecology of Art
In this studio course, students make metaphorical and practical use of basic ecological principles to question and test productive, meaningful, and sustainable artistic practices. Emphasis is placed on biodiversity, community relationships, patterns and hierarchies. This course consists of field work, readings and lectures, the content of which is examined through individual and collaborative projects. We visit local gardens, parks, farms and neighborhoods while seeking to understand the complexity of our own role in nature and culture. Traditional, reclaimed and renewable materials are explored. At midterm, students identify opportunities for focused research and production and the course culminates with the public display of this work. This course approaches ecology both metaphorically and literally. Ecology is community-focused and involves the study of relationships with a given community. We test this premise as it might apply to the questions of what gives rise to art, how it might be made, and what its effect could or should be upon its larger community. The diverse range of ecological information and the multiple points of view to be presented allow for a broad array of applications in the studio arts, design and architecture. The class format challenges students with new ways of thinking while allowing them to select materials, specific topics of study, and methods of engagement appropriate to their own developing interests. Credit 3 units.

X10 XCORE 315. Cycles
Students design and build human-powered vehicles from discarded bicycles. The course collaborates with student mechanics involved with Bicycle Works (Bworks). Bworks collaborates in teams with Washington University students to design and build the work. Credit 3 units.

X10 XCORE 317. Furniture Design
The seat is an intimate interface between the building and the body. It embodies a complex set of structural conditions, material opportunities and possibilities for expression. Architects, artists and industrial designers covet opportunities to make
the chair. The result is that seemingly infinite perfect solutions exist — and still the seat remains a provocative challenge. In this course, students design and build a chair. Emergent technologies are combined with traditional techniques of metal fabrication, woodworking and plastic forming in the design and making of the work. The course objective is for students to learn how to work directly with machinery and materials in the realization of their design. Students are expected to have basic shop skills addressed in course prerequisites. Advanced techniques are introduced in this course and students select those most appropriate to their work to build upon. A great deal of independent investigation is required to excel in this course. Students propose ideas and develop them using drawings, models and mock-ups in order to realize the best potential for their design. Credit 3 units.

X10 XCORE 319. Digital Fabrications: A Primer Course in the Use of Computer Modeling for Art & Design
This course focuses on fabrications both real and virtual. The ubiquity of computers in design, studio art, communications, construction and fabrication demand that professionals become comfortable with their use. It also is important in a group of ever-specializing fields that one knows how to translate between different software and output platforms. This comfort and the ability to translate between platforms allow contemporary artists and designers to fabricate with ever-increasing freedom and precision. This course introduces students to 3D software with a focus on 2D, 3D and physical output. Through a series of projects, students learn to generate work directly from the computer and translate it into different types of output. Starting from first principles, the course covers the basics from interface to output for each platform used. The course also familiarizes students with a range of CNC technology and other digital output for both small- and large-scale fabrication. The course is broken into three projects. In the first, students focus on computer generated geometry and control systems. In the second, students generate physical output and line drawings. The final project focuses on rendering, context and cinematic effects. The software covered includes, but is not limited to Rhinoceros 3D, Maya, Illustator and Photoshop. Additionally, students use the 3D printer, laser cutter and/or other digital output tools. Credit 3 units.

X10 XCORE 321. Mapping Soft Bodies
This course develops digital design skills with conceptual understanding of the transformative process of artistic production. Mapping Soft Bodies investigates artificial objects and industrial products as a basis for inspiration. Through digital modeling and scanning the human body, each student develops a transformation process that analyzes the social and cultural conditions of a new emerging design. New body armatures are modeled through CADCAM (laser cutting) and Rapid Prototyping (3D printing) for physical outputs. The course is for students who are interested in emerging technologies and digital production.

This course is for students interested in design, sculpture, architecture and digital media by enhancing 3D technologies and allows each student to develop abstract thinking and making processes. Credit 3 units.

X10 XCORE 323. Disegno: Encounters in Public Space
One of the origins of the term “design” is the Italian word “disegno,” which delineates drawing both as a mark-making process and as a form of critical inquiry. Building upon this dual trajectory, this architectural design studio focuses on a series of site-specific projects that explore public space as a visual and conceptual phenomenon — a space of social encounter that is drawn, redrawn and ultimately (re)designed through a series of drawing strategies, including freehand drawing, drafting and making. The projects engage architecture, culture and identity, using modern metropolitan Florence as a laboratory for visual experimentation. By embracing the complexities of contemporary Italian society — including its evolving ethnic, cultural and social dynamic — the projects explore the critical dichotomies of past-present and global-local. This course is a dynamic learning environment that encourages students to develop a unique way of working by building upon their intellectual curiosity and diverse educational backgrounds. Course requirements include studio work, discussions and field trips. Credit 6 units.

Design & Visual Arts — Elective (X20)
X20 XELEC 320. Global Discourses in Art & Architecture
This course examines art, architecture and urbanism from the perspective of their global production, dissemination and reception. It focuses on the global exchange of people and ideas as one of the main vehicles of visual culture, both historical and contemporary. Through a series of focused case studies, the course probes inherent dichotomies within art and architecture driven by their site-specificity, yet also by their constant global displacement across various disciplinary, cultural and geographical boundaries. The course content includes lectures, discussion sessions, readings and textual and visual projects that examine cross-cultural aspects of art and architecture. Credit 3 units.

Architecture
A46 ARCH 100A English Language Support for Architecture
Same as U15 112
Credit 2 units.

A46 ARCH 111 Introduction to Design Processes I
This introductory architectural design studio engages the basic principles of architectural context, composition and experience. Through various fieldwork strategies, students explore architectural context through observation, analysis and invention. The site-specific design processes bridge two-dimensional and three-dimensional work, including drawing.
drafting and making. The experiential qualities of architecture are introduced through basic considerations of scale and human interaction. The course work includes studio, work, lectures, presentations by students, readings, writing assignments and field trips. Credit 3 units.

A46 ARCH 111A Introduction to Architecture I
Lectures examining historical, theoretical and professional perspectives in architecture. Credit 1 unit.

A46 ARCH 112 Introduction to Design Processes II
Building upon the design processes explored in ARCH 111, this architectural design studio spans analog and digital techniques. The projects engage material and conceptual qualities of architectural form and space, exploring the complexities of virtual environments, digital fabrication and their correlation to the built environment. Credit 3 units.

A46 ARCH 112A Introduction to Architecture II
Lectures examining historical, theoretical and professional perspectives in architecture. Credit 1 unit.

A46 ARCH 121 Community Building, Building Community (Hewlett Program)
Credit 3 units.

A46 ARCH 209 Design Process
Open to Engineering and Arts & Sciences students at all levels. Studio course engages students in the process of design with an emphasis on creative thinking. Course content relates directly to the interests of engineers and all liberal arts students who wish to problem solve about shaping the texture and quality of the built world. No technical knowledge or special drawing skills are required. Credit 3 units. EN : H

A46 ARCH 211 Introduction to Design Processes III
Introduction to Design Processes III engages design through the lens of perception investigating the relationship between materiality and inhabitable space situated in a natural context. Credit 3 units.

A46 ARCH 211A Issues in Design I
Conceptual, theoretical and historical perspectives in design and architecture. Credit 1 unit.

A46 ARCH 212 Introduction to Design Processes IV
Introduction to Design Processes IV engages design through the analysis of human behavior and scale to generate a programmatically complex project within the urban context. Credit 3 units.

A46 ARCH 212A Issues in Design II
Lectures presenting design concepts that form the focus of exercises presented in ARCH 212. Prerequisite: satisfactory completion of Arch 211A or permission of the associate dean of the College of Architecture. Credit 1 unit.

A46 ARCH 241 Community Dynamics
Credit 3 units.

A46 ARCH 2661 Semester Abroad Program Seminar
This course prepares students participating in the College of Architecture’s Spring Semester Abroad Program in Florence, Italy. The seminar will meet eight times over the course of the semester. Attendance is required. Credit 1 unit.

A46 ARCH 275 Service Learning Course: Environmental Issues
Credit 2 units.

A46 ARCH 302A Advanced Freehand Drawing
Application of the principles presented in ARCH 302 to more ambitious and individualized work. Work can include drawing, color, painting, printmaking, etc. The final target is a suite of independent works that explores a chosen medium or subject and that could constitute a small one-person show, but exploration and growth are given precedence over production. Weekly/bi-weekly critiques. Prerequisite: Arch 302 or equivalent previous studies. Credit 3 units.

A46 ARCH 302B Advanced Freehand Drawing (and Painting)
Credit 3 units.

A46 ARCH 305A Special Topics Workshop
Credit 1 unit.

A46 ARCH 308A Digital Fabrications
Credit 3 units.

A46 ARCH 309 Special Topics: Photography for Architecture Students
Same as ART 309
Architecture

Credit 3 units.

A46 ARCH 310 Photography for Architecture Students
Same as ART 310
Credit 3 units.

A46 ARCH 311 Architectural Design I
Prerequisite: ARCH 212 with a grade of C– or better. There is a required weekend, out-of-town field trip.
Credit 6 units.

A46 ARCH 312 Architectural Design II
CBTL course. Prerequisite: satisfactory completion of ARCH 311.
Credit 6 units.

A46 ARCH 317 Architectural Design I (M.Arch. 3)
The first of a three-semester sequence that introduces students to architectural design, focusing on conceptual, theoretical and tectonic principles. First-semester M.Arch. 3 students only.
Credit 6 units.

A46 ARCH 318 Architectural Design II (M.Arch. 3)
The second of a three-semester sequence of design studios. Continues examination of issues raised in ARCH 317. Second-semester M.Arch. 3 students only.
Credit 6 units.

A46 ARCH 320A Architectural Representation I (Undergraduate)
Credit 3 units.

A46 ARCH 320B Architectural Representation II (Undergraduate)
Credit 3 units.

A46 ARCH 323A Architectural Representation I (M.Arch 3)
Credit 3 units.

A46 ARCH 323B Architectural Representation II (M.Arch 3)
The course examines the history/theory and practice of representation, specifically the systems of drawing used in architecture. The objective is to develop the requisite discipline, accuracy and visual intelligence to conceptualize and generate a relationship between space and form. The course focuses on two concurrent tasks: first, to outline and analyze the historical development of representational logics and their impact on architectural ideation, and second, to explain the codification and usage of specific geometries, including orthographic and isometric projection, central and parallel perspective, and architectural axonometric. We see that, rather than a translation of reality, representation operates between perception and cognition as a transcription of reality and is a powerful instrument in the design and making of architecture. The relationship between the drawing forms and the tools used to produce them are brought into focus as manual, digital, photographic and physical applications driven by drawing intentions. This course is organized as a lecture/lab with emphasis on the practice of digital media and physical modeling. Emphasis is on participation and excessive absences are noted. Please note: The second half of the semester focuses on computing, for which each student is required to have a laptop computer.
Credit 3 units.

A46 ARCH 326A Introduction to Computing in Architecture
This course is focused on the application of computer technologies in the analysis and design of our built environment. Computer technology is presented as a related tool for support of the Architectural studio environment. Curriculum provides for the correct use of vector imaging (CAD), raster imaging and Internet technologies, as well as rapid prototyping techniques for architectural inquiry. Overlapping digital and physical projects synthesize the dynamic nature of computing in a studio environment. Examples of technologies explored include (but are not limited to) large-format raster printing, multiresolution monitor presentation, distance collaboration, 2-D and 3-D digital model building, and laser cutter component output. These technologies are utilized to analyze successful architectural works in order to explore the benefits and strengths of computing in the architectural process.
Credit 3 units.

The current developments in digital technology allow mathematical expressions to transform complex dynamic systems that have shifted the formal discourse of architecture. The new digitally based techniques are being invented to inform creative processes in architecture through the manipulations of complex geometrical and topological forms. This course focuses on developing new techniques that translate these mathematical developments into diagrammatic design strategies. The animation and modeling software MAYA is deployed by the students for the investigation. Students are taught MAYA with a conceptual development for defining and inventing dynamic-based architectural proposals with multiple perceptions in spatial formations.
Credit 3 units.

A46 ARCH 326D Prototyping the Responsive Dynamic Media Wall
The seminar focuses on designing and constructing a working prototype for a Responsive Dynamic Media Wall currently being
Architecture

developed by the College of Architecture and the Computer Sciences departments. The seminar develops and solves certain design problems in tectonics, material, mechanization, electronics, computational, spatial and social issues addressing the project. The seminar endorses more of a research lab atmosphere with a collaborative working environment between designers and scientists. Credit 3 units.

**A46 ARCH 326F Camera Obscura: Digital Fabrication: Prototyping a Hybrid Structure**
Credit 3 units.

**A46 ARCH 326G Digital Fabrications**
Credit 3 units.

**A46 ARCH 326H Digital + Craft: Textile**
Credit 3 units.

**A46 ARCH 3268 Architectural History I: Antiquity to 1650**
This course explores the history of architecture from its origins until the beginnings of the modern period from a global perspective, focusing on patterns of interaction and exchange between and within both elite and vernacular building cultures. Using selected examples from Eurasia, sub-Saharan Africa and the Americas, the course traces the major elements of change and development in the design of the earth's built environment, including technologies and materials, typology, the organization of labor and capital systems to the profession and the public. Course requirements include a mid-term, final exam and research paper. Credit 3 units. EN : H

**A46 ARCH 3269 Architectural History I: Antiquity to the Enlightenment**
This course addresses the development of architecture and urbanism from Greco-Roman antiquity to the European Enlightenment, while also paying close attention to contemporary developments in the non-Western world, especially in the Islamic world and East Asia. The course’s objective is to set the stage for major ideological pursuits of modern architecture as they developed in the 19th and 20th centuries, examining how these ideas evolved out of longer-term historical processes. We focus on issues of classicism, tectonic culture and historicity, and discuss commonalities and differences toward them across time and cultures in the premodern world. Credit 3 units.

**A46 ARCH 3261 Architectural History II: Architecture Since 1880**
An introductory survey of the history and theory of architecture and urbanism in the context of the rapidly changing technological and social circumstances of the past 120 years. In addition to tracing the usual history of modern architecture, this course also emphasizes understanding of the formal, philosophical, social, technical and economic background of other important architectural directions in a global context. Topics range from architects’ responses to new conditions in the rapidly developing cities of the later 19th century, through early 20th-century theories of perception and social engagement, to recent efforts to find new bases for architectural interventions in the contemporary metropolis. Credit 3 units. EN : H

**A46 ARCH 3266 Architectural History I: Antiquity to the Enlightenment**
This course addresses the development of architecture and urbanism from Greco-Roman antiquity to the European Enlightenment, while also paying close attention to contemporary developments in the non-Western world, especially in the Islamic world and East Asia. The course’s objective is to set the stage for major ideological pursuits of modern architecture as they developed in the 19th and 20th centuries, examining how these ideas evolved out of longer-term historical processes. We focus on issues of classicism, tectonic culture and historicity, and discuss commonalities and differences toward them across time and cultures in the premodern world. Credit 3 units.

**A46 ARCH 326B Designing Sustainable Environments**
Credit 3 units.

**A46 ARCH 326C Biomimicry: Toward a Sustainable Design**
Credit 3 units.
A46 ARCH 336D Biomimicry: A Biokinetic Approach to Sustain(Able) Design
There is a conceptual similarity between the way an organism and a building engage their respective environments. A biological system responds to the unique condition of its ecosystem; architecture responds to the unique conditions of the site. Building on this principle are the fields of biomimicry, the study of design and process in nature, and biokinetics, the study of movement within organisms, and their ability to address architectural problems with elegant, technologically advanced, sustainable solutions. Biomimicry: A Biokinetic Approach to Sustain(Able) Design focuses on kinetics as an essential element of biomimicry in the context of architecture and employs the study of the kinetic aspects of biological systems — structure, function and movement — to inform the design and engineering of buildings. A systematic approach to researching and translating the kinetic function of organisms leads to a successful bridging of biological and architectural concepts. Credit 3 units.

A46 ARCH 339 Concepts and Principles of Architecture I
This weekly seminar course addresses issues of Western architectural thought through a focused series of readings and discussions. The necessity and role of architectural theory in general is examined. Issues of tectonics, historicism, typology, regionalism, modernism, postmodernism and other critical frameworks for the consideration of architecture are thematic subjects of discussion. Selected readings include Vitruvius, Alberti, Laugier, Semper, Ruskin, Le Corbusier, Gropius, Kahn, Rossi, Venturi, Eisenman, Libeskind and Koolhaas. Weekly reading assignments, attendance, participation, one summary and discussion introduction based on a reading topic, final paper. Required for first-semester M.Arch.3 students. Fulfills history/ theory elective for M.Arch. 2 students. Credit 3 units.

A46 ARCH 346 Building Systems I
The first of a two-course building systems sequence. The course progresses from a survey of the physical and structural properties of building materials through an analysis of building assemblies and systems. Structural systems are examined relative to their performance characteristics and issues related to manufacturing and construction. Structural systems in wood, steel and concrete along with masonry systems are reviewed in this class. Additionally, the primary and secondary performance characteristics of enclosure systems are identified and analyzed in this course. This course also covers the design of egress systems and vertical transportation systems in buildings. Though the course focuses primarily on the underlying principles associated with these building systems, industry standards and building code requirements are an integral part of the review. Credit 3 units.

A46 ARCH 347 Building Systems II
Building Systems II is a lecture/workshop course. It is the capstone course in the technology sequence. The course is composed of a series of lectures related to technical theory, an analysis of technical precedent, and an integration exercise. The lectures focus on structure and enclosure systems, active and passive climate control systems, natural and artificial lighting systems, mechanical and electrical services for buildings. The lectures take place over the course of the semester. During the first half of the course, students conduct the analysis of technical precedent in architecture exercise. Technical precedents are analyzed relative to their performance characteristics and their relationship to other technologies in the building. During the second half of the semester, students conduct an integration exercise. Technical systems are selected based on architectural issues, performance characteristics and systems integration. Credit 3 units.

A46 ARCH 350 Service Learning Course: Environmental Issues
Credit 3 units.

A46 ARCH 375B STL City Studio Programming:
Understanding, Engaging and Organizing Columbus Square Citizenry
This class dedicates itself to designing programs for future community projects in the Columbus Square neighborhood. Programming occurs organically through understanding, engaging and organizing the neighborhood. These projects are to be cross-disciplinary, not limited to any particular practice or discipline. They are realized in future semesters (or in certain cases, this semester) through the support of STL City Studio. The class builds on relationships established during last year’s City Studio design/build project, Learning Landscapes at Patrick Henry Elementary School, a series of gardens at the center of the neighborhood. To define and develop projects, we use narrative to clarify both our own values and the values of the neighborhood. Students regularly visit Columbus Square and its adjacencies, particularly Downtown St. Louis, uncovering visible and invisible stories. We listen to what residents, officials, experts and planners have to tell us about the place and what the place could become. Throughout the semester, students present their findings through narratives, diagrams and other representations. Projects emerge out of this collaborative, narrative-based process. All students, from any discipline or at any level, may take this class. Credit 3 units.

A46 ARCH 376 Design Thinking for Science, Engineering, Business and the Liberal Arts
This introductory course outlines strategies and methodologies drawn from a wide range of creative design practices, including architecture, landscape architecture, urban design, industrial
design and others. The course explores how these ideas and techniques are similar to practices in science, engineering, business and the liberal arts and how they might be applicable to multidisciplinary problem solving. Topics include perception, representation, technology, group intelligence, bio-mimicry and context-based learning, among others. Emphasis is given to the intersection of design thinking with environmental problems and the relationship between design thinking and innovation. The course includes lectures, guest lectures with case studies, and design projects. Open to all undergraduate students. Credit 1 unit.

A46 ARCH 394 New Topic (Sam Fox School)
Same as ART 394
Credit 3 units.

A46 ARCH 402A Measured Representation
Credit 3 units.

A46 ARCH 402C Advanced Freehand Drawing II
Credit 3 units.

A46 ARCH 403 Sustainable Design
Credit 3 units.

A46 ARCH 404 Advancing Integrated Sustainability
Credit 3 units.

A46 ARCH 404A Contemporary Exhibition Studies
Credit 1 unit.

A46 ARCH 404C Topics in Architectural Entrepreneurship
Entrepreneurship has become a very important issue for businesses small and large. What can the profession of architecture learn from these ideas? This course, offered in partnership with the Skandalaris Center for Entrepreneurial Studies, offers students a chance to gain exposure to the entrepreneurial ideas that are innovating the architectural community, and begin to foster a mindset of architectural entrepreneurship that has the potential to be widely beneficial to the profession. Each week the course welcomes a guest speaker who, as the owner of a firm or innovator of a new business proposal in the design field, provides case studies to show students what type of entrepreneurial ideas are shifting the architectural discipline. From sustainability, to urbanization and localism, to emerging global growth engines, and the future structure of the architectural network, each lecturer brings new insight to what it is to be an architectural entrepreneur. Credit 3 units.

A46 ARCH 404D For Purpose: Art and Design as an Ethics-based Model of Entrepreneurship
In recent years the structure of our economy and culture has seen a tectonic shift due to technological advances and an increasingly interconnected global economy resulting in new challenges and opportunities for the next generation of artists, designers and entrepreneurs. Students from various disciplines draw lessons from researching established individuals, companies and not-for-profit organizations that are involved in the production of culturally significant, creative work that also supports a larger social mission. Students work in teams to apply this research to develop a proposal for a creative organization that strives to make a social impact as well. Each proposal is developed into a business/sustainability plan that is evaluated and tested for feasibility. This course is a simulated experience that introduces students to the uncertainty that is inherent in the entrepreneurial process and is intended to help students develop skills essential to entrepreneurs and business professionals. Students identify problems and resulting opportunities and evaluate idea concepts through assessing market demand, risk and potential economic and social benefits. Credit 3 units.

A46 ARCH 405A Furniture Design for the Architect
Students design and fabricate furniture. The box and chair are used as vehicles to study historic examples of furniture design, structure, fabrications and finishing techniques. Other issues that are addressed are: material awareness and craftsmanship. Evaluation of the final products is based on design, structure, craftsmanship, material use, beauty and finish. Credit 3 units.

A46 ARCH 405D Furniture Design
The course focuses on the design of tables using wood as the primary material in response to “rational and irrational strategies” (systematic and emotional). Each student designs, develops and builds prototypes of two tables using the same material. One table is the product of a systematic analysis of material qualities, production procedures and other constructivist principles. The other table is the product of more explicitly intuitive, emotional and interpretive responses to the nature of the material and its production. Course limited to 10 students. Credit 3 units.

A46 ARCH 405F Furniture Design (Study Abroad)
Credit 3 units.

A46 ARCH 405G Furniture Design in Finland
Credit 3 units.

A46 ARCH 406J Woodworking
The content of this workshop is woodworking technique and appropriate design for this material.
Credit 1 unit.

A46 ARCH 406L Perspective Drawing
A study in perspective drawing methods, using the traditional construction methods as a starting point, and then exploring alternative approaches. The fundamentals of one-point and two-point are covered along with rendering techniques for formal and informal representations. A variety of rendering techniques are presented depending on situation of design and time allowed.
Credit 1 unit.

A46 ARCH 406M Mold-Making and Casting
Credit 1 unit.

A46 ARCH 406N GIS Workshop
Credit 1 unit.

A46 ARCH 406P 3-D Digital Tools for Studio
Credit 1 unit.

A46 ARCH 406R Model Making
Credit 1 unit.

A46 ARCH 406S Real Estate Workshop
Credit 1 unit.

A46 ARCH 406W Simple Book Structures
Students investigate the form of the visual book through construction of several different book structures, among them the accordion, the flag book, the tunnel, simplified case binding and a portfolio case. This class investigates the organization of the visual book through the sequencing of images and the structure of the book as a reflection of content. It is hoped that the class permits the student to pursue new approaches to presenting visual information in book form.
Credit 1 unit.

A46 ARCH 406Y The Diagram
The purpose of this workshop is to fully understand how we can exploit the concept and method of the diagram in order to better access ideas, reveal themes, discover underlying processes and relationships, and ultimately, to better represent our final design intentions. The goal of the workshop is: to understand the position of the diagram in the architectural design process by looking at examples of architect’s drawings/other diagrams; to understand what diagrams can mean, and specifically how to use them in design; to test methods of drawing and diagramming through a series of targeted exercises; and to be able to further exploit ideas and designs through their representation — skills for the larger context of the architecture studio and for future analyses.
Credit 1 unit.

A46 ARCH 406Z Vertical and Horizontal Structures
Designing with advanced digital modeling and CAD cam output through laser cutting and CNC milling. Students develop complex structural systems through virtual design tools and translate them into physical objects that can be programmed for human interaction.
Credit 1 unit.

A46 ARCH 408A Digital Visualization Workshop: 2-D Representation
This workshop is an introduction to basic Auto CAD drawing layout and organization with printing process. The workshop introduces students to importing and exporting into other graphic softwares (Photoshop and Illustrator) allowing a basic understanding of resolution and line types with articulated graphic awareness to develop complex 2-D drawing capabilities. Required for all 317-level M.Arch. students, who are given priority in enrolling. Open to all other architecture students as space allows.
Credit 1 unit.

A46 ARCH 408B Digital Visualization Workshop: Advanced 3-D Modeling
This workshop is an introduction to complex digital rendering in Rhino 4.0 with plug-ins Flamingo, VRay, Maxwell and Fry Rendering Engines. These skills are needed for sophisticated rendering outputs for more hyper-real visualization. The workshop introduces students to material, lighting, camera and global illumination processes. This workshop is required for all M.Arch. students at the 419 level, who are given priority for registration in this course. Open to other upper-level undergraduate and graduate architecture students as space allows.
Credit 1 unit.

A46 ARCH 408C Digital Visualization Workshop: Advanced Rendering
This workshop is an introduction to complex digital rendering in Rhino 4.0 with plug-ins Flamingo, VRay, Maxwell and Fry Rendering Engines. These skills are needed for sophisticated rendering outputs for more hyper-real visualization. The workshop introduces students to material, lighting, camera and global illumination processes. This workshop is required for all M.Arch. students at the 419 level, who are given priority for registration in this course. Open to other upper-level undergraduate and graduate architecture students as space allows.
Credit 1 unit.

A46 ARCH 408D BIM 101 Workshop
Credit 1 unit.

A46 ARCH 408H t^3//technology.today.tomorrow
The design industry is changing and the need to understand this change is critical. Before you graduate, you should make yourself aware of the way technology is impacting the process of delivering projects today and tomorrow. This evening workshop exposes you to various technologies within different parts of
the building industry. We review technology used in design and construction with special guests, from leaders in the industry demonstrating how they are using these tools today. We explore technology on the horizon and hear from those developing tools for the future. This workshop is not meant to be a software instruction class, but more of a window into the profession.

#BIM #technology #future #AEC #design #construction #cloud #knowledge #parametric #computation #collaboration.

Credit 1 unit.

A46 ARCH 409B Material Drawings, Unforeseen Drawings, Expanding Drawings
Credit 1 unit.

A46 ARCH 409C Watercolor Painting for Architects, Urban Designers and Landscape Architects
Credit 1 unit.

A46 ARCH 410D Printmaking
Credit 1 unit.

A46 ARCH 410W Perspective E: Architectural Education and the Public Good
This discussion-based course will explore Perspective E of the Five Perspectives from the National Architecture Accreditation Board’s Conditions for Accreditation: Architecture Education and the Public Good. Changing the perspective into a question, [What does it mean] "to be active, engaged citizens; to be responsive to the needs of a changing world; to acquire the knowledge needed to address pressing environmental, social and economic challenges through design." . . . provides the context for a series of discussions. Discussions will include student presentations of case studies in education and practice as well as speculation about how this perspective might be met within the Graduate School of Architecture, Landscape & Urban Design.
Credit 1 unit.

A46 ARCH 411 Architectural Design III
Prerequisite: satisfactory completion of ARCH 312.
Credit 6 units.

A46 ARCH 412 Architectural Design IV
CBTL course. Prerequisite: satisfactory completion of ARCH 411.
Credit 6 units.

A46 ARCH 419 Architectural Design III (M.Arch. 3)
The third of a three-semester sequence of design studios. Continues examination of issues raised in ARCH 317 and 318.
Credit 6 units.

A46 ARCH 421A Tale of Two Cities: Urban Form and Society in Chicago and St. Louis
Same as AMCS 4210
Credit 3 units.   A&S : TH   BU : HUM

A46 ARCH 421J Building a Better World: Architecture and Social Reform in America
Architects, planners and social reformers have addressed urban issues of poverty, crime, delinquency, labor unrest and class and ethnic tensions through activist models of the public library and school, the YMCA, the playground and the model home — or by a retreat from the city in the form of utopian settlements. This seminar examines the history of environmentalist thinking and social reform in the United States and to some extent, Europe, from the Enlightenment to World War II, including the work of Andrew Jackson Downing, Frederick Law Olmstead, Ernest Flagg and Frank Lloyd Wright and critics such as Jane Jacobs and Prince Charles. The class becomes familiar with reform architecture and its context and assesses the effectiveness of this strategy as a solution to social problems. Open to graduate and upper-level undergraduate students. Fulfills history/theory requirement.
Credit 3 units.

A46 ARCH 421K Modern vs. American: Rethinking the Architectural Relationship
What is American about American architecture? Architects, historians and theorists have asked this question throughout our nation’s history, but it gains renewed importance in this age of globalization. Can we, should we, continue to apply national labels to our architecture? This seminar examines the architectural culture of the United States in the 20th century, with special attention to the relationship between national identity and the internationalizing forces of modernity, particularly European modernism. Through analysis of theoretical writings, developments in education and practice, and key projects such as the Chicago Tribune Tower Competition, the Illinois Institute of Technology and U.S. embassies around the world, students gain insight into the dynamic between the local and the global in the design of the built environment. Course requirements include in-class presentations, field trips and a substantial research paper. Fulfills history/theory elective requirement.
Credit 3 units.

A46 ARCH 421P Marina City: Bertrand Goldberg and the Aura of Chicago Modernism
Credit 3 units.

A46 ARCH 421R Gender, Race and Architecture in the American City, 1865–1960
Credit 3 units.
A46 ARCH 423 History of Landscape Architecture
This seminar reviews the history of gardening in the Western tradition from the Renaissance to the present and in the Chinese and Japanese traditions. Park-making, neighborhood design and the rise of landscape architecture as a profession receive attention, including several classes held at notable St. Louis examples. Course requirements include readings, a design or research project, and a final exam. Fulfills History/Theory elective.
Credit 3 units.

A46 ARCH 425D Meso-American Architecture
Credit 3 units.

A46 ARCH 426F Discover Latin America: Literature, Culture and Cinema
Credit 3 units.

A46 ARCH 426G Latin-American Literature
Credit 3 units.

A46 ARCH 4280 Architectural History I: Antiquity to Baroque
An introductory survey of the history and theory of architecture and urbanism in the context of the rapidly changing technological and social circumstances of the past 120 years. In addition to tracing the usual history of modern architecture, this course emphasizes understanding of the formal, philosophical, social, technical and economic background of other important architectural directions in a global context. Topics range from architects’ responses to new conditions in the rapidly developing cities of the later 19th century, through early 20th-century theories of perception and social engagement, to recent efforts to find new bases for architectural interventions in the contemporary metropolis. This course is required for all M.Arch. 3 students.
Credit 3 units.

A46 ARCH 4285 Architectural History I: Premodern Encounters in World Architecture
This course explores the history of architecture from its origins until the beginnings of the modern period from a global perspective, focusing on patterns of interaction and exchange between and within both elite and vernacular building cultures. Using selected examples from Eurasia, sub-Saharan Africa and the Americas, the course traces the major elements of change and development in the design on the earth’s built environment including technologies and materials, typology, the organization of labor and capital systems, and the codification and transmission of architectural knowledge and symbolism to the profession and the public. Course requirements include a mid-term, final exam and research paper.
Credit 3 units.

A46 ARCH 4286 Architectural History I: Antiquity to the Enlightenment
This course addresses the development of architecture and urbanism from Greco-Roman antiquity to the European Enlightenment, while also paying close attention to contemporary developments in the non-Western world, especially in the Islamic world and East Asia. The course’s objective is to set the stage for major ideological pursuits of modern architecture as they developed in the 19th and 20th centuries, examining how these ideas evolved out of longer-term historical processes. We focus on issues of classicism, tectonic culture and historicity, and discuss commonalities and differences toward them across time and cultures in the premodern world.
Credit 3 units.

A46 ARCH 430 The Design of Practice in America
Credit 3 units.

A46 ARCH 430D Special Topics: Beyond words, Beyond Images: Representation After History
Same as ART 430D
Credit 3 units.

A46 ARCH 434L Materials Study: History, Technology and Design
Credit 3 units.

A46 ARCH 434M Materials Research Seminar
Credit 3 units.

A46 ARCH 434N Materials Research Seminar
Credit 3 units.

A46 ARCH 434P Materials Research Seminar
Credit 3 units.

A46 ARCH 434Q Materials Research Seminar
Credit 3 units.

A46 ARCH 434R Decoding Sustainability
This course engages worldwide conversations regarding current global environmental issues in relation to the production of building materials. Students begin by defining dilemmas faced by designers and architects in the selection of materials, followed
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by introductory information on biomimicry, natural capitalism, true cost and lifecycle analysis. This course then looks at national, international and industry environmental standards that govern building materials with respect to the triple bottom line: environmental impact, economic impact and social equity. By analyzing specific “certified” building materials, students see how much or how little is being measured and how transparent the certification processes are. Building materials and the environmental standards that govern them will continue to evolve throughout the entirety of a designer’s life. Therefore, developing a thinking/filtering process to employ in the selection aids each designer in his/her career. This course seeks to develop design thinking in relation to the environment while developing tools to understand how building materials can be evaluated for sustainability.

Credit 3 units.

A46 ARCH 435C Site Works
Credit 3 units.

A46 ARCH 435D Surface It, With Pieces
The seminar focuses on the in-depth understanding and development of ideas based on the technical, experiential and aesthetic exploration of one material: concrete, into a specific application; pavers. The students design a module and then explore different pattern options. The pattern modules consider the limitations of the material in terms of strength, weight, size, etc. The goal is to make a single piece or pieces that can be lifted by a single person without much effort and combine them in different ways in order to create an artificial topography. Students learn about the material itself as well as the act of construction, assemblage and mass production, which include methods and technology, ranging from tools to form work. The forms for the concrete pieces are built through a process of CNC milling and/or vacuum-formed plastic. The challenge is to define environmentally sensitive strategies for problem solving, conceptual development and poetic expression at both levels of the design process, conceptual and real. Sustainable principles, such as the use of recycled materials as an aggregate in the concrete mix, are an important consideration for this class. Students also are asked to investigate water run-off in a given area and alter the percentage of open grids as a way to create a pervious, though walkable surface. Construction is the ultimate goal.

Credit 3 units.

A46 ARCH 436 Mapping Soft Bodies/Constructing Complex Objects
Theory and research on digital design and manufacturing. “Body and soul are thus constructed in the same manner, at the intersection of a cluster of radii of curvature. Both are then simply effects of convergence that are constituted in space, on either side of the surface of the work that envelops them. It follows that the body is no less ideal than the mind” (Bernard Cache, Earth Moves). This course explores the complex systems of geometries that compose the human body. The students invent techniques of digital-mapping the contours of the soft bodies and define the potential for developing new forms of spatial effects uncovered through the digital representation. The mapping procedures are developed to trace and project the human scale and material interface imposed by the fluctuating movements of the bodies in dynamics. Through the making of these forms, each student manufactures new objects through alternative prototyping techniques.

Credit 3 units.

A46 ARCH 436A Information Modeling and Technology
Credit 3 units.

A46 ARCH 436B BIM in Practice
Building Information Modeling (BIM) is a developing method of creating, sharing and managing project data through a visualized 3D or 4D model. While it continues to deliver on an initial promise to increase design consistency and efficiency while minimizing errors, the focus of attention is shifting to the use of BIM to facilitate integrated methods of project delivery. The course explores the use of the BIM platform and the development of data exchange methods in architectural design through a case study and subsequent design project. Students are provided instruction in Revit covering the creation, management and extraction of data from a model, but also look at the technology more broadly, discussing the changes advanced by the deployment of BIM processes in practice.

Credit 3 units.

A46 ARCH 438 Environmental Systems I
Credit 3 units.

A46 ARCH 438A Digital Diversions
Credit 3 units.

A46 ARCH 439 Environmental Systems II
Credit 3 units.

A46 ARCH 440 Explorations in Structural Principles
This course begins with a series of presentations (lectures) about primary systems in an effort to familiarize students with basic structural principles. This is a non-mathematical exploration of how structures “work” and why. We attempt to become conversant in “the language of structures.” Students identify a particular system and do case studies exploring its characteristics and how, where and why the system has been used. These explorations ultimately lead to the development of large-scale (testable) models.
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Credit 3 units.

A46 ARCH 444A Lightweight Prototyping
Credit 3 units.

A46 ARCH 445 Building Systems
Credit 3 units.

A46 ARCH 447A Structures I
Statics and strength of materials through beam and column theory. Loads are defined and states of stress are identified and analyzed. The context of structural behavior is identified and optimal structural behavior and material efficiency structural design is reviewed. Form-active, bulk-active and vector-active structural options are explored relative to the transference of load along the length of structural members. The course applies structural theory to the analysis and design of structural members — beams, trusses, arches and columns. Credit 3 units.

A46 ARCH 448A Structures II
Continuation of Arch 447A with consideration of the effects of forces on structural members of various materials. Introduction to the design of structural members in steel, reinforced concrete and wood. Prerequisite: Arch 447A. Credit 3 units.

A46 ARCH 450B Readings in Architecture
This weekly seminar course addresses issues of Western architectural thought through a focused series of readings and discussions. The necessity and role of architectural theory in general are examined. Issues of tectonics, historicism, typology, regionalism, modernism, postmodernism and other critical frameworks for the consideration of architecture are thematic subjects of discussion. Selected readings include Vitruvius, Alberti, Laugier, Semper, Ruskin, Le Corbusier, Gropius, Kahn, Rossi, Venturi, Eisenman, Libeskind and Koolhaas. Weekly reading assignments, attendance, participation, one summary and discussion introduction based on a reading topic, final paper. Fulfills history/theory requirement. Credit 3 units.

A46 ARCH 452G Modern Architecture in Japan
Since the beginning of the 20th century, art, architecture and urbanism together have investigated the production of images that shape the symbolic dimension of our experience of large cities. This seminar critically embraces this tradition and brings together different methodologies for the visual analysis and representation of contemporary urban phenomena, using St. Louis as a focal point. The goal is to design and produce individual books as a result of research, visual documentation, readings and discussions in a seminar and workshop structure. Each student selects and develops a theme related to the urbanization of St. Louis that is organized into books that present how this metropolitan area has been conceived through images. The course is divided into three parts combining readings, research and design activities, each of which culminates in the presentation of an individual project: a total of two study books and a final book. Fulfills Urban Issues elective requirement. Credit 3 units.

A46 ARCH 462H Information Modeling for Sustainable Design
Credit 3 units.
A46 ARCH 462K Productive Systems: Ecological Articulations in Architecture
Credit 3 units.

A46 ARCH 462L Articulating an Idea
Credit 3 units.

A46 ARCH 462M Pattern Recognition
Interrogates a recent history of architecture replete with pattern. Case studies of patterning in contemporary projects are undertaken through the production of analytical, computational models to reveal an underlying logic of performance and construction. In parallel, the course presents a theoretical survey of related issues in art, psychology, computation and ecology. In this context, pattern is understood as a performative expression of an ecological system, distinct from historical issues of ornament and representations. Informed by the analysis, students then digitally produce an original pattern, both graphically operative and spatially materialized.
Credit 3 units.

A46 ARCH 463A Emerging (Re)Development Strategies
Credit 3 units.

A46 ARCH 463B Emergent Urbanisms
This course surveys emergent models of urbanization in globalizing cities that thus far defy categorization or exist peripherally in studies of urban form. The goal of the course is to equip students with the theoretical and historical background, the analytical tactics, and the critical awareness necessary to reposition themselves as designers in these increasingly challenging contexts. Through course study examples and supporting readings, the course deciphers the formal, social and environmental effects of particular processes defining new urban spatial configurations in city-regions around the globe. Most of these processes are driven by discourses of “efficiency,” such that urban forms are increasingly inflected by economic operating systems as they are subsequently detached from traditional concerns of livability and public interest. Emerging urban assemblages include: massive manufacturing warehouse landscapes or logistical distribution centers and “aerotropolis” transit hubs as well as those spaces left behind by regional restructuring: de-urbanizing (or deliberately erased) environments that contradictorily “enable growth” in other areas (or over the same areas); and the informal settlements that emerge more spontaneously on the margins of mainstream urban policy. Students use their understanding of these spatial and logistical configurations to project creative models for redirection or engagement. Sources and analytical tactics are drawn from across fields including design, sociology, geography and history. Fulfills Urban Issues elective requirement, MUD-Track elective requirement.

A46 ARCH 464A Architecture and Photography
Seminar that deals with issues raised by use of photography by architects, historians and critics. Seminar confronts the assumption that our knowledge of notable buildings and architectural space is based primarily on the photographic image. Photographs are tacitly accepted as objective facts, and the pervasiveness of photography in magazines, books and exhibits as substitute for direct experiences is rarely questioned. Goal of seminar: to foster a healthy skepticism of photographs, and to investigate the role of photography as a means of record and convey complex spatial conditions by the ordering conventions of the frame. While not technical, the course introduces students to technical aspects of photography that are particularly relevant to architectural photography: parallax, lighting, lens distortion, depth of field, format and grain, cropping, photomontage and point of view. Fulfills history/theory requirement.
Credit 3 units.

A46 ARCH 464E Spatial Representations in Contemporary Culture
The main objective of this seminar is to analyze the crisis of representation in contemporary culture and its relationship to architecture and the urban landscape, looking for a critique of architecture beyond formal aspects. The framework for the seminar is the transition of modernity into the contested terrain of postmodernity, and the limitations and possibilities faced by architects in the thinking and in the production of space. The activities are mainly organized along the reading and discussion of texts drawn from a multidisciplinary theoretical approach, and by the analysis of examples of representation from films, artworks, architecture and the city.
Credit 3 units.

A46 ARCH 464F Contemporary Theories in Architecture and Urban Practices
Since the 1960s the practice of design in architecture and urbanism has been increasingly associated with a theoretical framework. Theory has both provided support to the investigation of the phenomena related to the built environment and has faced problems in the translation of abstract constructs into the practice of design. This seminar presents examples of relevant contemporary interpretive and critical theory and confronts them with current practices in architecture and urbanism. The purpose of this confrontation is to develop skills to articulate individual critiques of design as a mediation between discourse and practice. Required work: The seminar activities take place in the form of reading and discussion of texts, and analyses of current examples of architecture and urban practices. Each student must investigate an individual case study to be presented in the form
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of a seminar as well as a final paper. Prerequisite: Arch 222 or 223. Fulfills history/theory elective.
Credit 3 units.

A46 ARCH 464G Drawing and Urbanism
Credit 3 units.

A46 ARCH 467 The Visible and the Invisible
A seminar on philosophy, criticism and architecture providing an intellectual framework for making architecture, by investigating the development of thought and ideas in other disciplines and the effect they have had in the arts. Specific assigned readings are presented and discussed by the class weekly. Emphasis placed on the discussion and the formulation of personal interpretations developed after careful and thoughtful reading. Offers an arena in which theory and practice, often seen as irreconcilable, can be understood as inseparable aspects of the same realm, informing both the author and the work. Fulfills history/theory requirement.
Credit 3 units.

A46 ARCH 469B Appraising the Opaque: Studies of Architectural Opacity
Credit 3 units.

A46 ARCH 470D The Description of Place
The means by which we come to an understanding of a place profoundly effects any subsequent action taken in that place — specifically the action of building. The possibility for place to gather and hold, not only things, but also ourselves, our memories and our imaginations — the event of place — is defined as place becomes concretely defined and choreographed as a static background for action, rather than as a fluid and dynamic action itself. In order to reassert the active reflecting and gathering power of place and, subsequently, of architecture, the process of knowing and describing where we build needs to be reconsidered. This seminar focuses on the potential for visual description to effect alternative readings of place that are otherwise obscured, and speculate regarding the implications of such readings on the making of architecture. The course is divided equally between theory and making. In addition to discussions surrounding assigned readings, students select a specific place of study in St. Louis from which they develop different methodologies for observation and description over the course of the semester. Students have a choice of submitting either a final paper or project, which speculates as to what new understandings have emerged and what possible actions could result from their study.
Credit 3 units.

A46 ARCH 470E Extreme Architecture
Credit 3 units.

A46 ARCH 471A Continuity and Transformation
Throughout history and across cultures, certain ideas, concepts and organizational strategies have persisted in architecture, despite advances in social ideals and technological capabilities. The seminar explores the phenomenon of this continuity with the goal of uncovering the manner in which these ideas and strategies are transformed. Whether classified by use, characteristic form or compositional device, the continuity of these notions is clearly traceable as a body of knowledge waiting to be revealed, understood, assessed and, when valid, built upon. The transformation of ideas and strategies is one of the most fundamental activities of the designer, but relies on careful study. We discover evidence of this phenomenon in vernacular architecture, patterns of settlement and habitation, and in the work on many of our most influential practitioners, such as Le Corbusier, Kahn, Moneo and Zumthor, as well as in the realm of painting and sculpture including Cubism, Suprematism and Expressionism.
Credit 3 units.

A46 ARCH 472 Sustainable Development
Credit 3 units.

A46 ARCH 475D Landscapes Through Time: The History of St. Louis' Built Environment
Credit 3 units.

A46 ARCH 475E History of the Modern Art Museum
This seminar explores the development of the modern art museum as an architectural type, measured against evolving nature of display objects, curatorial practices, and demands of the viewing public. Since the consolidation of the type in the early 19th century, the art museum has been the primary site where the symbiotic trajectories between artistic and architectural development have played out. Also examined is the importation of this program into non-Western countries, which responded with their own canons and classifications of fine art. The course ends with recent case studies in which architecture has made new, often aggressive, commentaries on objects it is designed to display. The course is open to graduate students and advanced undergraduate Architectural History minors.
Fulfills History/Theory elective requirement.
Credit 3 units.

A46 ARCH 476 Approach: A Studio in Publication Design
Credit 3 units.

A46 ARCH 4782 Modern Architecture in St. Louis
Credit 3 units.
A46 ARCH 478A Mid-Century Modernism in St. Louis 1930–1965
Credit 3 units.

A46 ARCH 480B Mapping the Metropolitan Mississippi
Same as LAND 480B
Credit 3 units.

A46 ARCH 484B Notations on Florentine Architecture
This seminar proposes a historical survey of significant buildings and urban spaces in Florence through the graphic documentation and spatial analysis of selected sites and buildings from antiquity to the Renaissance and to modernism. The general framework of our analysis is to understand the relationship between the historic development of the city and its most symbolic architecture. This approach is based on the work of Italian scholars, such as Giulio Carlo Argan, who define the history of architecture as the history of the city. The course is methodically divided into two blocks of exercises. In the first part of the semester, we focus on readings, site visits, sketches, analytical drawings and photos, as well as the mapping of the urban development of Florence. In the second part of the semester, students focus on the tectonic study of specific buildings through the construction of representational and experimental models. Each student’s individual work contributes to a collective 2-D and 3-D final project to be presented as an exhibition in the Florence Studio during the spring and to be shown at the College of Architecture in the fall.
Credit 3 units.

A46 ARCH 484C Metabolic City: Drawing and Urbanism
Credit 3 units.

A46 ARCH 484D Space, Society and the Digital
Credit 3 units.

A46 ARCH 486A NOMA National Design Competition
Credit 3 units.

A48 LAND 401 Landscape Architecture Design Studio I
This core studio explores design principles common to architecture and landscape architecture as well as their own specificity. A series of problems focuses on the relation of component to space through conceptual, analytical, formal and perceptual investigations.
Credit 6 units.

A48 LAND 421 Landscape Representation I: Hand Drafting, Drawing and Sketching
The beginning course in the representation sequence introduces students to freehand and mechanical representation as a means for developing and communicating design ideas. Students build a basic understanding of orthographic drawing typologies and traditional drawing materials. Emphasis is placed on development of observational skills, building a design vocabulary, basic drawing skills, and the techniques of landscape architecture and architectural representation.
Credit 3 units.

A48 LAND 422 GIS
This course module introduces GIS mapping software and its application to methods used in site planning and design. The focus of this half-semester course is to understand the potential
of GIS to analyze, visualize and utilize complex data. Students learn techniques and tools in ArcGIS software and explore how these can be applied to projects specific to individual sites. This course introduces new skills and analytical complexity while building upon previously learned representation techniques. Credit 1.5 unit.

A48 LAND 431 Landscape on Structure
This course examines materials and technologies for landscapes on structure — green roofs and vertical gardens, among others. Through a series of case studies, students gain an understanding of the relationships between structure (architecture and infrastructure) and substrate, soil, water and plants. Topics covered include innovative planting and urban streetscape systems, and infrastructural adaptation and re-use. Exercises range from analytical diagrams of construction methods to design concepts for living systems adapted to a variety of structural and environmental conditions. Open to students in architecture, landscape architecture and urban design. Credit 3 units.

A48 LAND 451 Plants & Environment
Credit 1.5 unit.

A48 LAND 452 Planting Design I
Credit 1.5 unit.

A48 LAND 461 Grading + Landform
Credit 1.5 unit.

A48 LAND 462 Landscape Materials
Credit 1.5 unit.

A48 LAND 465 Landscape Technology
Throughout the world of spatial design, there has been a strong resurgence of interest in landscape methods as a comprehensive and innovative approach toward defining and engineering sites. Techniques of working the land engage dynamic processes, molding conditions and creating forms in order to control erosion, conserve water and minimize human impacts. As such, landscape methods have created new standards of performance for sites of all sizes and circumstances. Accordingly, this course, intended for students across disciplines, presents an integrated approach to site planning through the intensive study of applied landscape systems. The material covers the spatial and functional systems of designed landscapes and their associated computational and technical aspects: micro- and macrograding, path alignment and drainage calculation. Through studying these techniques, students learn to implement and quantify water management, microclimate manipulation and low-impact circulation, parking and servicing. The principles and methods are presented through short lectures and supported by case studies, class workshops and design exercises, tying theory to practical applications. Credit 3 units.

A48 LAND 480 Case, Trace, Displace: Dialogue between River and City
Credit 3 units.

A48 LAND 480B Mapping the Metropolitan Mississippi
This seminar explores the relationship of city to river through reading, recording and mapping. Students document their research, create proposals and develop simulations and/or prototypes for a site on the St. Louis riverfront. Methods of inquiry combine hand-recording, photography, GIS techniques and DIY devices. The course alternates discussion sessions, field research and lab. Open to all graduate students; undergraduates require the instructor’s approval. Credit 3 units.

Sam Fox School of Design & Visual Arts

Carmon Colangelo, MFA
Dean
E. Desmond Lee Professor for Collaboration in the Arts

Peter MacKeith, BA, MArch
Associate Dean

Georgia Binnington, BA
Associate Dean of Students

College of Architecture/Graduate School of Architecture & Urban Design

Bruce Lindsey, A.I.A., MFA, MArch
Dean
E. Desmond Lee Professor for Community Collaboration

Kathryn Dean, MArch
Director of the Graduate School of Architecture & Urban Design

JoAnne Stolaroff Costen Professor of Architecture

College of Art/Graduate School of Art

Buzz Spector, MFA
Dean
Jane Reuter Hitzeman and Herbert F. Hitzeman Jr. Professor of Art
Architecture

**Patricia Olynyk**, MFA  
Director of the Graduate School of Art  
Florence and Frank Bush Professor of Art

**Mildred Lane Kemper Art Museum**

**Sabine Eckmann**, PhD  
William T. Kemper Director and Chief Curator

The Sam Fox School of Design & Visual Arts is a unique collaboration in architecture, art and design education, linking professional studio programs with one of the country’s finest university art museums in the context of an internationally recognized research university.

The Sam Fox School is composed of the College of Architecture, the Graduate School of Architecture & Urban Design, the College of Art, the Graduate School of Art and the Mildred Lane Kemper Art Museum.

The **College of Art**, founded in 1879, was the first professional, university-affiliated art school in the United States. In the 1940s, its broad-based core program helped set the standards for the bachelor of fine arts degree. Faculty over the years have included Max Beckmann, Philip Guston and other internationally known artists.

The **College of Architecture**, established in 1910, was one of eight founding members of the Association of Collegiate Schools of Architecture (ACSA). In 1962, Architecture launched one of the nation’s first Master of Urban Design programs. Four winners of the Pritzker Prize, considered architecture’s highest honor, have taught at the school.

The **Mildred Lane Kemper Art Museum** dates back to 1881, making it the first art museum west of the Mississippi River. The collection has historically focused on contemporary work. Today the Kemper Art Museum holds roughly 3,500 important paintings, sculptures, photographs and installations by 19th-, 20th- and 21st-century American and European artists, along with significant antiquities and a large number of prints and drawings.

Additional collaborative opportunities are provided by the Department of Art History & Archaeology in Arts & Sciences and the Kenneth and Nancy Kranzberg Art & Architecture Library.

**Inquiry, Creativity and Synthesis**

The Sam Fox School offers rigorous art and architecture education at both the undergraduate and graduate levels, within the unique context of an independent, nationally prominent research university.

The student body is composed of approximately 300 undergraduate and 50 graduate students in Art, as well as 200 undergraduate and 280 graduate students in Architecture. In all, they represent 17 countries, 47 states and the District of Columbia. Roughly 30 percent of undergraduates pursue combined studies within another university area.

Both core and advanced studios integrate contemporary theory and practice. Among the innovative programs are:

- Multidisciplinary courses co-taught by Art, Architecture and Art History & Archaeology faculty. Recent seminars have explored the history of illustrated entertainment, combined urban theory with book design and production, and crafted a variety of online publications. Courses in exhibition studies are being offered and a new program of exhibition studies is under development.
- International studios in Barcelona, Buenos Aires, Florence and Helsinki are taught by Washington University faculty and offer a range of distinctive programs in art and architecture.
- Community projects include the University City Sculpture Series, which funds student-designed public artworks; WashU City, a mentoring program for local high school artists; and Architecture’s Building Community/Community Building, which explores relationships between St. Louis’ inner city, nearby municipalities and outlying suburbs.

**Uniting Creativity and Scholarship**

The Sam Fox School boasts a unique combination of academic and intellectual resources.

The Architecture faculty includes practicing architects, urban designers and landscape architects as well as eminent architectural theorists and historians and a select number of international visitors. The resident, full-time faculty members have won national and regional awards for design excellence and planning, including more than two dozen from the American Institute of Architects alone.

Art’s full-time faculty members include prominent painters, sculptors, printmakers and mixed-media artists as well as leading illustrators, graphic designers, fashion designers and photographers. In the past decade, design faculty have won numerous professional honors while fine art faculty have been featured in more than 100 solo exhibitions and 300 group shows on five continents.

The nationally recognized Kemper Art Museum maintains a vital program of exhibitions, publications and educational events. Major thematic shows are drawn from institutions and private collections around the world, while the Contemporary Projects Series highlights nationally and internationally emerging artists. The acclaimed permanent collection includes key works by modern and contemporary artists from Henri Matisse, Pablo Picasso and Jackson Pollock to Christian Boltanski, Candida Hofer and Olafur Eliasson.

Public events include concerts, film screenings, lectures and discussions with distinguished visitors, and museum tours led by student docents. The museum also provides workspace for faculty- and student-curated exhibitions (usually relating to Sam
Architecture

The Sam Fox School is housed in a comprehensive, five-building campus for design and the visual arts. Conceived around a central courtyard, it both reflects and updates Washington University’s original campus plan, developed in 1895 by Frederick Law Olmsted, the founder of American landscape architecture.

The architectural centerpiece is prize-winning Japanese architect Fumihiko Maki’s new Kemper Art Museum. This elegant, 65,000-square-foot limestone clad structure — a gathering point for scholars and the general public — includes more than 10,000 square feet of exhibition space, art storage facilities, and the Florence Steinberg Weil Sculpture Garden. The museum also houses the new Kranzberg Art & Architecture Library, Art History & Archaeology, and the Newman Money Museum, a state-of-the-art numismatics center.

Adjacent to the Kemper Art Museum is Maki’s Earl E. and Myrtle E. Walker Hall. The three-story, 38,000-square-foot building contains painting and sculpture studios and the Nancy Spirtas Kranzberg Studio for the Illustrated Book.

Flanking the new buildings are Bixby and Givens halls — historic homes to Art and Architecture, respectively — as well as Steinberg Hall, Maki’s iconic modernist pavilion. Recent renovations include state-of-the-art computing environments; accessible, light-filled studios; additional workspaces; an auditorium; and a café.

Visiting Artists and Architects

The Sam Fox School invites distinguished academics and professionals to lecture, attend critiques and visit major studios. Recent visitors include:

2011–12
Radcliffe Bailey
Claudia Bernardi
Phyllis Bramson
Julia Bryan-Wilson
Adam Budak
Thomas Demand
Patrick Dougherty
Theaster Gates Jr.
Trenton Doyle Hancock

Jessica Hische
Barbara Kasten
Balázs Kicsiny
Chelsea Knight
Susan Laxton
Ellen K. Levy
Richard Meyer
Tomás Saraceno
John Stezaker
Renata Stih and Frieder Schnock
Diane Victor

E-mail: samfoxschool@wustl.edu
Departmental website: http://www.samfoxschool.wustl.edu

Dean, Sam Fox School
Carmon Colangelo
E. Desmond Lee Professor for Collaboration in the Arts
MFA, Louisiana State University
(College of Art/Graduate School of Art)

Dean, College of Architecture/Graduate School of Architecture & Urban Design
Bruce Lindsey, A.I.A.
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MFA, MArch , Yale University
(College of Art/Graduate School of Art)

Dean, College of Art/Graduate School of Art
Buzz Spector
Jane Reuter Hitzeman and Herbert F. Hitzeman Jr. Professor Art
MFA, University of Chicago
(College of Art/Graduate School of Art)

Associate Dean
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BA, MArch, Yale University
(College of Architecture/Graduate School of Architecture & Design)

Associate Dean of Students
Georgia Binnington
BA, Washington University

Director of the Graduate School of Architecture & Urban Design
Kathryn Dean
Architecture

JoAnne Stolaroff Cotsen Professor of Architecture
MArch, Oregon School of Architecture and Allied Arts
(College of Architecture/Graduate School of Architecture & Urban Design)

Director of the Graduate School of Art
Patricia Olynyk
Florence and Frank Bush Professor of Art
MFA, California College of the Arts
(College of Art/Graduate School of Art)

William T. Kemper Director
Sabine Eckmann
William T. Kemper Director and Chief Curator
PhD, University of Erlangen–Nürnberg

Degree Requirements

Undergraduate Degree

As a student in the College of Architecture, you select, in consultation with your adviser, a course of study that satisfies the formal degree requirements, addresses your interests and best meets your overall goals.

General

Students matriculating in 2011 and after will earn either a Bachelor of Science in Architecture degree or a Bachelor of Design degree.

Undergraduate students who have matriculated prior to the fall of 2011 in the College of Architecture receive either:

- A. The Bachelor of Science in Architecture degree, or
- B. The Bachelor of Arts degree with a major in architecture.

These degrees are conferred by the College of Arts & Sciences. All undergraduates must therefore fulfill the requirements of the College, as well as the requirements of their specific degree program in the College of Architecture. The degree program requirements are the same for both degrees through the junior year (300 level). Students then choose which degree program they wish to pursue at the conclusion of the junior level.

College of Architecture Requirements

Students in the classes of 2015 and beyond must fulfill the following degree requirements:

A. Academic Requirements

1. Writing I: Every student must demonstrate proficiency in reading and writing the English language and must begin to develop mature skills in framing and revising arguments by completing course work as determined by the Department of English with a grade of C+ or better.

2. Calculus (Natural Sciences/Math)

3. Physics (Natural Sciences/Math)

4. Art History (History of Western Art, Architecture and Design)

5. Art History (Introduction to Modern Art, Architecture and Design)

6. Literature (6 units)

7. Social Sciences/Philosophy (6 units)

B. Academic Electives

Every student is required to take 18 units of course work in Arts & Sciences electives.

C. Foundation Courses

1. Drawing I, II

D. Sam Fox Commons Courses

Every student is required to take at least three Sam Fox Commons Courses.

This curriculum includes several new elements including the Sam Fox Foundation Sequence; the Sam Fox Commons, consisting of three art, architecture and design interdisciplinary courses; and the Capstone studio for students in the Bachelor of Design degree program.

E. Major Required Courses: Bachelor of Science in Architecture

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 111</td>
<td>Introduction to Design Processes I</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 112</td>
<td>Introduction to Design Processes II</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 211</td>
<td>Introduction to Design Processes III</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 212</td>
<td>Introduction to Design Processes IV</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 311</td>
<td>Architectural Design I</td>
<td>6</td>
</tr>
<tr>
<td>ARCH 312</td>
<td>Architectural Design II</td>
<td>6</td>
</tr>
<tr>
<td>ARCH 411</td>
<td>Architectural Design III</td>
<td>6</td>
</tr>
<tr>
<td>ARCH 412</td>
<td>Architectural Design IV</td>
<td>6</td>
</tr>
<tr>
<td>ARCH 333</td>
<td>Case Studies in 20th-Century Architecture</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 346</td>
<td>Building Systems I</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 438</td>
<td>Environmental Systems I</td>
<td>3</td>
</tr>
</tbody>
</table>

One History/Theory or Urban Issues elective

F. Major Required Courses: Bachelor of Design, Major in Architecture

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 111</td>
<td>Introduction to Design Processes I</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 112</td>
<td>Introduction to Design Processes II</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 211</td>
<td>Introduction to Design Processes III</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 212</td>
<td>Introduction to Design Processes IV</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 311</td>
<td>Architectural Design I</td>
<td>6</td>
</tr>
</tbody>
</table>
ARCH 312 Architectural Design II 6
Capstone Course 3
Architectural History I or II 3
ARCH 333 Case Studies in 20th-Century Architecture 3
ARCH 346 Building Systems I 3
Electives 24

College of Arts & Sciences Requirements
For students matriculating prior to Fall 2011:

A. Basic Skills

1. Writing I: Every student must demonstrate proficiency in reading and writing the English language and must begin to develop mature skills in framing and revising arguments by completing course work as determined by the Department of English with a grade of C+ or better.

2. Quantitative Analysis: Every student must develop skills in quantitative analysis by completing one of an approved list of “QA” courses with a grade of C+ or better.

B. Arts & Sciences Degree Requirements

Please refer to the distribution requirements of the College of Arts & Sciences (p. 134 ) of this Bulletin.

College of Architecture Requirements
For students matriculating prior to Fall 2011:

A. Prerequisite Courses to the Degree Programs

In addition to the requirements of the College of Arts & Sciences, the College of Architecture also requires that the quantitative analysis requirement be fulfilled by Math 131 (placement by math department) or its equivalent. This quantitative analysis foundation is extended by required course work in Physics 117A, usually during the sophomore year.

To establish a basis for cultural understanding and critical thought, beginning students of architecture enroll in the two-semester sequence surveying the history of civilization, History 101C and 102C, usually in the freshman year. This historical and cultural studies foundation is extended by two semesters of required course work in architectural history, Arch 3283 and 3284, in the junior year.

The introductory architecture and design sequence is a set of courses prerequisite to both undergraduate architecture degree programs. The introductory architecture sequence is normally completed within the first two years of enrollment. The prerequisite courses are:

Course Units
ARCH 111-112 Introduction to 6
Design Processes I and II
Arch 111A-112A Introduction to Architecture I and II 2
ARCH 211-212 Introduction to Design Processes III and IV 6
Arch 211A-212A Issues in Design I and II 2

These courses must be passed in sequence with a grade of C– or better.

B. Typical Freshman and Sophomore Programs for Architecture Students

The following typical programs for the freshman and sophomore years are based on the requirements of the College of Arts & Sciences and on the prerequisite introductory architecture sequences for the undergraduate degrees in architecture:

Freshman Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 111-112</td>
<td>6</td>
</tr>
<tr>
<td>Arch 111A-112A</td>
<td>2</td>
</tr>
<tr>
<td>Math 131</td>
<td>3</td>
</tr>
<tr>
<td>History 101C-102C</td>
<td>6</td>
</tr>
<tr>
<td>Writing 1</td>
<td>3</td>
</tr>
<tr>
<td>Distribution/Discovery Requirements</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

Sophomore Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 211-212</td>
<td>6</td>
</tr>
<tr>
<td>Arch 211A-212A</td>
<td>2</td>
</tr>
<tr>
<td>Physics 117A</td>
<td>4</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
<tr>
<td>Distribution/Discovery Requirements</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

If a student plans to enter the architectural design sequence Arch 311-312 in the fall of the junior year, the student must complete 60 units of academic work by the end of the sophomore year.

C. Degree Program Requirements

1. Bachelor of Arts Degree with a Major in Architecture

The major requirements for the Bachelor of Arts degree, with a major in architecture, are as follows:
## Architecture

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 311 Architectural Design I</td>
<td>6</td>
</tr>
<tr>
<td>ARCH 312 Architectural Design II</td>
<td>6</td>
</tr>
<tr>
<td>Arch 321A Architectural Representation I</td>
<td>3</td>
</tr>
<tr>
<td>Arch 321B Architectural Representation II</td>
<td>3</td>
</tr>
<tr>
<td>Arch 3283 Architectural History I</td>
<td>3</td>
</tr>
<tr>
<td>Arch 3284 Architectural History II</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 333 Case Studies in 20th-Century Architecture</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 346 Building Systems I</td>
<td>3</td>
</tr>
</tbody>
</table>

2. Bachelor of Science in Architecture Degree

The major requirements for the Bachelor of Science in Architecture degree are as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 311 Architectural Design I</td>
<td>6</td>
</tr>
<tr>
<td>ARCH 312 Architectural Design II</td>
<td>6</td>
</tr>
<tr>
<td>ARCH 411 Architectural Design III</td>
<td>6</td>
</tr>
<tr>
<td>ARCH 412 Architectural Design IV</td>
<td>6</td>
</tr>
<tr>
<td>Arch 3283 Architectural History I</td>
<td>3</td>
</tr>
<tr>
<td>Arch 3284 Architectural History II</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 333 Case Studies in 20th-Century Architecture</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 438 Environmental Systems I</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 439 Environmental Systems II</td>
<td>3</td>
</tr>
</tbody>
</table>

- Urban Issues Electives group, or
- Architectural History/Theory Electives group.

## D. Minor in Architecture Requirements

Minor degree candidates are required to complete 18 units including:

1. 6 units of introductory design, from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 111-112 Introduction to Design Processes I and II</td>
<td>6</td>
</tr>
<tr>
<td>ARCH 211-212 Introduction to Design Processes III and IV</td>
<td>6</td>
</tr>
</tbody>
</table>

2. 3 units (minimum) of the architectural history survey:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arch 3283 Architectural History I</td>
<td>3</td>
</tr>
<tr>
<td>Arch 3284 Architectural History II</td>
<td>3</td>
</tr>
</tbody>
</table>

3. 3 to 9 units chosen from the following electives:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arch 111A-112A Introduction to Architecture I and II</td>
<td>2</td>
</tr>
<tr>
<td>Arch 211A-212A Issues in Design I and II</td>
<td>2</td>
</tr>
<tr>
<td>Arch 302 Freehand Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 333 Case Studies in 20th-Century Architecture</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional courses as approved by the associate dean or dean.

## Additional Requirements

Each undergraduate student shall complete 122 (student matriculating in Fall 2011) or 120 units (students matriculating prior to Fall 2011) with a grade of D or better (or credit) and at least 30 units in advanced courses (numbered 300, 400 or 500). The 30 units in advanced courses may include the minimum number of advanced units required by the major areas of concentration. Courses required for the major (see College of Architecture Requirements (p. 63)) must be passed with a grade of C− or better.

Each student shall spend at least three semesters in full-time residence (at least 12 units per semester) at Washington University. Unless excused by the dean of the College of Architecture, the student must earn the last 30 units at Washington University. The dean of the College of Architecture may waive the full-time residence requirement for students who are employed full-time and have completed at least two years of college.
### Regulations

A. No more than eight courses, exclusive of general studies courses, may be taken pass/fail.

B. You may enroll for credit in only one supervised performance course in any semester. You may earn a maximum of 12 units toward the degree in supervised performance and/or in group and individual performance courses combined.

### The 4+2 Program: Bachelor of Science in Architecture and Master of Architecture

The College of Architecture’s Bachelor of Science degree curriculum leads directly into the Graduate School of Architecture & Urban Design’s two-year Master of Architecture degree program, providing for the attainment of the accredited professional degree in six years.

Students who have satisfactorily completed, or who are about to complete, the Bachelor of Science requirements can apply to the Graduate School of Architecture & Urban Design’s Master of Architecture degree program by submitting an application to the Graduate Admissions Office and by requesting a review of their undergraduate work by the Graduate Admissions Committee. Admission is not automatic, however, and requires approval from the Graduate Admissions Committee. A portfolio is not required for students in the senior year of the Bachelor of Science curriculum at the time of application.

Bachelor of Science in Architecture students thus accepted into the two-year Master of Architecture degree program are required to complete the following courses to fulfill the requirements of the M.Arch.2 degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 347 Building Systems II</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 511 Architectural Design V</td>
<td>6</td>
</tr>
<tr>
<td>ARCH 512 Architectural Design VI</td>
<td>6</td>
</tr>
<tr>
<td>Arch 544A Acoustics and Lighting</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 580 Design Thinking (to be taken in penultimate semester)</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 611 Architectural Design VII</td>
<td>6</td>
</tr>
<tr>
<td>ARCH 616 Degree Project</td>
<td>6</td>
</tr>
<tr>
<td>ARCH 646 Professional Practice</td>
<td>3</td>
</tr>
</tbody>
</table>

Additionally, students entering the two-year Master of Architecture degree program with the college’s Bachelor of Science degree must complete course work not addressed during the Bachelor of Science curriculum, as follows:

1. Completion of both Arch 552B Site Planning and Arch 546C Climate and Light;
2. Completion of at least one elective course in Architectural History and Theory; and
3. Completion of at least one elective course in Urban Issues.

Students in the M.Arch.2 degree program have 18 units (six courses) of additional elective credits to complete.

### Information

For more information about graduate degree programs and requirements, contact the Director of Graduate Admissions, Graduate School of Architecture & Urban Design, Sam Fox School of Design & Visual Arts, Washington University in St. Louis, Campus Box 1079, One Brookings Drive, St. Louis, MO 63130-4899, or send e-mail to: wuarch@arch.wustl.edu.

### Academic Honors & Awards

**Dean’s List:** In recognition of exceptional scholarship, the Office of the Dean compiles, at the end of each academic year, a list of those students whose work has been particularly worthy of commendation. Students will be eligible for the Dean’s List if they:

1. Elect to take a minimum of 14 hours of course work per semester on the grade option, and;
2. Achieve a semester grade point average of 3.5 or better.

All undergraduate students electing the grade option are candidates for the Dean’s List unless they notify the Office of the Dean in writing that they do not wish to be considered.

**Latin Honors:** Senior Honors may be awarded to graduating students whose academic performance has been outstanding. Candidates for Senior Honors will be recommended to the College of Arts & Sciences by the Dean.

To be eligible for Senior Honors, a student must have achieved a cumulative grade point average of 3.5 or above through his or her final semester. You may be considered for the Bachelor of Arts degree and Bachelor of Science degree cum laude, magna cum laude or summa cum laude as determined by the dean. Nomination for Senior Honors will ultimately depend on the student’s attitude toward learning demonstrated by academic records and faculty recommendations.

### Special Awards, Medals and Prizes

**Undergraduate**

*Betty Lou Custer Award*. The St. Louis Chapter of the American Institute of Architects presents a book award in
memory of Betty Lou Custer, longstanding executive director of the chapter, to an outstanding graduate receiving either undergraduate degree. In recognition of Custer’s service to the profession of architecture, the prize is awarded to a student who has contributed willing service to the College of Architecture.

**Faculty Award**. The faculty of the College of Architecture offers a book award to an outstanding B.A. or B.S. undergraduate in the College.

**Sophomore Book Prize**. Presented to an outstanding sophomore who has completed the basic design sequence within the College. Given in honor of Leslie J. Laskey, professor emeritus, whose inspired teaching formed the basis of the basic design program and whose influence is carried on in the lives and work of the students who studied with him.

**Graduate**

**Alpha Rho Chi Medal**. Alpha Rho Chi, a national social fraternity in architecture, awards a medal to the graduating sixth-year student who has shown an ability for leadership, has performed willing service for the Graduate School of Architecture & Urban Design, and has given promise of real professional merit.

**American Institute of Architects Medal**. Each year, the AIA medal is awarded to a member of the graduating class in recognition of scholastic achievement, character and promise of professional ability. The student so honored receives the engraved medal. The runner-up also may be awarded a certificate, depending on the decision of the faculty. The awards are made in the name of the Henry Adams Fund by the AIA.

**All School**

**James Walter Fitzgibbon Prize**. Mrs. James Fitzgibbon and friends of the family established a fund to honor Professor Fitzgibbon’s memory and to recall his long and distinguished service on the faculty of Architecture. The annual income from this fund provides for the Fitzgibbon Prize, given to a 300- to 600-level student who has the winning solution to a one-day sketch problem.

**William Tao Prize**. Established by William K.Y. Tao, P.E., alumnus, emeritus trustee and affiliate professor at Washington University, the William Tao Prize provides an annual cash award to students who have demonstrated excellence in the understanding and application of building systems in architecture, including illumination, electrical and mechanical engineering, and energy-efficient design.

**Frederick Widmann Prize in Architecture**. Through a bequest from the late Frederick Widmann, an annual prize of at least $1,500 is offered to the best architectural student in the University. The selection is made by the faculty of the architecture college.

### Scholarship Funds

**Scholarships with applications**

**St. Louis Chapter American Institute of Architects Scholarship Fund**. For students from the St. Louis metropolitan area who have completed the first two years of their architectural studies. Inquiries should be addressed to the St. Louis Chapter AIA, 911 Washington Ave., #225, St. Louis, Missouri 63101. Separate application is required.

**The James W. Fitzgibbon Scholarship in Architecture**. Awarded to support four years of study leading to either undergraduate architecture degree. The Fitzgibbon Scholar is selected in recognition of outstanding academic performance and promise in the field of architecture. The scholarship is in the amount of full tuition plus a $1,000 stipend, renewable for a total of four years of undergraduate study. Up to five partial-tuition scholarships are also available. For more information, contact the Office of Undergraduate Admissions. Separate application is required.

**Scholars in Architecture**

The Scholars in Architecture program provides named scholarship funds that have been donated to the University by individuals or companies specifically for this purpose. Selection is based on financial need and academic achievement. There is no application process. The total amount of the student’s financial assistance package does not change.

**Loan Fund**

Gustel and Edith H. Kelwitt Scholarship Loan Fund. For students of architecture.

### Academic Regulations

**Attendance**

Regular attendance at all classes and studio meetings is expected of each student. If, in the opinion of the instructor, any student has accumulated absences to such an extent as to preclude the possibility of satisfying the course requirements, the student’s registration in that course will be canceled, subject to the approval of the dean.

**Units and Grades**

A unit is the amount of credit given for one hour of lecture or up to three hours of studio work a week for one semester. All students in the College of Architecture may take one nonrequired course on a pass/fail basis each semester. All students in the Graduate School of Architecture & Urban Design may select one of the following two grading options as they register for each semester: (1) grade option or (2) pass/fail option. Under the grade option, a student may take one nonrequired course under
pass/fail. Under the pass/fail option, all courses must be taken pass/fail.

Symbols used for both options have the following meanings:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points per Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0</td>
</tr>
<tr>
<td>A–</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
</tr>
<tr>
<td>B–</td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
</tr>
<tr>
<td>C–</td>
<td>1.7</td>
</tr>
<tr>
<td>D+</td>
<td>1.3</td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
</tr>
<tr>
<td>D–</td>
<td>0.7</td>
</tr>
<tr>
<td>F</td>
<td>0.0</td>
</tr>
<tr>
<td>P</td>
<td>0.0</td>
</tr>
<tr>
<td>F</td>
<td>Failing</td>
</tr>
<tr>
<td>I</td>
<td>Course work incomplete</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawal &amp;</td>
</tr>
<tr>
<td>R</td>
<td>Repeat</td>
</tr>
<tr>
<td>L</td>
<td>Successful audit</td>
</tr>
<tr>
<td>Z</td>
<td>Unsuccessful audit</td>
</tr>
<tr>
<td>N</td>
<td>No grade submitted</td>
</tr>
</tbody>
</table>

Pluses and minuses are used. Each grade earned for a course taken for credit receives a specified number of grade points, and these points are affected by plus and minus grades as well.

F grades for a semester may be changed only through the last day of classes of the following semester and then only in extraordinary circumstances. The Office of the Dean will approve no changes of F grades after this interval.

In addition to grading under either the regular grade option or the pass/fail option, instructors teaching architectural design courses complete an evaluation form for each student; a copy is made available to the student, and the original is filed in the student’s folder in the Office of the Dean.

Auditing a Course

With prior approval from your academic adviser, you may audit an elective course.

Incomplete Grades

Incomplete marks in all architectural design courses (100 to 600 level) must be removed by the first day of classes of the following semester. Failure to remove the incomplete will prevent the student from continuing in another architectural design course.

In all other courses, the grade of I must be removed no later than the last day of classes of the next full semester. On failure to make up an I within the next semester, the student shall automatically receive an F in the course unless explicitly excused by the dean. An F grade, so received, may not be changed. Students will not be allowed to continue in courses requiring prerequisites if the prerequisite has an Incomplete grade. A student who carries more than 9 units of incomplete work may be declared ineligible to re-enroll.

Pass/Fail Option

No more than eight courses, exclusive of general studies, major and minor courses, may be taken pass/fail.

Minimum and Maximum Loads

Freshman and sophomore undergraduates will normally enroll in either 15 or 16 units each semester, although enrollment in up to 18 units is possible. Juniors and seniors in the architecture degree programs are strongly recommended to enroll in no more than 16 units each semester in order to maintain focus on the design studio and major requirements. This guideline can only be waived by the dean or associate dean. The normal load for graduate students is a maximum of 16 units each semester.

An enrollment above 18 units will be charged at the established university rate per hour of the additional credits and must be approved by the dean or associate dean of the College of Architecture.

Refer to the About WUSTL (p. 8) section of this Bulletin that covers tuition and fees (p. 28) for both the annual tuition rate and the per credit hour breakdown applicable to the College of Architecture.

Partial load enrollment is possible when circumstances warrant it and requires the permission of the dean.

Students are expected to proceed at a pace that enables them to finish their degree within the appropriate time limit. For undergraduates this is usually eight semesters, and for graduates it is established by the letter of admission. Students are expected to complete no fewer than the minimum number of hours set forth in the schedule below:

### Undergraduate Program

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>32</td>
</tr>
<tr>
<td>4</td>
<td>45</td>
</tr>
<tr>
<td>5</td>
<td>60</td>
</tr>
<tr>
<td>6</td>
<td>75</td>
</tr>
</tbody>
</table>
Exceptions to these minimum standards may be granted only with the written consent of an academic adviser or the associate dean or dean.

### Repeating a Course

When a student retakes a course in which a passing grade has been received, both enrollments will show on the transcript. If the second grade is equivalent to or better than the first grade, the first grade may be changed to R, indicating the re-enrollment upon request of the student and with department approval. If the second grade is lower, both grades will stand. Credit toward the degree will be allowed for only one of the enrollments. When a student retakes a course in which an F has been received, both enrollments for the course will appear on the transcript. If a passing grade is received in the second enrollment, the first enrollment may be changed to R, indicating the re-enrollment upon request of the student and with the approval of the dean.

### Academic Warning and Suspension

A student who fails to make satisfactory progress for two semesters toward the degree as outlined above will be placed on probation. The probation status serves as a warning that unless the quality of work improves, the student may be subject to dismissal from the college because of academic deficiency. Students dismissed for academic deficiency will not be eligible for readmission until they have demonstrated, under the conditions set for each individual case, their ability to do satisfactory work. A student will be taken off the probation list at the completion of two consecutive semesters of satisfactory progress.

A student who receives two or more grades of F in a semester will be placed on academic warning for the following semester. The warning serves as a notice that, unless the student passes all courses in the following semester, he or she will be placed on academic probation.

### Leave of Absence

A leave of absence for one or two semesters is normally granted to a student when individual circumstances, medical or personal, warrant it. A leave of absence assumes that the student will not be taking any academic work at another institution, and it guarantees re-enrollment at its conclusion. A letter from the dean granting a leave of absence will normally require notification by February 15 or November 15 of the student’s intention to re-enroll in the following semester.

### Transfer Credit

Students wishing to transfer credit for course work completed at another institution should bring a full description of the course(s) to the associate dean for pre-approval. Upon receipt of an official transcript indicating a grade of C or better, courses will be considered for transfer. Grades for transfer courses will not appear on the student’s Washington University record and will not figure into the student’s grade point average.

### Retention of Student Work

The College of Architecture and Graduate School of Architecture & Urban Design reserve the right to retain any student work submitted for course credit. Normally this work will be returned to the student at the end of the semester, except that which has been retained for publications, exhibitions or accreditation reviews. It is highly recommended that students photographically reproduce or electronically store their work in order to keep a record of their work.

### Withdrawals

Students wishing to withdraw for any reason from the College of Architecture before the end of the semester should consult in person with the associate dean. No such withdrawal will be official until the request in writing has been approved by the associate dean and the appropriate changes have been made in the student’s record.

### Academic Integrity

Students and members of the faculty of a university have an obligation to uphold the highest standards of scholarship. Plagiarism or other forms of cheating will not be tolerated. Where a student has violated the integrity of the academic community, an instructor may recommend that the student be brought before the Committee on Academic Integrity. A set of guidelines on academic integrity and a list of procedural steps for bringing a complaint before the committee are printed each semester in the College of Arts & Sciences section in Course Listings.
University College Courses

Students may take courses in University College. Students should check with an associate dean prior to taking the course(s) if they want the course(s) to fulfill requirements.

Administration

Bruce Lindsey, AIA, MFA, MArch
Dean
E. Desmond Lee Professor for Community Collaboration

Kathryn Dean, MArch
Director, Graduate Programs
JoAnne Stolaroff Cotsen Professor

Majors

The College of Architecture offers a Bachelor of Arts degree with a Major in Architecture and a Bachelor of Science in Architecture degree. For more information, click the link below.

• Architecture (p. 42)

Minors

The College of Architecture offers a minor in Architecture. Click the link to view more information about the minor.

• Architectural History (p. 42)
• Architecture (p. 42)
• Landscape Architecture (p. 42)
• Urban Design (p. 42)
The Sam Fox School of Design & Visual Arts is a unique collaboration in architecture, art and design education, linking professional studio programs with one of the country’s finest university art museums in the context of an internationally recognized research university.

The Sam Fox School is composed of the College of Architecture, the Graduate School of Architecture & Urban Design, the College of Art, the Graduate School of Art and the Mildred Lane Kemper Art Museum.

A Professional Art College Within a University

The College of Art offers you the opportunity to study art or design while taking both required and elective courses through other schools and divisions of the university. The College of Art, which has its own faculty and facilities, has been a degree-conferring division of Washington University since 1879.

As an undergraduate student at the College of Art, you have a wide variety of options from which to choose to meet your individual needs and to satisfy your interests. The Bachelor of Fine Arts (B.F.A.) curriculum has been designed around the philosophy that the study of art has no natural boundaries; all human experience — intellectual, technological and social — can at some point become part of the purposes of an artist or designer. College of Art courses provide a structural base upon which you are able to build.

When you major in art at Washington University, you may choose from these areas of concentration: communication design, fashion design, painting, photography, printmaking or sculpture.

Our diverse student body is composed of young people who have records of high achievement in both art and academic subjects. Most of our students are planning for professional careers; some head for more traditional careers; others invent new opportunities and directions. Because the college provides such a comprehensive learning environment, it is an excellent place for you to mature as an artist or designer.

Facilities

The College of Art studios are in William K. Bixby Hall, Earl E. and Myrtle E. Walker Hall, Mark C. Steinberg Hall and Lewis Center. Bixby Hall, located on the university’s Danforth Campus, was built for the College of Art in 1926. Walker Hall was completed in the summer of 2006 as part of the Sam Fox School of Design & Visual Arts. The renovation of Steinberg Hall was completed in fall 2007. Lewis Center, located one mile from the Danforth Campus, offers 28,000 square feet of space for graduate studios.

Resources at the College of Art include the Whittaker Learning Laboratory, which has computers and software for graphics and design, as well as video equipment, and the Nancy Spirtas Kranzberg Studio for the Illustrated Book, located in Walker Hall.

Dean

Buzz Spector
Jane Reuter Hitzeman and Herbert F. Hitzman Jr. Professor
MFA, University of Chicago

Endowed Professors

Carmon Colangelo
E. Desmond Lee Professor for Collaboration in the Arts
MFA, Louisiana State University

Joan Hall
Kenneth E. Hudson Professor of Art
MFA, University of Nebraska–Lincoln

Ronald A. Leax
Halsey C. Ives Professor of Art
MFA, Cranbrook Academy of Art

Patricia Olynnyk
Florence and Frank Bush Professor of Art
MFA, California College of the Arts

Professors

Ken Botnick
BBS, University of Wisconsin

Michael Byron
MFA, Nova Scotia College of Art and Design

D. B. Dowd
MFA, University of Nebraska–Lincoln

Ron Fondaw
MFA, University of Illinois–Urbana

Jeff Pike
MFA, Syracuse University

Stan Strembicki
MFA, California Institute of the Arts

Associate Professors

Jamie Adams
MFA, Pennsylvania Academy of Fine Arts

Sarah Birdsall
Art

BFA, University of Michigan
Lisa Schneider Bulawsky
MFA, University of Kansas

Heather Corcoran
MFA, Yale University

Richard Krueger
MFA, University of Notre Dame

Arny Nadler
MFA, Cranbrook Academy of Art

Franklin Oros
BS, Western Michigan University

Jeigh Singleton
MS, Kansas State University

Robin VerHage-Abrams
MFA, University of Michigan

Denise D. Ward-Brown
MFA, Howard University

Cheryl Wassenaar
MFA, University of Cincinnati

Assistant Professors
Lauren Adams
MFA, Carnegie Mellon University

John Hendrix
MFA, School of Visual Art

Irena Knezevic
MFA, University of Illinois

Monika Weiss
BFA, Academy of Fine Arts, Warsaw

Visiting Assistant Professor
Jennifer Ingram
BFA, Washington University

Senior Lecturers
Mary Borgman
MFA, Fontbonne University

Traci Moore Clay
BS, University of Kansas

Jana Harper
MFA, Arizona State University

Noah Kirby
MFA, Washington University

Jon Navy
MFA, School of the Art Institute of Chicago

Tom Reed
MFA, University of Iowa

John Sarra
MFA, Washington University

Jennifer Colten Schmidt
MFA, Massachusetts College of Art

Linda Solovic
BFA, Washington University

Lindsey Stouffer
MFA, Washington University

Enrique von Rohr
BFA, Washington University

Lecturers
Lou Ann Card
Certificate, Washington University

Robert Gero
PhD, New School for Social Research
MFA, California State University
MA, California State University

Ben Kaplan
BFA, New York University

Tim Lane
BFA, Minneapolis College of Art & Design

Angela Malchionno
MFA, Southern Illinois University–Edwardsville

Michele Owens
MFA, Washington University

Jesse Thomas
MFA, Washington University

Regan Wheat
MFA, Cranbrook Academy of Art

Mary Jane Woehler
BS, Southern Illinois University–Carbondale

Professors Emeriti
Edward Boccia
William Fett
Gene R. Hoefel
Peter Marcus
James McGarrell
Hylarie M. McMahon
William Quinn
Barry Schactman
W. Patrick Schuchard
Robert C. Smith
Stanley Tasker

**Bachelor of Fine Arts**

For students matriculating in Fall 2012, you will take drawing courses offered to all first-year students in Art and Architecture. Throughout the four-year program, you will take both studio courses and Sam Fox School Foundation and Commons courses that are offered to both Art and Architecture majors. These opportunities to study “in between” art and architecture will expose you to different methods and ways of thinking, incorporating topics such as sustainability, public practice and new technologies. This broad-based foundation will complement and enhance your chosen area of study. You will also complete your academic and art history requirements.

Your last two years will include intense study in your chosen focus area and a capstone experience. Your final year culminates with a public presentation or exhibition of your work.

For students who matriculated prior to Fall 2011, the Bachelor of Fine Arts curriculum consists of a concentration of studio art courses in two-year components, the introductory Core program and majors. In addition, courses in art history, literature, social science and natural science or math are required and provide a well-rounded educational experience.

The first year includes a planned sequence of drawing and design courses taken in conjunction with academic requirements and electives. The second year continues with intermediate studio experiences, based not in media but on concepts and methods of visual organization. It is recommended that you also complete an art elective in your intended major. Once this Core curriculum is completed, you begin your major.

During your third and fourth years, you spend the majority of your time in your selected major, while continuing to complete both academic requirements and studio electives.

For specific degree requirements, see the Degree Requirements (p. 119) page for the College of Art.

**The Major in Art**

Majors are offered in:

- Communication Design
- Fashion Design
- Painting
- Photography
- Printmaking
- Sculpture

**The Second Major**

As an art student, you may earn a second major in the College of Arts & Sciences, the Olin Business School or the School of Engineering & Applied Science (computer science) while completing the requirements for the B.F.A. degree. If you choose to take advantage of this option, you will graduate with a B.F.A. degree with two majors — one in art and one in another school.

You must successfully complete all of the degree requirements for the B.F.A. and all of the requirements for the second major. Unlike a combined degree program, you do not need to complete the distribution requirements necessary for a degree in the College of Arts & Sciences, the Olin Business School or the School of Engineering & Applied Science (computer science).

The second major option can be completed within four years if careful planning begins during the first year. If you are interested in this option, you should consult with the associate dean of students in the College of Art.

**Art Education**

If you wish to teach art at the elementary and secondary levels, you may obtain Missouri state certification by taking additional credit units of required education courses offered by the university’s Department of Education in the College of Arts & Sciences. These courses may be taken as academic electives within the B.F.A. program.

In addition to course work in education, prospective art teachers must complete specific courses in general education (communications, humanities, mathematics, natural sciences and social sciences). For information on general education requirements, you should consult with the associate dean of students (Bixby Hall, Room 1) or the Department of Education (Seigle Hall, Room 107). Missouri state certification normally takes an additional semester of study. Application to enroll in the teacher education program is made through the Department of Education and should be done no later than the beginning of the sophomore year. Part of the application process involves successfully passing College Base, an achievement test focused on general education content. (This test is periodically given on the Washington University campus.) Acceptable scores on the SAT or the ACT also must be submitted. Interested students may also apply for admission to the Master of Education degree program offered by the Education Department.

If you are in an undergraduate degree program at Washington University, you may pursue a minor from the College of Art. You must consult with the associate dean of students or the assistant dean/registrar (Bixby Hall, Room 1).

Students earning a minor in art may transfer only one non-Washington University course to fulfill a minor requirement with pre-approval from the associate dean of students or the assistant dean/registrar.
A minor requires a total of 15 credits from F10, F20, X10 or X20 courses with a grade of C– or better. See the most recent Course Listings for specific requirements.

Minors are offered in:

- Art: General Studies
- Book Arts
- Communication Design
- Fashion Design
- Painting
- Photography
- Printmaking
- Sculpture
- Textiles

**F10 Art:** Art foundation and major studio courses

**F20 Art:** Art elective courses

**X10 Xcore:** Sam Fox foundation and commons courses

**X20 Xelec:** Sam Fox elective courses

College of Art majors will have enrollment priority in F10 and F20 courses. College of Art and College of Architecture majors will have enrollment priority in X10 and X20 courses. Elective (F20 and X20) courses may be offered at the 100–400 levels; students must enroll as applicable — 100-level courses are for freshmen, 200 level for sophomores, 300 level for juniors and 400 level for seniors.

**Design & Visual Arts — Core (X10)**

**X10 XCORE 101. Drawing I**

An introductory course that teaches the student to recognize and manipulate fundamental elements of composition, line, form, space, modeling and color. Emphasis is placed on working accurately from observation, with an introduction to other methodologies. Students work in a variety of media. Demonstrations and illustrated lectures supplement studio sessions and outside projects. Credit 3 units.

**X10 XCORE 102. Drawing II**

Continuing as an introductory course that teaches the student to recognize and manipulate fundamental elements of composition, line, form, space, modeling and color. This course is an intensive studio course that builds on the perceptual and conceptual skills and experiences developed in Drawing I. A main objective is to develop a higher level of critical and studio practice. Credit 3 units.

**X10 XCORE 181. Practices in Architecture + Art + Design**

This course offers first-year students in architecture and art an introduction to the subjects, theories and methodologies of the disciplines of art, design, architecture, landscape architecture and urban studies. Examples drawn from a range of historical periods as well as contemporary practice highlight distinct processes of thinking and working in each discipline, as well as areas of intersection and overlap. Part one of two. Credit 1 unit.

**X10 XCORE 182. Practices in Architecture + Art + Design**

This course offers first-year students in architecture and art an introduction to the subjects, theories and methodologies of the disciplines of art, design, architecture, landscape architecture and urban studies. Examples drawn from a range of historical periods as well as contemporary practice highlight distinct processes of thinking and working in each discipline, as well as areas of intersection and overlap supplemented by a series of presentations by faculty. Part two of two. Credit 1 unit.

**X10 XCORE 301. From Propaganda to Decoration**

This is a studio course that is conceptually driven and anchored in the philosophical terrain of the print multiple. The fundamental attributes of the multiple, including its accessibility and repeatability, are from private to public and from political to aesthetic. Given this orientation, we examine the place where the public and private spheres meet. Considering urban communication and social space, reproduction and distribution, gifting and exchange, private practice and public intervention, this course uses the print multiple as a starting point to explore a continuum that runs from propaganda to decoration. Credit 3 units.

**X10 XCORE 303. Visualizing Information**

This project-based studio course brings students from diverse backgrounds in Art, Architecture and Design together to learn to compose information-rich surfaces. The course explores principles of information design on paper initially, and offers the opportunity to extend some applications to the screen. Course topics include content organization, visual structure, hierarchy, typography, color, sequencing, audience and usability. Students have the chance to select subject and media for some of their projects. Projects are supplemented with readings and lectures about contemporary information design, with some historical references. This course combines the rigor of a disciplinary classroom with the flexibility of a multidisciplinary one. Topics likely to emerge in the interdisciplinary conversation include information in three-dimensional spaces, communicating information with a particular voice or editorial perspective, analytical versus poetic information design, function, audience, and programming. All of these are supported, and students develop a set of tools that can be adapted to their own disciplinary work in a meaningful way. Credit 3 units.

**X10 XCORE 305. Topics in Visual Culture: Commercial Modernism in America, 1865–1965**

This survey course explores contributions to and expressions of visual modernism within the commercial tradition in the
United States. Lectures, readings and screenings engage the intertwined histories of commerce, technology, society and aesthetics. Topics include periodical illustration from Harper’s Weekly to the Ladies Home Journal, the newspaper comic strip and the comic book, animation from vaudeville to television, and science fiction and transportation design. Context provided by the advent of industrial image production; modernist art theory and high cultural disdain for mass markets (with resulting effects on the academy); avant-garde and commercial cross-pollination; the social histories of ethnic depiction (i.e., blackface minstrelsy); consideration of women as consumers and producers of commercial images. Students make use of materials in the collections of the Modern Graphics History Library at Washington University. Three animation screenings are required. Attendance at these screenings is required. Credit 3 units.

X10 XCORE 307. Community Building
This course looks at the intersection of the built fabric and the social fabric. Using St. Louis as the starting point, this course takes students out of the classroom and into a variety of neighborhoods — old, new, affluent, poor — to look at the built environment in a variety of contexts and through a variety of lenses. Almost every week for the first half of the semester, students visit a different area (or areas), each trip highlighting some theme or issue related to the built environment (architecture, planning, American history, investment and disinvestment, community character and values, race, transportation, immigrant communities, future visions, etc.). Running parallel to this, students are involved in an ongoing relationship with one particular struggling neighborhood, in which students attend community meetings and get to know and become involved with the people in the community in a variety of ways. Students learn to look below the surface, beyond the single obvious story, for multiple stories, discovering their complexity, contradictions and paradoxes. They also come to consider the complex ways in which architecture and the built environment can affect or be affected by a host of other disciplines. Credit 3 units.

X10 XCORE 309. Convergences: Studies in Art & Architecture
This interdisciplinary course examines the convergence of artistic and architectural ideas, techniques and practices through selected historical and contemporary studies. Emphases range from the figure of the artist/architect (Michelangelo and Leonardo, for example, to Le Borbusier and Libeskind), to critical reflections (Vasari, Gennough, Serra) to boundary-crossing practices (Whiteread, Webster, Irwin, Kin, Judd, Miss) to collaborations and collaborative works (Ando/Kelly/Serra and the Pulitzer Foundation). The course emphasizes empathy and productive work across artistic disciplines. Field trips to the Pulitzer Foundation for the Arts (St. Louis) and the Chinati Foundation (Marfa, Texas) are planned. Credit 3 units.

X10 XCORE 311. Materials & Mechanisms: Site Specific Design Installation
In this course, students are guided to explore the nature of materials and simple mechanisms (mechanically driven kinetics) in the making of art and/or utilitarian objects. This course investigates the qualities of materials and how they might be used thoughtfully to develop a conceptual and physical experience for an audience or user. Specific materials, at times, are assigned, yet students have the opportunity to self-select materials based on project needs. Throughout the semester, students balance designing with finding — the process of playfully exploring materials and methods without preconception of a final resolution. Looking for possibilities can lead to unexpected discoveries. Credit 3 units.

X10 XCORE 313. An Ecology of Art
In this studio course, students make metaphorical and practical use of basic ecological principles to question and test productive, meaningful, and sustainable artistic practices. Emphasis is placed on biodiversity, community relationships, patterns and hierarchies. This course consists of field work, readings and lectures, the content of which is examined through individual and collaborative projects. We visit local gardens, parks, farms and neighborhoods while seeking to understand the complexity of our own role in nature and culture. Traditional, reclaimed and renewable materials are explored. At midterm, students identify opportunities for focused research and production and the course culminates with the public display of this work. This course approaches ecology both metaphorically and literally. Ecology is community-focused and involves the study of relationships with a given community. We test this premise as it might apply to the questions of what gives rise to art, how it might be made, and what its effect could or should be upon its larger community. The diverse range of ecological information and the multiple points of view to be presented allow for a broad array of applications in the studio arts, design and architecture. The class format challenges students with new ways of thinking while allowing them to select materials, specific topics of study, and methods of engagement appropriate to their own developing interests. Credit 3 units.

X10 XCORE 315. Cycles
Students design and build human-powered vehicles from discarded bicycles. The course collaborates with student mechanics involved with Bicycle Works (Bworks). Bworks collaborates in teams with Washington University students to design and build the work. Credit 3 units.

X10 XCORE 317. Furniture Design
The seat is an intimate interface between the building and the body. It embodies a complex set of structural conditions, material opportunities and possibilities for expression. Architects,
artists and industrial designers covet opportunities to make the chair. The result is that seemingly infinite perfect solutions exist — and still the seat remains a provocative challenge. In this course, students design and build a chair. Emergent technologies are combined with traditional techniques of metal fabrication, woodworking and plastic forming in the design and making of the work. The course objective is for students to learn how to work directly with machinery and materials in the realization of their design. Students are expected to have basic shop skills addressed in course prerequisites. Advanced techniques are introduced in this course and students select those most appropriate to their work to build upon. A great deal of independent investigation is required to excel in this course. Students propose ideas and develop them using drawings, models and mock-ups in order to realize the best potential for their design. Credit 3 units.

X10 XCORE 319. Digital Fabrications: A Primer Course in the Use of Computer Modeling for Art & Design
This course focuses on fabrications both real and virtual. The ubiquity of computers in design, studio art, communications, construction and fabrication demand that professionals become comfortable with their use. It also is important in a group of ever-specializing fields that one knows how to translate between different software and output platforms. This comfort and the ability to translate between platforms allow contemporary artists and designers to fabricate with ever-increasing freedom and precision. This course introduces students to 3D software with a focus on 2D, 3D and physical output. Through a series of projects, students learn to generate work directly from the computer and translate it into different types of output. Starting from first principles, the course covers the basics from interface to output for each platform used. The course also familiarizes students with a range of CNC technology and other digital output for both small- and large-scale fabrication. The course is broken into three projects. In the first, students focus on computer generated geometry and control systems. In the second, students generate physical output and line drawings. The final project focuses on rendering, context and cinematic effects. The software covered includes, but is not limited to Rhinoceros 3D, Maya, Illustrator and Photoshop. Additionally, students use the 3D printer, laser cutter and/or other digital output tools. Credit 3 units.

X10 XCORE 321. Mapping Soft Bodies
This course develops digital design skills with conceptual understanding of the transformative process of artistic production. Mapping Soft Bodies investigates artificial objects and industrial products as a basis for inspiration. Through digital modeling and scanning the human body, each student develops a transformation process that analyzes the social and cultural conditions of a new emerging design. New body armatures are modeled through CADCAM (laser cutting) and Rapid Prototyping (3D printing) for physical outputs. The course is for students who are interested in emerging technologies and digital production. This course is for students interested in design, sculpture, architecture and digital media by enhancing 3D technologies and allows each student to develop abstract thinking and making processes. Credit 3 units.

X10 XCORE 323. Disegno: Encounters in Public Space
One of the origins of the term "design" is the Italian word “disegno,” which delineates drawing both as a mark-making process and as a form of critical inquiry. Building upon this dual trajectory, this architectural design studio focuses on a series of site-specific projects that explore public space as a visual and conceptual phenomenon — a space of social encounter that is drawn, redrawn and ultimately (re)designed through a series of drawing strategies, including freehand drawing, drafting and making. The projects engage architecture, culture and identity, using modern metropolitan Florence as a laboratory for visual experimentation. By embracing the complexities of contemporary Italian society — including its evolving ethnic, cultural and social dynamic — the projects explore the critical dichotomies of past-present and global-local. This course is a dynamic learning environment that encourages students to develop a unique way of working by building upon their intellectual curiosity and diverse educational backgrounds. Course requirements include studio work, discussions and field trips. Credit 6 units.

Design & Visual Arts — Elective (X20)
X20 XELEC 320. Global Discourses in Art & Architecture
This course examines art, architecture and urbanism from the perspective of their global production, dissemination and reception. It focuses on the global exchange of people and ideas as one of the main vehicles of visual culture, both historical and contemporary. Through a series of focused case studies, the course probes inherent dichotomies within art and architecture driven by their site-specificity, yet also by their constant global displacement across various disciplinary, cultural and geographical boundaries. The course content includes lectures, discussion sessions, readings and textual and visual projects that examine cross-cultural aspects of art and architecture. Credit 3 units.

Art
F10 ART 101 Drawing
An introductory course that teaches students to recognize and manipulate fundamental elements of composition, line, form, space and modeling. Emphasis is placed on working accurately from observation, with an introduction to other methodologies. Students work in a variety of media. Demonstrations and illustrated lectures supplement studio sessions and outside projects. Credit 3 units.

F10 ART 102 Drawing
An introductory course that teaches students to recognize and manipulate fundamental elements of line, tone, texture, volume and plane with relation to representational drawing. Students work in a wide variety of media and techniques (charcoal, pencil, pastels and wet media) from the model, still life and environment. Demonstrations and illustrated lectures supplement studio sessions and outside projects.
Credit 3 units.

F10 ART 105 2-D Design
An introduction to basic design principles and their application on a 2-dimensional surface. Investigation of the functions and properties of the formal elements and their organization through the use of relational schemes. Includes an introduction to color and basic color theory. Problems stress systematic approach to visual communication.
Credit 3 units.

F10 ART 106 2-D Design
An introduction to basic design principles and their application on a 2-dimensional surface. Investigation of the functions and properties of the formal elements and their organization through the use of relational schemes. Includes an introduction to color and basic color theory. Problems stress systematic approach to visual communication.
Credit 3 units.

F10 ART 107 3-D Design
An introduction to basic design principles and their application to 3-dimensional form and real space and time. The design vocabulary is broadened through exercises that deal with mass, volume, weight, gravity and movement. Students learn to use hand and power tools.
Credit 3 units.

F10 ART 108 3-D Design
An introduction to basic design principles and their application to three-dimensional form and real space and time. The design vocabulary is broadened through exercises that deal with mass, volume, weight, gravity and movement. Students learn to use hand and power tools.
Credit 3 units.

F20 ART 111 Painting
Introduction to painting processes and materials. While there is emphasis on oil painting, students also are introduced to watercolor and acrylic paints and a wide variety of painting surfaces. Subject matter is varied, beginning with still-life material and ending with direct painting from the model. Technical skills and content are dealt with at the individual student’s level.
Credit 3 units.

F20 ART 112 Painting
Introduction to painting processes and materials. While there is emphasis on oil painting, students also are introduced to watercolor and acrylic paints and a wide variety of painting surfaces. Subject matter is varied, beginning with still-life material and ending with direct painting from the model. Technical skills and content are dealt with at the individual student’s level.
Credit 3 units.

F20 ART 113A Sculpture
Explores contemporary sculptural concepts and processes in various media, including latex, plaster, plastics, metal and wood fabrication, with emphasis on development of technical skills at whatever level of advancement is suited to the experience of the student.
Credit 3 units.

F20 ART 113F Sculpture: Foundry
Same as F20 Art 213F, F20 Art 313F, F20 Art 413F. Freshman (only) register for F20 Art 113F. The focus of this course is to introduce students to the basic principles of bronze and aluminum casting according to the lost wax method. Students learn mold making, direct organic burnout, ceramic shell investment, metal chasing and patination in order to create finished sculpture. In addition to metal casting, students use other materials such as plaster, resin, steel, wood, rubber, plastic and foam to create a mixed-media project that explores a specific idea or theme. Additional work outside the regularly scheduled class time is required. College of Art majors and non-art students pursuing an art minor have priority. Prerequisite: freshman standing or departmental approval.
Credit 3 units.

F20 ART 113G Sculpture: Wood
Same as F20 Art 213G, F20 Art 313G, F20 Art 413G. Freshman (only) register for F20 Art 113G. The focus of this course is to introduce students to the basic principles of wood sculpture with an emphasis on furniture making. College of Art majors and non-art students pursuing an art minor have priority. Prerequisite: freshman standing or departmental approval.
Credit 3 units.

F20 ART 113H Sculpture: Blacksmithing
This course is an introduction to blacksmithing materials, tools and techniques. Students explore the fundamental techniques of hand-forged metal. Metal can be manipulated as a plastic material and offers enormous possibilities for three-dimensional form. In this class we explore these possibilities and expand our sculptural vocabulary.
Credit 3 units.
Art

F20 ART 113I Sculpture: Metal Fabrication
Metal is the backbone of our modern world and a viable medium for self-expression. It can be employed as structure or as surface, it can be deformed plastically to create compound shapes, or it can be connected to most any other material. Students explore the creative potential of this material in the fabrication of sculptural forms. Students learn to weld using both gas and electric arc machines and learn the safe operation of drilling, grinding and finishing tools.
Credit 3 units.

F20 ART 114A Sculpture
Explores contemporary sculptural concepts and processes in various media, including latex, plaster, plastics, metal and wood fabrication, with emphasis on development of technical skills at whatever level of advancement is suited to the experience of the student. College of Art majors and non-art students pursuing an art minor have priority.
Credit 3 units.

F20 ART 114F Sculpture: Foundry
Same as F20 Art 214F, F20 Art 314F, F20 Art 414F. Freshman (only) register for F20 Art 114F. The focus of this course is to introduce students to the basic principles of bronze and aluminum casting according to the lost wax method. Students learn mold making, direct organic burnout, ceramic shell investment, metal chasing and patination in order to create finished sculpture. In addition to metal casting, students use other materials such as plaster, resin, steel, wood, rubber, plastic and foam to create a mixed-media project that explores a specific idea or theme. Additional work outside the regularly scheduled class time is required. Prerequisite: freshman standing or departmental approval.
Credit 3 units.

F20 ART 114G Sculpture: Wood
Same as F20 Art 214G, F20 Art 314G, F20 Art 414G. Freshman (only) register for F20 Art 114G. The focus of this course is to introduce students to the basic principles of wood sculpture with an emphasis on furniture making. Prerequisite: freshman standing or departmental approval.
Credit 3 units.

F20 ART 114I Sculpture: Metal Fabrication
Metal is the backbone of our modern world and a viable medium for self-expression. It can be employed as structure or as surface, it can be deformed plastically to create compound shapes, or it can be connected to most any other material. Students explore the creative potential of this material in the fabrication of sculptural forms. Students learn to weld using both gas and electric arc machines and learn the safe operation of drilling, grinding and finishing tools.

F20 ART 115 Printmaking
Survey of printmaking covering basic processes in intaglio, lithography, relief and monotype. Emphasis on mixed media and experimentation with a foundation in traditional, historical and philosophical aspects of printmaking. Students are encouraged to work at a level suited to their individual technical skills and conceptual interests.
Credit 3 units.

F20 ART 116 Printmaking
Students explore various mixed-media approaches to relief printmaking in combination with collagraph, photo lithography and drawing. Relief techniques covered include wood and linoleum cuts using the black line and white line approaches. (Students are encouraged to work at a level suited to their individual technical skills and conceptual interests.).
Credit 3 units.

F20 ART 1181 Photography I
Designed to acquaint students with the fundamentals of camera handling, darkroom and photographic processes and using photography as a means of personal, creative self expression. Course is structured around the use of color transparency and the craft of printing with color negative materials.
Credit 3 units.

F20 ART 1183 Digital Photography
This introductory-level course explores digital technology for capturing, enhancing and producing still lens-based images. The course addresses basic digital camera operations, the visual language of camera-generated images, computer workflow and the connoisseurship of digital image output. The course assumes no prior knowledge or experience with digital imaging technologies or materials.
Credit 3 units.

F20 ART 1184 Digital Photo II/Digital Imaging
This course addresses the use of technology and pixel-based software for generating, manipulating and compositing still digital images. The course examines the visual language and poetics of additive lens-based images while providing students with knowledge of software tools, input devices, production techniques, color management strategies and output devices.
Credit 3 units.

F20 ART 1185 Kinetic Image/Digital Video
This introductory-level course addresses the use of digital technology and software for capturing, editing and producing moving images. The course examines the visual language and poetics of moving images while providing students with
foundation knowledge of camera operations, production storyboarding, software tools and presentation strategies. The course assumes no prior knowledge or experience with kinetic imaging technologies or software.

Credit 3 units.

F20 ART 1186 Black-and-White Photography
Introduction to the fundamentals of black-and-white photography. Emphasis on control of film, paper and black-and-white photographic processes in the classical fine arts tradition. Topics may include portrait, landscape, street photography, the figure and contemporary issues in photography.

Credit 3 units.

F20 ART 119 Ceramics
An introduction to the design and making of functional pottery as well as sculptural objects. Students learn basic forming processes of the wheel, coil and slab construction. While the emphasis is on high-fired stoneware, students are introduced to Raku and soda firing. Content and advanced processes and skills are encouraged according to the individual’s level.

Credit 3 units.

F20 ART 120 Ceramics
An introduction to the design and making of functional pottery as well as sculptural objects. Students learn basic forming processes of the wheel, coil and slab construction. While the emphasis is on high-fired stoneware, students are introduced to Raku and soda firing. Content and advanced processes and skills are encouraged according to the individual’s level.

Credit 3 units.

F20 ART 123D Fashion Design 2-D
Designed to familiarize students with techniques and materials used in drawing flats, floats, croquis, specs and illustrations for fashion design. Design problems associated with designing groups, collections and lines of apparel for popular and selected consumption are included.

Credit 3 units.

F20 ART 123E Fashion Design 3-D
Designed to familiarize students with the equipment and technology peculiar to a career in fashion design. Emphasis on increased awareness of the capabilities of the materials and equipment. Development of skills peculiar to apparel design and appreciation of the processes involved in the design and manufacturing of apparel.

Credit 3 units.

F20 ART 124D Fashion Design 2-D
Designed to familiarize students with techniques and materials used in drawing flats, floats, croquis, specs and illustrations for fashion design. Design problems associated with designing groups, collections and lines of apparel for popular and selected consumption are included.

Credit 3 units.

F20 ART 124E Fashion Design 3-D
Designed to familiarize students with the equipment and technology peculiar to a career in fashion design. Emphasis on increased awareness of the capabilities of the materials and equipment. Development of skills peculiar to apparel design and appreciation of the processes involved in the design and manufacturing of apparel.

Credit 3 units.

F20 ART 124I Fashion: Textile Design
Introductory study of textiles, beginning with study of the basic fibers used in textile production, through weaving, knitting, dyeing, printing and finishing. Class format includes lectures, field trips, garment study and a variety of creative projects that replicate current textile production techniques such as weaving, silkscreen, dyeing and printing.

Credit 3 units.

F20 ART 127A History of Photography
Survey of the history of photography and a look at the medium form the camera obscura to contemporary developments. Social and technological developments examined in terms of their influences on the medium.

Credit 3 units.

F20 ART 128A History of Photography
Survey of the history of photography and a look at the medium from the camera obscura to contemporary developments. Social and technological developments examined in terms of their influence on the medium.

Credit 3 units.

F20 ART 133 Basic Illustration
An introduction to concepts, media techniques and problem-solving approaches within contemporary illustration. Emphasis on individual solutions to the problems presented. Credit 3 units.

F20 ART 134 Basic Illustration
Same as F20 ART 233, F20 ART 333, F20 ART 433. Freshmen (only) register for F20 ART 133. An introduction to concepts, media techniques and problem-solving approaches within contemporary illustration. Emphasis on individual solutions to the problems presented. Credit 3 units.

F20 ART 135F Interactivity and Web Design
This course combines investigations of image construction and editing, typography and basic issues in interactivity to explore the world of interface design and beginning web development. Credit 3 units.

F20 ART 135G The Licensed Image: Development and Distribution
An introduction to the concept of image development, design, market distribution and methodology for creating licensed products. Projects involve product idea development, market and the development of image-driven products using images, design and writing. Traditional drawing skills not required. Students may work by hand or on the computer. Ideal course for College of Art students whose work focuses on images, Visual Communications minors, and students outside the College of Art interested in developing visual products, including business students. Credit 3 units.

F20 ART 135I Communication Design I
An introduction to the field of communication design, combining principles from the fields of graphic design, advertising and illustration/image construction. Through studio exercises and lectures, students are exposed to the broad range of conceptual, aesthetic and strategic issues inherent to the field. Additionally, the similarities, differences and points of overlap within the three areas are discussed. Strongly recommended for students considering the Communication Design major. An excellent introduction to the subject as a tool for business and marketing. Credit 3 units.

F20 ART 135J Introduction to Animating in Three Dimensions
This course addresses the fundamental principles of designing and constructing the 3-dimensional modeled world for film and video. Students progress from an overview of the 3-D animation process to defining and implementing filmic ideas using their own modeled creations. Sketches are imported into modeling software (Maya), which is used to build and animate characters, create environments and produce effects. Three-dimensional animation is created in its own virtual space and is navigated by cameras much like a traditional film studio or sound stage. Therefore, cinematic shot design and camera navigation within the virtual world are examined in depth. An animated 3-D short is produced to convey a simple story in a model environment. Credit 3 units.

F20 ART 135L Communication Design and Business
This course provides an introduction to business communications in a visual environment. Subjects addressed include visual organization, introductory typography, basic identity development, message construction and business presentation development. Credit 3 units.

F20 ART 136F Interactivity and Web Design
This course combines investigations of image construction and editing, typography and basic issues in interactivity to explore the world of interface design and beginning web development. Credit 3 units.

F20 ART 136G The Licensed Image: Development and Distribution
An introduction to the concept of image development, design, market distribution and methodology for creating licensed products. Projects involve product idea development, market and the development of image-driven products using images, design and writing. Traditional drawing skills not required. Students may work by hand or on the computer. Ideal course for College of Art students whose work focuses on images, Visual Communications minors, and students outside the College of Art interested in developing visual products, including business students. Credit 3 units.

F20 ART 136I Communication Design I
An introduction to the field of communication design, combining principles from the fields of graphic design, advertising and illustration/image construction. Through studio exercises and lectures, students are exposed to the broad range of conceptual, aesthetic and strategic issues inherent to the field. Additionally, the similarities, differences and points of overlap within the three areas are discussed. Strongly recommended for students considering the Communication Design major. An excellent introduction to the subject as a tool for business and marketing. Credit 3 units.

F20 ART 136J Introduction to Animating in Three Dimensions
This course addresses the fundamental principles of designing and constructing the 3-dimensional modeled world for film and video. Students progress from an overview of the 3-D animation process to defining and implementing filmic ideas using their own modeled creations. Sketches are imported into modeling software (Maya), which is used to build and animate characters, create environments and produce effects. Three-dimensional animation is created in its own virtual space and is navigated by cameras much like a traditional film studio or sound stage. Therefore, cinematic shot design and camera navigation within the virtual world are examined in depth. An animated 3-D short is produced to convey a simple story in a model environment. Credit 3 units.
This course explores 3-D animation in the short film format. Students move from an overview of the process and visual vocabulary of animation to defining filmic ideas, the visual gag and character-driven content. Cinematic shot design, timing, character design and sound design are studied for determining the most effective means of communicating desired content. Hand-drawn sketches are imported into a 3-D animation program as the basis to model and animate characters, create settings and add special effects. An animated sequence is produced to show evidence of personal inquiry and level of expertise. Prerequisite: F10 ART 101 Drawing or equivalent or permission of instructor. Credit 3 units.

F20 ART 1386 The Art of Advertising
This course introduces students to the field by defining the role of advertising in American culture and economy. It begins by exploring the evolving and developing aspects of American advertising and the forces that both compel and repel consumer audiences. The class explains the processes and criteria that, when properly utilized, elevate advertising and validate it as an art form. The course consists of lectures and visiting instructors, brief essay quizzes and a series of exercises designed to acquaint each student with administrative and creative processes and various disciplines within the advertising field. Major emphasis is upon the creative disciplines. Credit 3 units.

F20 ART 1481 The Illustrated Book: Design and Production
An investigation of text, image, design and production within the broad realm of illustrated books. A series of exploratory exercises in the beginning of the semester yields to a single sustained project proposed and developed by the student. Project emphases may include visual narrative, textual interpretation, creative writing, typography, structure and sequencing, and material investigation. Production methods may include relief and letterpress; engraving and intaglio; offset lithography; and digital, "virtual" media. Certain projects may require a second semester of study to complete. Credit 3 units.

F20 ART 1482 The Illustrated Book: Design and Production
An investigation of text, image, design and production within the broad realm of illustrated books. A series of exploratory exercises in the beginning of the semester yields to a single sustained project proposed and developed by the student. Project emphases may include visual narrative, textual interpretation, creative writing, typography, structure and sequencing, and material investigation. Production methods may include relief and letterpress, engraving and intaglio, offset lithography and digital (“virtual”) media. Certain projects may require a second semester of study to complete. Credit 3 units.

F20 ART 171 Introduction to Letterpress Printing
This class serves as an introduction to printing with the Vandercook handpress. Through a series of assignments students learn a systematic approach to planning, arranging and printing type on a page. The students receive a basic introduction to typography, history of letterforms and history of the book. The mechanics of relief printing with the cylinder proof press, ink composition and resolution of the typographic image also are explored. As an exploration of the publishing process, students produce a chapbook of a short literary work. The class primarily focuses on typographic composition, but one assignment employs a combination of word and image. Credit 3 units.

F20 ART 1713 Introduction to Book Binding
Same as F20 ART 2713, F20 ART 3713, F20 ART 4713. Freshmen (only) register for F20 1713. This class serves as an introduction to the book as artifact of material culture. A variety of traditional and nontraditional book structures are explored. Students learn from historical approaches to constructing the codex form, including the single signature pamphlet, the multisignature case binding, the coptic and the medieval long stitch. Students learn Japanese binding and its many variations. Several contemporary variations are introduced, including the tunnel, the flag book, the accordion and the carousel. Students explore the visual book using found imagery and photocopy transfers and produce a variety of decorated papers to be used in their bindings. Freshmen only. Credit 3 units.

F20 ART 1714 Introduction to Book Binding
This class serves as an introduction to the book as artifact of material culture. A variety of traditional and nontraditional book structures are explored. Students learn from historical approaches to constructing the codex form, including the single signature pamphlet, the multisignature case binding, the coptic and the medieval long stitch. Students learn Japanese binding and its many variations. Several contemporary variations are introduced, including the tunnel, the flag book, the accordion and the carousel. Students explore the visual book using found imagery and photocopy transfers and produce a variety of decorated papers to be used in their bindings. Prerequisite: none. Freshmen only. Credit 3 units.

F20 ART 196 Design, Artisanship and Sustainability as Cultural Catalyst
This course investigates the ways in which artisanship is a stimulus to design thinking and innovation. The prerequisite to the course is a 16-day trip to India over winter break in which students work closely with leading Indian designers of textiles, products and architecture as well as accomplished...
Artisans working with methods both ancient and modern. We discuss how craft informs design and how design acts as a force in entrepreneurship and job creation. A major focus of our research is investigating how craft and design are catalysts for innovation in a sustainable use of materials and water. For more information, contact Belinda Lee at Lee@samfox.wustl.edu. Students should obtain a visa on their own.

Credit 3 units.

F10 ART 203B Anatomy/Figure Structure
A rigorous drawing course focusing on human anatomy (muscular and skeletal systems), various proportional systems, as well as bio/psycho/social/political conditions having influenced figural representations. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106 and F10 107 or F10 108 or permission of instructor.
Credit 3 units.

F10 ART 204B Anatomy/Figure Structure
A rigorous drawing course focusing on human anatomy (muscular and skeletal systems), various proportional systems, as well as bio/psycho/social/political conditions having influenced figural representations. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106 and F10 107 or F10 108 or permission of instructor.
Credit 3 units.

F20 ART 211 Painting
Introduction to painting processes and materials. While there is emphasis on oil painting, students also are introduced to watercolor and acrylic paints and a wide variety of painting surfaces. Subject matter is varied, beginning with still-life material and ending with direct painting from the model. Technical skills and content are dealt with at the individual student’s level.
Credit 3 units.

F20 ART 2115 Intensive Intermediate Painting
Same as F20 ART 3115, F20 ART 4115. Sophomores (only) register for course F20 ART 2115. In this course we explore the genres of painting from the inside-out. We focus on process and technical skill as well as the political and social underpinnings of several painting genres. As the course progresses, students improve at oil painting in its traditional 20th-century use and gain some technical and conceptual experience with its contemporary manifestation. Our main focus is on perceptual studies, although we also work with notions of abstraction in painting. There are weekly homework assignments as well as a few reading assignments. This is a very structured course, designed to develop your strengths and abilities as a painter and to further your conceptual understanding of the medium. Prerequisite: painting elective or permission of instructor. Credit 3 units.

F20 ART 2116 Intensive Intermediate Painting
Same as F20 ART 3116, F20 ART 4116. Sophomores (only) register for course F20 ART 2116. In this course we explore the genres of painting from the inside-out. We focus on process and technical skill as well as the political and social underpinnings of several painting genres. As the course progresses, students improve at oil painting in its traditional 20th-century use and gain some technical and conceptual experience with its contemporary manifestation. Our main focus is on perceptual studies, although we also work with notions of abstraction in painting. There are weekly homework assignments as well as a few reading assignments. This is a very structured course, designed to develop your strengths and abilities as a painter and to further your conceptual understanding of the medium. Prerequisite: painting elective or permission of instructor. Credit 3 units.

F20 ART 211B Painting II
Same as F20 ART 311B, F20 ART 411B. Sophomores (only) register for course F20 ART 211B. Intermediate painting focuses on the processes and concepts of oil painting. It is a structured course with an emphasis on perceptual studies as well as an overview of historical and contemporary painting issues. Students are expected to possess good drawing skills and a beginner’s familiarity with oil painting techniques. Critical readings and homework assignments are an important part of the course. Prerequisite: a beginning painting elective or permission of instructor. Credit 3 units.

F20 ART 212 Painting
Introduction to painting processes and materials. While there is emphasis on oil painting, students also are introduced to watercolor and acrylic paints and a wide variety of painting surfaces. Subject matter is varied, beginning with still-life material and ending with direct painting from the model. Technical skills and content are dealt with at the individual student’s level.
Credit 3 units.

F20 ART 2122 Special Topics in Painting
Credit 3 units.

F20 ART 212B Painting II
Intermediate painting focuses on the processes and concepts of oil painting. It is a structured course with an emphasis on perceptual studies as well as an overview of historical and contemporary painting issues. Students are expected to possess good drawing skills and a beginner’s familiarity with oil painting.
techniques. Critical readings and homework assignments are an important part of the course. College of Art majors and non-art students pursuing an art minor have priority. Prerequisite: a beginning painting elective or permission of instructor. Credit 3 units.

F10 ART 213 Introduction to Sculpture
This course introduces students to the materials, processes and concepts specific to sculpture. Students develop an understanding of, and dexterity with, multiple materials and modes of production ranging from additive, assembled, molded, modeled, to subtractive or carved. This course promotes independent working and problem solving in regard to content and intention. Students engage in discourse about their work through critical analysis and explorations of historical and cultural precedent. This course involves lectures, material and process demonstrations, and assigned readings along with creative and technical explorations. Students in the classes of 2015 and later must complete either F10 213 or 214 as an introduction to the sculpture major. The course is open to nonmajors and minors as space permits. Credit 3 units.

F20 ART 213A Sculpture
Explores contemporary sculptural concepts and processes in various media, including latex, plaster, plastics, metal and wood fabrication, with emphasis on development of technical skills at whatever level of advancement is suited to the experience of the student. Credit 3 units.

F20 ART 213F Sculpture: Foundry
Same as F20 ART 113F, F20 ART 313F, F20 ART413F. Sophomores (only) register for F20 ART 213F. The focus of this course is to introduce students to the basic principles of bronze and aluminum casting according to the lost wax method. Students learn mold making, direct organic burnout, ceramic shell investment, metal chasing and patination in order to create finished sculpture. In addition to metal casting, students use other materials such as plaster, resin, steel, wood, rubber, plastic and foam to create a mixed-media project that explores a specific idea or theme. Additional work outside the regularly scheduled class time is required. Credit 3 units.

F20 ART 213G Sculpture: Wood
Same as F20 Art 113G, F20 Art 13G, F20 Art 413G. Sophomores (only) register for F20 Art 213G. The focus of this course is to introduce students to the basic principles of wood sculpture with an emphasis on furniture making. College of Art majors and non-art students pursuing an art minor have priority. Prerequisite: sophomore standing or departmental approval. Credit 3 units.

F20 ART 213H Sculpture: Blacksmithing
This course is an introduction to blacksmithing materials, tools and techniques. Students explore the fundamental techniques of hand-forged metal. Metal can be manipulated as a plastic material and offers enormous possibilities for three-dimensional form. In this class we explore these possibilities and expand our sculptural vocabulary. Credit 3 units.

F20 ART 213I Sculpture: Metal Fabrication
Metal is the backbone of our modern world and a viable medium for self-expression. It can be employed as structure or as surface, it can be deformed plastically to create compound shapes, or it can be connected to most any other material. Students explore the creative potential of this material in the fabrication of sculptural forms. Students learn to weld using both gas and electric arc machines and learn the safe operation of drilling, grinding and finishing tools. Credit 3 units.

F10 ART 214 Introduction to Sculpture
This course introduces students to the materials, processes and concepts specific to sculpture. Students develop an understanding of, and dexterity with, multiple materials and modes of production ranging from additive, assembled, molded, modeled, to subtractive or carved. This course promotes independent working and problem solving in regard to content and intention. Students engage in discourse about their work through critical analysis and explorations of historical and cultural precedent. This course involves lectures, material and process demonstrations, and assigned readings along with creative and technical explorations. Students in the classes of 2015 and later must complete either F10 213 or 214 as an introduction to the sculpture major. The course is open to nonmajors and minors as space permits. Credit 3 units.

F20 ART 214A Sculpture
Explores contemporary sculptural concepts and processes in various media, including latex, plaster, plastics, metal and wood fabrication, with emphasis on development of technical skills at whatever level of advancement is suited to the experience of the student. Credit 3 units.

F20 ART 214F Sculpture: Foundry
Same as F20 ART 114F, F20 ART 314F, F20 ART 414F. Sophomores (only) register for F20 ART 214F. The focus of
this course is to introduce students to the basic principles of bronze and aluminum casting according to the lost wax method. Students learn mold making, direct organic burnout, ceramic shell investment, metal chasing and patination in order to create finished sculpture. In addition to metal casting, students use other materials such as plaster, resin, steel, wood, rubber, plastic and foam to create a mixed-media project that explores a specific idea or theme. Additional work outside the regularly scheduled class time is required. Prerequisite: sophomore standing or departmental approval. Credit 3 units.

F20 ART 214G Sculpture: Wood
Same as F20 Art 114G, F20 Art 214G, F20 Art 414G. Sophomores (only) register for F20 Art 214G. The focus of this course is to introduce students to the basic principles of wood sculpture with an emphasis on furniture making. Prerequisite: sophomore standing or departmental approval. Credit 3 units.

F20 ART 214I Sculpture: Metal Fabrication
Metal is the backbone of our modern world and a viable medium for self-expression. It can be employed as structure or as surface, it can be deformed plastically to create compound shapes, or it can be connected to most any other material. Students explore the creative potential of this material in the fabrication of sculptural forms. Students learn to weld using both gas and electric arc machines and learn the safe operation of drilling, grinding and finishing tools. Credit 3 units.

F10,F20 ART 215 Introduction to Printmaking
Survey of printmaking covering basic processes in intaglio, lithography, relief and monotype. Emphasis on mixed media and experimentation with a foundation in traditional, historical and philosophical aspects of printmaking. Students are encouraged to work at a level suited to their individual technical skills and conceptual interests. Credit 3 units.

F10,F20 ART 215 Introduction to Printmaking
Survey of printmaking covering basic processes in intaglio, lithography, relief and monotype. Emphasis on mixed media and experimentation with a foundation in traditional, historical and philosophical aspects of printmaking. Students are encouraged to work at a level suited to their individual technical skills and conceptual interests. Credit 3 units.

F10 ART 217 Introduction to Photography
This course introduces photography as a dialogue between material and cultural histories, personal experience, tradition and contemporary practice. Students gain full manual control of the digital camera apparatus, learn how to import and edit raw images, and print according to fine art professional standards. The resulting work fosters critical evaluations of form, content and intention. In addition to studio production, this course includes lectures, readings and discussions. Students must provide a fully manual digital camera capable of capturing RAW images. Students in the classes of 2015 and later must complete either F10 217 or 218 as an introduction to the photography major or minor. The course is open to nonmajors and minors as space permits. Credit 3 units.

F20 ART 217I Advanced Photography Seminar
Designed for non-art students fulfilling art minor requirements in the Photography Minor. Topics covered include studio lighting and large format photography. Credit 3 units.

F20 ART 217J Alternative Process Photography
(Formerly Non-Silver Photography). Same as F20 Art 317J, F20 Art 417J. Sophomores (only) register for F20 Art 217J. An exploration into the use of non-silver and alternative photographic processes. The use of such processes as blue and brown printing and gum printing explored, as well as photomechanical processes such as photocopying and color photocopying. Prerequisite: F20 Art 1186 Black-and-White Photography or permission of instructor. Credit 3 units.

F10 ART 218 Introduction to Photography
This course introduces photography as a dialogue between material and cultural histories, personal experience, tradition and contemporary practice. Students gain full manual control of
the digital camera apparatus, learn how to import and edit raw images, and print according to fine art professional standards. The resulting work fosters critical evaluations of form, content and intention. In addition to studio production, this course includes lectures, readings and discussions. Students must provide a fully manual digital camera capable of capturing RAW images. Students in the classes of 2015 and later must complete either F10 217 or 218 as an introduction to the photography major or minor. The course is open to nonmajors and minors as space permits. Credit 3 units.

F20 ART 2182 Photography II
Introduction to the fundamentals of black-and-white photography. Emphasis on control of film, paper and black-and-white photographic process in the classical fine arts tradition. Course adds to the experience of Photography I. Topics may include portrait, landscape, street photography, the figure and contemporary issues in photography. Prerequisite: F10 Art 2181 Photography I or permission of department. College of Art students and photography minors have priority. Credit 3 units.

F20 ART 218I Advanced Photography Seminar
Designed for non-art students fulfilling art minor requirements in the Photography Minor. Topics covered include studio lighting and large format photography. Credit 3 units.

F20 ART 219 Ceramics
An introduction to the design and making of functional pottery as well as sculptural objects. Students learn basic forming processes of the wheel, coil and slab construction. While the emphasis is on high-fired stoneware, students are introduced to Raku and soda firing. Content and advanced processes and skills are encouraged according to the individual’s level. Credit 3 units.

F20 ART 220 Ceramics
An introduction to the design and making of functional pottery as well as sculptural objects. Students learn basic forming processes of the wheel, coil and slab construction. While the emphasis is on high-fired stoneware, students are introduced to Raku and soda firing. Content and advanced processes and skills are encouraged according to the individual’s level. Credit 3 units.

F10 ART 221 Introduction to Painting
This studio course introduces painting as a dialogue between material and cultural histories, personal experience, tradition and contemporary practice. Students employ a variety of oil and water-based media in this concept-driven approach to new and established methodologies. The resulting work generates critical evaluations of form, content and intention. In addition to studio production, this course includes lectures, readings and discussions. Students in the classes of 2015 and later must complete either F10 221 or 222 as an introduction to the painting major. The course is open to nonmajors and minors as space permits. Credit 3 units.

F10 ART 222 Introduction to Painting
This studio course introduces painting as a dialogue between material and cultural histories, personal experience, tradition and contemporary practice. Students employ a variety of oil and water-based media in this concept-driven approach to new and established methodologies. The resulting work generates critical evaluations of form, content and intention. In addition to studio production, this course includes lectures, readings and discussions. Students in the classes of 2015 and later must complete either F10 221 or 222 as an introduction to the painting major. The course is open to nonmajors and minors as space permits. Credit 3 units.

F20 ART 223D Fashion Design 2-D
Designed to familiarize students with techniques and materials used in drawing flats, floats, croquis, specs and illustrations for fashion design. Design problems associated with designing groups, collections and lines of apparel for popular and selected consumption are included. Credit 3 units.

F20 ART 223E Fashion Design 3-D
Designed to familiarize students with the equipment and technology peculiar to a career in fashion design. Emphasis on increased awareness of the capabilities of the materials and equipment. Development of skills peculiar to apparel design, and appreciation of the processes involved in the design and manufacturing of apparel. Credit 3 units.

F20 ART 223G Fashion: Textile Design
Same as F20 ART 123G, F20 ART 323G, F20 ART 423G. Sophomores (only) register for F20 ART 223G. Introductory study of textiles, beginning with study of the basic fibers used in textile production, through weaving, knitting, dyeing, printing and finishing. Class format includes lectures, field trips, garment study and a variety of creative projects that replicate current textile production techniques such as weaving, silkscreen, dyeing and printing. College of Art majors and non-art students pursuing an art minor have priority. Prerequisite: sophomore standing or departmental approval. Credit 3 units.
F20 ART 224D Fashion Design 2-D
Designed to familiarize students with techniques and materials used in drawing flats, floats, croquis, specs and illustrations for fashion design. Design problems associated with designing groups, collections and lines of apparel for popular and selected consumption are included.
Credit 3 units.

F20 ART 224E Fashion Design 3-D
Designed to familiarize students with the equipment and technology peculiar to a career in fashion design. Emphasis on increased awareness of the capabilities of the materials and equipment. Development of skills peculiar to apparel design, and appreciation of the processes involved in the design and manufacturing of apparel.
Credit 3 units.

F20 ART 224I Fashion: Textile Design
Introductory study of textiles, beginning with study of the basic fibers used in textile production, through weaving, knitting, dyeing, printing and finishing. Class format includes lectures, field trips, garment study and a variety of creative projects that replicate current textile production techniques such as weaving, silkscreen, dyeing and printing.
Credit 3 units.

F10 ART 225 Artist and Self
A course that investigates the self-portrait from both the studio/visual aspect as well as the psychodynamic. Through assignments, readings and in-class discussions, students examine the motivations and implications of the portrait from internal as well as external descriptions. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106 and F10 107 or F10 108 or permission of instructor.
Credit 3 units.

F10 ART 226 Artist and Self
A course that investigates the self-portrait from both the studio/visual aspect as well as the psychodynamic. Through assignments, readings and in-class discussions, students examine the motivations and implications of the portrait from internal as well as external descriptions. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106 and F10 107 or F10 108 or permission of instructor.
Credit 3 units.

F20 ART 227A History of Photography
Survey of the history of photography and a look at the medium from the camera obscura to contemporary developments. Social and technological developments examined in terms of their influence on the medium.
Credit 3 units.

F20 ART 228A History of Photography
Survey of the history of photography and a look at the medium from the camera obscura to contemporary developments. Social and technological developments examined in terms of their influence on the medium.
Credit 3 units.

F10 ART 231 Introduction to Fashion Design
A structured discourse on fashion designers of the 20th and 21st centuries for study of the body as site and inspiration for apparel design. Class discussions and projects engage concept, materials and process. Through exploration of shapes, forms and their role in the development of 3-dimensional ideas, the student learns the fundamentals of fashion design. Students in the classes of 2015 and later must complete either F10 231 or 232 as an introduction to the fashion design major. This course is open to nonmajors and minors as space permits.
Credit 3 units.

F10 ART 232 Introduction to Fashion Design: Materials, Volume and the Body
A structured discourse on fashion designers of the 20th and 21st centuries for study of the body as site and inspiration for apparel design. Class discussions and projects engage concept, materials and process. Through exploration of shapes, forms and their role in the development of three-dimensional ideas, the student learns the fundamentals of fashion design. Students in the classes of 2015 and later must complete either F10 231 or 232 as an introduction to the fashion design major. This course is open to nonmajors and minors as space permits.
Credit 3 units.

F20 ART 233 Basic Illustration
An introduction to concepts, media techniques and problem-solving approaches within contemporary illustration. Emphasis on individual solutions to the problems presented.
Credit 3 units.

F20 ART 234 Basic Illustration
Credit 3 units.

F20 ART 235F Interactivity and Web Design
This course combines investigations of image construction and editing, typography and basic issues in interactivity to explore the world of interface design and beginning web development.
F20 ART 235G The Licensed Image: Development and Distribution
An introduction to the concept of image development, design, market distribution and methodology for creating licensed products. Projects involve product idea development, market and the development of image-driven products using images, design and writing. Traditional drawing skills not required. Students may work by hand or on the computer. Ideal course for College of Art students whose work focuses on images, Visual Communications minors and students outside the College of Art interested in developing visual products, including business students.
Credit 3 units.

F20 ART 235I Communication Design I
An introduction to the field of communication design, combining principles from the fields of graphic design, advertising and illustration/image construction. Through studio exercises and lectures, students are exposed to the broad range of conceptual, aesthetic and strategic issues inherent to the field. Additionally, the similarities, differences and points of overlap within the three areas are discussed. Strongly recommended for students considering the Communication Design major. An excellent introduction to the subject as a tool for business and marketing.
Credit 3 units.

F20 ART 235J Introduction to Animating in Three Dimensions
This course explores 3-D animation in the short film format. Students move from an overview of the process and visual vocabulary of animation to defining filmic ideas, the visual gag and character-driven content. Cinematic shot design, timing, character design and sound design are studied for determining the most effective means of communicating desired content. Hand-drawn sketches are imported into a 3-D animation program as the basis to model and animate characters, create settings and add special effects. An animated sequence is produced to show evidence of personal inquiry and level of expertise. Prerequisite: F10 ART 101 Drawing or equivalent or permission of instructor.
Credit 3 units.

F20 ART 235L Communication Design and Business
This course provides an introduction to business communications in a visual environment. Subjects addressed include visual organization, introductory typography, basic identity development, message construction and business presentation development.
Credit 3 units.

F20 ART 236F Interactivity and Web Design
This course combines investigations of image construction and editing, typography and basic issues in interactivity to explore the world of interface design and beginning web development.
Credit 3 units.

F20 ART 236G The Licensed Image: Development and Distribution
An introduction to the concept of image development, design, market distribution and methodology for creating licensed products. Projects involve product idea development, market and the development of image-driven products using images, design and writing. Traditional drawing skills not required. Students may work by hand or on the computer. Ideal course for College of Art students whose work focuses on images, Visual Communications minors and students outside the College of Art interested in developing visual products, including business students.
Credit 3 units.

F20 ART 236I Communication Design I
An introduction to the field of communication design, combining principles from the fields of graphic design, advertising and illustration/image construction. Through studio exercises and lectures, students are exposed to the broad range of conceptual, aesthetic and strategic issues inherent to the field. Additionally, the similarities, differences and points of overlap within the three areas are discussed. Strongly recommended for students considering the Communication Design major. An excellent introduction to the subject as a tool for business and marketing.
Credit 3 units.

F20 ART 236J Introduction to Animating in Three Dimensions
This course explores 3-D animation in the short film format. Students move from an overview of the process and visual vocabulary of animation to defining filmic ideas, the visual gag and character-driven content. Cinematic shot design, timing, character design and sound design are studied for determining the most effective means of communicating desired content. Hand-drawn sketches are imported into a 3-D animation program as the basis to model and animate characters, create settings, and add special effects. An animated sequence is produced to show evidence of personal inquiry and level of expertise. Prerequisite: F10 ART 101 Drawing or equivalent or permission of instructor.
Credit 3 units.

F20 ART 2384 Special Topics in Visual Communications: Presenting a Visual Business Case
Learn firsthand what it takes to sell a new idea to business decision makers. Work with executives and entrepreneurs to build a compelling business case. Help create visual
This course introduces the language and standards of typography. Through a series of exercises and projects, students explore the role of typography in the design of information and as an expressive and interpretive tool. Required for the communication design major. Prerequisite: Digital Studio (F10 241 or 242) or Digital Design (F10 243 or 244). The course is open to nonmajors and minors as space permits. Credit 3 units.

F10 ART 243 Digital Design

Students are introduced to digital tools in the context of applied design thinking for graphic design, surface design, and image-making. Students pursue projects using Adobe Photoshop, Adobe Illustrator, and Adobe InDesign. This course engages software learning in the service of design thinking. Students in the classes of 2015 and later must complete either Digital Studio (F10 241 or 242) or Digital Design (F10 243 or 244). This course is strongly recommended for communication design, fashion design, and photography majors. Credit 3 units.

F10 ART 244 Digital Design

Students are introduced to digital tools in the context of applied design thinking for graphic design, surface design, and image-making. Students pursue projects using Adobe Photoshop, Adobe Illustrator, and Adobe InDesign. This course engages software learning in the service of design thinking. Students in the classes of 2015 and later must complete either Digital Studio (F10 241 or 242) or Digital Design (F10 243 or 244). This course is strongly recommended for communication design, fashion design, and photography majors. Credit 3 units.

F20 ART 2481 The Illustrated Book: Design and Production

An investigation of text, image, design, and production within the broad realm of illustrated books. A series of exploratory exercises in the beginning of the semester yields to a single sustained project proposed and developed by the student. Project emphases may include visual narrative, textual interpretation, creative writing, typography, structure and sequencing, and material investigation. Production methods may include relief and letterpress; engraving and intaglio; offset
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lithography; and digital, “virtual” media. Certain projects may require a second semester of study to complete. Credit 3 units.

F20 ART 2482 The Illustrated Book: Design and Production
An investigation of text, image, design and production within the broad realm of illustrated books. A series of exploratory exercises in the beginning of the semester yields to a single sustained project proposed and developed by the student. Project emphases may include visual narrative, textual interpretation, creative writing, typography, structure and sequencing, and material investigation. Production methods may include relief and letterpress; engraving and intaglio; offset lithography; and digital, “virtual” media. Certain projects may require a second semester of study to complete. Credit 3 units.

F10,F20 ART 250 Independent Study
Designed for sophomores fulfilling art minor requirements. Prerequisites: Permission of instructor and submission of a written proposal to the associate dean of students (Room 1, Bixby Hall). Credit -3 unit.

F10,F20 ART 250 Independent Study
Designed for sophomores fulfilling art minor requirements. Prerequisites: Permission of instructor and submission of a written proposal to the associate dean of students (Room 1, Bixby Hall). Credit -3 unit.

F10 ART 261 Issues in Pictorial Space
A drawing course that examines spatial systems, traditions and contemporary usages; students develop artwork using traditional and experimental techniques. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106 and F10 107 or F10 108 or permission of instructor. Credit 3 units.

F10 ART 262 Issues in Pictorial Space
A drawing course that examines spatial systems, traditions and contemporary usages; students develop artwork using traditional and experimental techniques. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106 and F10 107 or F10 108 or permission of instructor. Credit 3 units.

F20 ART 263 Italian Level II
This course is a continuation of the conversational Italian course required for study abroad students. Taught entirely in Italian, this class concentrates on conversational Italian. There is an emphasis on class participation accompanied by readings and writing. The student develops facility speaking the language on an everyday basis. Credit 5 units.

F20 ART 264 Italian Level II
This course is a continuation of the conversational Italian course required for the Study Abroad students. Taught entirely in Italian, this class concentrates on conversational Italian. There is an emphasis on class participation accompanied by readings and writing. The student develops facility speaking the language on an everyday basis. Prerequisite: College of Art sophomores in the Study Abroad Program in Florence, Italy. Credit 5 units.

F10 ART 265 Conceptual Methods in Drawing
Communication of conceptual content through the invention of systems of signification related to language structure. Equates drawing with the primary formation of concepts — anthropological models, serial structures, symbolic languages, spatial systems. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106 and F10 107 or F10 108 or permission of instructor. Credit 3 units.

F10 ART 266 Conceptual Methods in Drawing
Communication of conceptual content through the invention of systems of signification related to language structure. Equates drawing with the primary formation of concepts — anthropological models, serial structures, symbolic languages, spatial systems. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106 and F10 107 or F10 108 or permission of instructor. Credit 3 units.

F20 ART 2661 Semester Abroad Program Seminar
This course prepares students participating in the College of Art’s Spring Semester Abroad Program in Florence, Italy. The seminar meets eight times over the course of the semester. Attendance is required. Credit 1 unit.

F20 ART 2662 Semester Abroad Program Seminar
This course prepares students participating in the College of Art’s Semester Abroad Program in Florence, Italy. The seminar meets eight times over the course of the semester. Attendance is required. Prerequisite: students selected for the Semester Abroad Program only. Credit 1 unit.

F10 ART 267 Dimension Studies
An investigation of surface and volume. Production of objects carried out in relation to the motivating idea of dimensional
forms as evolved choices. Exploration of tension and movement between two and three dimensions. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106 and F10 107 or F10 108 or permission of instructor. Credit 3 units.

**F10 ART 267A Pattern, Repetition and Accumulation**
The exploration of excessiveness with materials, images and/or gestures. Students investigate the relationships between such issues as part/whole, order/chaos, seen/secrets, permanence/ephemerality, formalism/meaning. Studio and site-specific work is open to two-, three-, and four-dimensional solutions. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106 and F10 107 or F10 108 or permission of instructor. Credit 3 units.

**F10 ART 268 Dimension Studies**
An investigation of surface and volume. Production of objects carried out in relation to the motivating idea of dimensional forms as evolved choices. Exploration of tension and movement between two and three dimensions. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106 and F10 107 or F10 108, or permission of instructor. Credit 3 units.

**F10 ART 268A Pattern, Repetition and Accumulation**
The exploration of excessiveness with materials, images and/or gestures. Students investigate the relationships between such issues as part/whole, order/chaos, seen/secrets, permanence/ephemerality, formalism/meaning. Studio and site-specific work is open to 2-, 3- and 4-dimensional solutions. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106, and F10 107 or F10 108, or permission of instructor. Credit 3 units.

**F10,F20 ART 271 Narrative, Sequence and Seriality**
The investigation of narrative structure and strategy, both implied and explicit. The definition of narrative extends to purely formal issues of sequence and arrangement. Relationships between visual and verbal structures, attention to the architecture of stories. Consideration of historical and contemporary visual narratives; exploration of personal and public forms. Studio production; open to 2- and 3-dimensional solutions. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106 and F10 107 or F10 108 or permission of instructor. Credit 3 units.

**F10,F20 ART 2713 Introduction to Book Binding**
Same as F20 ART 1713, F20 ART 3713, F20 ART 4713. Sophomores (only) register for F20 ART 2713. This class serves as an introduction to the book as artifact of material culture. A variety of traditional and nontraditional book structures are explored. Students learn from historical approaches to constructing the codex form, including the single signature pamphlet, the multisignature case binding, the coptic and the medieval long stitch. Students learn Japanese binding and its many variations. Several contemporary variations are introduced, including the tunnel, the flag book, the accordion and the carousel. Students explore the visual book using found imagery and photocopy transfers and produce a variety of decorated papers to be used in their bindings. Credit 3 units.

**F10 ART 272 Narrative, Sequence and Seriality**
The investigation of narrative structure and strategy, both implied and explicit. The definition of narrative extends to purely formal issues of sequence and arrangement. Relationships between visual and verbal structures, attention to the architecture of stories. Consideration of historical and contemporary visual narratives; exploration of personal and public forms. Studio production; open to 2- and 3-dimensional solutions. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106 and F10 107 or F10 108 or permission of instructor. Credit 3 units.

**F10,F20 ART 272 Narrative, Sequence and Seriality**
The investigation of narrative structure and strategy, both implied and explicit. The definition of narrative extends to purely formal issues of sequence and arrangement. Relationships between visual and verbal structures, attention to the architecture of stories. Consideration of historical and contemporary visual narratives; exploration of personal and public forms. Studio production; open to 2- and 3-dimensional solutions. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106 and F10 107 or F10 108 or permission of instructor. Credit 3 units.

**F10 ART 273 Time Arts**
This course explores media not found in the traditions of painting and sculpture. Rather, it uncovers the mysteries behind the 20th-century phenomenon of Performance Art. “Performance”
explores the interrelationship between numerous aesthetic approaches, a few of which are: time observation, duration works, four-dimensional works, body art and monologue. Students become facilitators of events. Four-dimensional structures of sequence, narrative and compilation become the constructs for investigation. Under this heading, hands-on experience with film making, video production, sound recording and performance art are explored. Students work independently, choosing from a menu of options. Students gain conceptual strategies, historical perspective and technical skills relating to each media and their interplay. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106 and F10 107 or F10 108 or permission of instructor. Credit 3 units.

F10 ART 273A Durational Systems
Investigation of duration as a mode of artistic production. Explores time-based objects and events. Open to digital, 3-D and 4-D solutions. Students harness the power of new media to interpret concepts such as time, distance, collaboration and interactivity through traditional, digital and web-based platforms. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106, and F10 107 or F10 108, or permission of instructor. Credit 3 units.

F10 ART 274 Time Arts
This course explores media not found in the traditions of painting and sculpture. Rather, it uncovers the mysteries behind the 20th-century phenomenon of Performance Art. “Performance” explores the interrelationship between numerous aesthetic approaches, a few of which are: time observation, duration works, four-dimensional works, body art and monologue. Students become facilitators of events. Four-dimensional structures of sequence, narrative and compilation become the constructs for investigation. Under this heading, hands-on experience with film making, video production, sound recording, and performance art are explored. Students will work independently choosing from a menu of options. Students gain conceptual strategies, historical perspective and technical skills relating to each media and their interplay. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106, and F10 107 or F10 108, or permission of instructor. Credit 3 units.

F10 ART 274A Durational Systems
Investigation of duration as a mode of artistic production. Explores time-based objects and events. Open to digital, 3D and 4D solutions. Students harness the power of new media to interpret concepts such as time, distance, collaboration and interactivity through traditional, digital and web-based platforms. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106, and F10 107 or F10 108 or permission of instructor. Credit 3 units.

F10 ART 275 Critical Frameworks in the Visual Arts
A lecture course addressing basic issues in modern and postmodern criticism presented in historical context. Lectures alternating with discussion. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106, and F10 107 or F10 108, or permission of instructor. Credit 3 units.

F10 ART 276 Critical Frameworks in the Visual Arts
A lecture course addressing basic issues in modern and postmodern criticism presented in historical context. Lectures alternating with discussion. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106, and F10 107 or F10 108, or permission of instructor. Credit 3 units.

F10 ART 277 Special Topics in Core
Studies in special subjects. Topics vary from semester to semester. Consult Course Listings. May be repeated for credit. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106, and F10 107 or F10 108, or permission of instructor. Credit 3 units.

F10 ART 2782 Special Topics in Core
Studies in special subjects. Topics vary from semester to semester. Consult Course Listings. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106, and F10 107 or F10 108, or permission of instructor. Credit 3 units.

F10 ART 2783 Special Topics in Core — Florence, Italy
Studies in special subjects. Topics vary from semester to semester. Consult Course Listings. Prerequisite: College of Art sophomores in the Study Abroad Program in Florence, Italy. Credit 3 units.

F10 ART 2784 Special Topics in Core — Florence, Italy
Study abroad in Florence, Italy. Studies in special subjects. Topics vary from semester to semester. Consult Course Listings. Prerequisite: College of Art sophomores in the Study Abroad Program in Florence, Italy. Credit 3 units.

F10 ART 2787 Visiting Faculty Workshops — Florence, Italy
Students participate in month-long workshops with visiting faculty from the College of Art. This course provides students with the
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opportunity to examine different artistic disciplines. The course can be modified to accommodate the student's experience abroad. Prerequisite: College of Art sophomores in the Study Abroad Program in Florence, Italy. Credit 3 units.

F10 ART 2788 Visiting Faculty Workshops — Florence, Italy
Students participate in three month-long workshops with visiting faculty from the College of Art. This course provides students with the opportunity to examine different artistic disciplines. The course can be modified to accommodate the student's experience abroad. Prerequisite: College of Art sophomores in the Study Abroad Program in Florence, Italy. Credit 3 units.

F10 ART 279 Recognition, Construction and the Found
In this course students juxtapose, combine and edit found objects, imagery and text to create 2- and 3-dimensional artwork. Historical precedents such as assemblage, collage and installation are examined. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106, and F10 107 or F10 108, or permission of instructor. Credit 3 units.

F10 ART 280 Recognition, Construction and the Found
In this course students juxtapose, combine and edit found objects, imagery and text to create 2- and 3-dimensional artwork. Historical precedents such as assemblage, collage and installation are examined. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106, and F10 107 or F10 108, or permission of instructor. Credit 3 units.

F10 ART 283 Typography and Letterform: The Design of Language
As an investigation of the formal qualities of familiar objects, letters, this is an introductory-level course in design thinking using families of letterforms as our focus. Students explore design strategies required to make individual forms into a family of types through exercises in tracing, drawing, letterpress printing and collage. Particular emphasis is devoted to the concept of modularity, including an assignment to design and print a modular typeface. Students in the class of 2015 and later must complete either F10 295, 296, 283 or 284 or other F10 200-level introductory studio as an introduction to the communication design major. Prerequisites: X10 101, X10 102, F10 105 or F10 106, and F10 107 or F10 108, or permission of instructor. This course is open to nonmajors and minors as space permits. Credit 3 units.

F10 ART 284 Typography and Letterform: The Design of Language
As an investigation of the formal qualities of familiar objects, letters, this is an introductory-level course in design thinking using families of letterforms as our focus. Students explore design strategies required to make individual forms into a family of types through exercises in tracing, drawing, letterpress printing and collage. Particular emphasis is devoted to the concept of modularity, including an assignment to design and print a modular typeface. Students in the class of 2015 and later must complete either F10 295, 296, 283 or 284 or other F10 200-level introductory studio as an introduction to the communication design major. Prerequisites: X10 101, X10 102, F10 105 or F10 106, and F10 107 or F10 108, or permission of instructor. This course is open to nonmajors and minors as space permits. Credit 3 units.

F10 ART 285 Color Systems
A sustained experience in color which includes the study of optical, theoretical and cultural issues. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106, and F10 107 or F10 108, or permission of instructor. Credit 3 units.

F10 ART 286 Color Systems
A sustained experience in color which includes the study of optical, theoretical and cultural issues. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106, and F10 107 or F10 108, or permission of instructor. Credit 3 units.

F10 ART 287 Material Systems
Investigates object making via materials and various processes to explore visual and physical metaphor. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106, and F10 107 or F10 108, or permission of instructor. Credit 3 units.

F10 ART 288 Material Systems
Investigates object making via materials and various processes to explore visual and physical metaphor. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106, and F10 107 or F10 108, or permission of instructor. Credit 3 units.

F10 ART 291 Core New Topic
Studies in special subjects. Topics vary from semester to semester. Consult Course Listings. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106 and F10 107 or F10 108, or permission of instructor. Credit 3 units.

F10 ART 292 Core New Topic
Studies in special subjects. Topics vary from semester to semester. Consult Course Listings. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106 and F10 107 or F10 108, or permission of instructor.

Credit 3 units.

F10 ART 294 Core New Topic
Studies in special subjects. Topics vary from semester to semester. Consult Course Listings. Prerequisites: F10 101 or X10 101, F10 102 or X10 102, F10 105 or F10 106 and F10 107 or F10 108, or permission of instructor.

Credit 3 units.

F10 ART 295 Pictures for Communication
Students investigate the realm of functional pictures through pictograms, comic strips, diagrammatic maps, visual metaphors and narratives. Each project focuses on a particular aspect of conceptual and formal clarity. Significant attention is paid to aesthetics. Students use a variety of media and are introduced to Adobe Illustrator. Students in the class of 2015 and later must complete either F10 295, 296, 283 or 284 or other F10 200-level introductory studio as an introduction to the communication design major. Prerequisites: X10 101, X10 102, F10 105 or F10 106, and F10 107 or F10 108, or permission of instructor. This course is open to nonmajors and minors as space permits.

Credit 3 units.

F10,F20 ART 296 Pictures for Communication
Students investigate the realm of functional pictures through pictograms, comic strips, diagrammatic maps, visual metaphors and narratives. Each project focuses on a particular aspect of conceptual and formal clarity. Significant attention is paid to aesthetics. Students use a variety of media and are introduced to Adobe Illustrator. Students in the class of 2015 and later must complete either F10 295, 296, 283 or 284 or other F10 200-level introductory studio as an introduction to the communication design major. Prerequisites: X10 101, X10 102, F10 105 or F10 106, and F10 107 or F10 108, or permission of instructor. This course is open to nonmajors and minors as space permits.

Credit 3 units.

F10,F20 ART 311 Painting
Advanced study in painting with individualized criticism, lectures and seminars, leading toward the development of personal idioms.

Credit 8.3 units.

F10,F20 ART 311 Painting
Advanced study in painting with individualized criticism, lectures and seminars, leading toward the development of personal idioms.

Credit 8.3 units.
F20 ART 3115 Intensive Intermediate Painting  
Same as F20 ART 2115, F20 ART 4115. Juniors (only) register for course F20 ART 3115. In this course we explore the genres of painting from the inside-out. We focus on process and technical skill as well as the political and social underpinnings of several painting genres. As the course progresses, students improve at oil painting in its traditional 20th-century use and gain some technical and conceptual experience with its contemporary manifestation. Our main focus is on perceptual studies, although we also work with notions of abstraction in painting. There are weekly homework assignments as well as a few reading assignments. This is a very structured course, designed to develop your strengths and abilities as a painter and to further your conceptual understanding of the medium. Prerequisite: painting elective or permission of instructor. Credit 3 units.

F20 ART 3116 Intensive Intermediate Painting  
Same as F20 ART 2116, F20 ART 4116. Juniors (only) register for course F20 ART 3116. In this course we explore the genres of painting from the inside-out. We focus on process and technical skill as well as the political and social underpinnings of several painting genres. As the course progresses, students improve at oil painting in its traditional 20th-century use and gain some technical and conceptual experience with its contemporary manifestation. Our main focus is on perceptual studies, although we also work with notions of abstraction in painting. There are weekly homework assignments as well as a few reading assignments. This is a very structured course, designed to develop your strengths and abilities as a painter and to further your conceptual understanding of the medium. Prerequisite: painting elective or permission of instructor. Credit 3 units.

F10 ART 311A Painting: Theory and Practice  
This major course of study for juniors and seniors expands the dialogue between material and cultural histories, personal experience, tradition and current practice in contemporary painting. The learning sequence consists of comprehensive investigations of painting processes and materials through assigned and self-directed projects, leading to the development of a unique body of work. Critical assessment of work produced occurs in discussion with faculty and peers. In addition to studio production, this course includes level-specific seminars and visits to galleries and museums. Required for painting majors. Prerequisites: F10 221 or 222; F10.311A. Credit 6 units.

F20 ART 311B Painting II  
Same as F20 ART 411B. Juniors (only) register for F20 ART 311B. Intermediate painting focuses on the processes and concepts of oil painting. It is a structured course with an emphasis on perceptual studies as well as an overview of historical and contemporary painting issues. Students are expected to possess good drawing skills and a beginner’s familiarity with oil painting techniques. Critical readings and homework assignments are an important part of the course. College of Art majors and non-art students pursuing an art minor have priority. Prerequisites: junior standing and a beginning painting elective or permission of instructor. Credit 3 units.

F10,F20 ART 312 Painting  
Advanced study in painting with individualized criticism, lectures and seminars, leading toward the development of personal idioms. Credit 8,3 units.

F10,F20 ART 312 Painting  
Advanced study in painting with individualized criticism, lectures and seminars, leading toward the development of personal idioms. Credit 8,3 units.

F10 ART 312A Painting: Theory and Practice  
This major course of study for juniors and seniors expands the dialogue between material and cultural histories, personal experience, tradition and current practice in contemporary painting. The learning sequence consists of comprehensive investigations of painting processes and materials through assigned and self-directed projects, leading to the development of a unique body of work. Critical assessment of work produced occurs in discussion with faculty and peers. In addition to studio production, this course includes level-specific seminars and visits to galleries and museums. Required for painting majors. Prerequisites: F10 221 or 222; F10.311A. Credit 6 units.

F20 ART 312B Painting II  
Intermediate painting focuses on the processes and concepts of oil painting. It is a structured course with an emphasis on perceptual studies as well as an overview of historical and contemporary painting issues. Students are expected to possess good drawing skills and a beginner’s familiarity with oil painting techniques. Critical readings and homework assignments are an important part of the course. College of Art majors and non-art students pursuing an art minor have priority. Prerequisite: a beginning painting elective or permission of instructor. Credit 3 units.

F10,F20 ART 313A Sculpture  
Exploration of advanced concepts and techniques. Involvement with larger scale, environmental relationships and architectural considerations. Processes and materials include construction
in a large variety of materials, firing, plaster mold making, direct plaster work, wood and stone carving, foundry, plastics laminations, soft sculpture, welding, soldering, brazing, metalwork.
Credit 8.3 units.

F10,F20 ART 313A Sculpture
Exploration of advanced concepts and techniques. Involvement with larger scale, environmental relationships and architectural considerations. Processes and materials include construction in a large variety of materials, firing, plaster mold making, direct plaster work, wood and stone carving, foundry, plastics laminations, soft sculpture, welding, soldering, brazing, metalwork.
Credit 8.3 units.

F10 ART 313D Sculpture: Theory and Practice
Contemporary practice in sculpture exists in plural modes at the intersection of diverse cultural traditions, material and process applications, and ideological positions. In this studio, students explore sculpture through sustained investigations in concept, material, media and process. Juniors and seniors participate in demonstrations, workshops and level-specific seminars that focus on individual topical research. Juniors expand their studio activity to include public art projects as part of a long-running program in University City. Seniors build a portfolio of work and prepare to enter the professional field. Critique structures are geared toward intellectual development, oral presentation and writing skills as they relate to studio practice. Required for sculpture majors. Prerequisite: F10 213 or 214.
Credit 6 units.

F20 ART 313F Sculpture: Foundry
Same as F20 ART 113F, F20 ART 213F, F20 ART 413F. Juniors (only) register for F20 ART 313F. The focus of this course is to introduce students to the basic principles of bronze and aluminum casting according to the lost wax method. Students learn mold making, direct organic burnout, ceramic shell investment, metal chasing and patination in order to create finished sculpture. In addition to metal casting, students use other materials such as plaster, resin, steel, wood, rubber, plastic and foam to create a mixed-media project that explores a specific idea or theme. Additional work outside the regularly scheduled class time is required. College of Art majors and non-art students pursuing an art minor have priority. Prerequisite: junior standing or departmental approval.
Credit 3 units.

F20 ART 313G Sculpture: Wood
Same as F20 Art 113G, F20 Art 213G, F20 Art 413G. Juniors (only) register for F20 Art 313G. The focus of this course is to introduce students to the basic principles of wood sculpture with an emphasis on furniture making. College of Art majors and non-art students pursuing an art minor have priority. Prerequisite: junior standing or departmental approval.
Credit 3 units.

F20 ART 313H Sculpture: Blacksmithing
This course is an introduction to Blacksmithing materials, tools and techniques. Students explore the fundamental techniques of hand-forged metal. Metal can be manipulated as a plastic material and offers enormous possibilities for 3-dimensional form. In this class we explore these possibilities and expand our sculptural vocabulary.
Credit 3 units.

F20 ART 313I Sculpture: Metal Fabrication
Metal is the backbone of our modern world and a viable medium for self-expression. It can be employed as structure or as surface, it can be deformed plastically to create compound shapes, or it can be connected to most any other material. Students explore the creative potential of this material in the fabrication of sculptural forms. Students learn to weld using both gas and electric arc machines and learn the safe operation of drilling, grinding and finishing tools.
Credit 3 units.

F10,F20 ART 314A Sculpture
Exploration of advanced concepts and techniques. Involvement with larger scale, environmental relationships, and architectural considerations. Processes and materials include construction in a large variety of materials, firing, plaster mold making, direct plaster work, wood and stone carving, foundry, plastics laminations, soft sculpture, welding, soldering, brazing, metalwork.
Credit 8.3 units.

F10,F20 ART 314A Sculpture
Exploration of advanced concepts and techniques. Involvement with larger scale, environmental relationships, and architectural considerations. Processes and materials include construction in a large variety of materials, firing, plaster mold making, direct plaster work, wood and stone carving, foundry, plastics laminations, soft sculpture, welding, soldering, brazing, metalwork.
Credit 8.3 units.

F10,F20 ART 314A Sculpture
Exploration of advanced concepts and techniques. Involvement with larger scale, environmental relationships, and architectural considerations. Processes and materials include construction in a large variety of materials, firing, plaster mold making, direct plaster work, wood and stone carving, foundry, plastics laminations, soft sculpture, welding, soldering, brazing, metalwork.
Credit 8.3 units.

F10 ART 314D Sculpture: Theory and Practice
Contemporary practice in sculpture exists in plural modes at the intersection of diverse cultural traditions, material and process applications, and ideological positions. In this studio, students explore sculpture through sustained investigations in concept, material, media and process. Juniors and seniors participate in demonstrations, workshops and level-specific seminars that focus on individual topical research. Juniors expand their studio
activity to include public art projects as part of a long-running program in University City. Seniors build a portfolio of work and prepare to enter the professional field. Critique structures are geared toward intellectual development, oral presentation and writing skills as they relate to studio practice. Required for sculpture majors. Prerequisite: F10 213 or 214; F10 313D. Credit 6 units.

F20 ART 314F Sculpture: Foundry
Same as F20 ART 114F, F20 ART 214F, F20 ART 414F. Sophomores (only) register for F20 ART 114F. The focus of this course is to introduce students to the basic principles of bronze and aluminum casting according to the lost wax method. Students learn mold making, direct organic burnout, ceramic shell investment, metal chasing and patination in order to create finished sculpture. In addition to metal casting, students use other materials such as plaster, resin, steel, wood, rubber, plastic and foam to create a mixed-media project that explores a specific idea or theme. Additional work outside the regularly scheduled class time is required. Prerequisite: junior standing or departmental approval. Credit 3 units.

F20 ART 314G Sculpture: Wood
Same as F20 Art 114G, F20 Art 214G, F20 Art 413G. Juniors (only) register for F20 Art 314G. The focus of this course is to introduce students to the basic principles of wood sculpture with an emphasis on furniture making. Prerequisite: junior standing or departmental approval. Credit 3 units.

F20 ART 314I Sculpture: Metal Fabrication
Metal is the backbone of our modern world and a viable medium for self-expression. It can be employed as structure or as surface, it can be deformed plastically to create compound shapes, or it can be connected to most any other material. Students explore the creative potential of this material in the fabrication of sculptural forms. Students learn to weld using both gas and electric arc machines and learn the safe operation of tools. Credit 3 units.

F10,F20 ART 315 Printmaking
Survey of printmaking covering basic processes in intaglio, lithography, relief and monotype. Emphasis on mixed media and experimentation with a foundation in traditional, historical and philosophical aspects of printmaking. Students are encouraged to work at a level suited to their individual technical skills and conceptual interests. Credit 8,3 units.

F10 ART 315A Printmaking/Drawing
A comprehensive investigation of both traditional and experimental drawing and printmaking techniques. Students are encouraged to explore large-scale mixed-media processes with an emphasis on the development of individual images and marking styles. Students have facilities available in papermaking and printmaking with capabilities for computer and photographic techniques. Credit 8 units.

F10 ART 315B Printmaking: Theory and Practice
Students explore the spectrum of print media and culture, find points of intersection with other media and disciplines, and develop and individual, sustained investigation as an artist. Advanced techniques and concepts are imparted through participatory workshops, focusing on sets of skills such as silkscreen, etching and monotype around strategies in the field of printmaking and contemporary art. Juniors and seniors participate in level-specific seminars that are focused on topical research and critique structures, and are geared toward intellectual development, oral presentation and writing skills as they relate to studio practice. Required for printmaking majors. Prerequisite: F10 215 or 216. Credit 6 units.

F10,F20 ART 316 Printmaking
Students explore various mixed-media approaches to relief printmaking in combination with collagraph, photo lithography and drawing. Relief techniques covered include wood and linoleum cuts using the black line and white line approaches. (Students are encouraged to work at a level suited to their individual technical skills and conceptual interests.). Credit 8,3 units.

F10,F20 ART 316 Printmaking
Students explore various mixed-media approaches to relief printmaking in combination with collagraph, photo lithography and drawing. Relief techniques covered include wood and linoleum cuts using the black line and white line approaches. (Students are encouraged to work at a level suited to their individual technical skills and conceptual interests.). Credit 8,3 units.

F20 ART 3162 Special Topics in Printmaking
Same as F20 Art 1162, F20 Art 2162, F20 Art 4162. Juniors (only) register for F20 Art 3162.
Credit 3 units.

F10 ART 316A Printmaking/Drawing
A comprehensive investigation of both traditional and experimental drawing and printmaking techniques. Students are encouraged to explore large-scale mixed-media processes with an emphasis on the development of individual images and marking styles. Students have facilities available in papermaking and printmaking with capabilities for computer and photographic techniques.
Credit 8 units.

F10 ART 316B Printmaking: Theory and Practice
Students explore the spectrum of print media and culture, find points of intersection with other media and disciplines, and develop and individual, sustained investigation as an artist. Advanced techniques and concepts are imparted through participatory workshops, focusing on sets of skills such as silkscreen, etching and monotype around strategies in the field of printmaking and contemporary art. Juniors and seniors participate in level-specific seminars that are focused on topical research and critique structures, and are geared toward intellectual development, oral presentation and writing skills as they relate to studio practice. Required for printmaking majors.
Prerequisites: F10 215 or 216; F10 315B.
Credit 6 units.

F10 ART 317 Photography
Refining methods, materials and techniques of photography, as well as developing working knowledge of chemistry, film and paper. Assignments challenge students’ insights into their own portfolios of photographs as well as those of other photographers.
Credit 8 units.

F20 ART 3173 Photography III
This class is designed for the student who is seeking to explore advanced issues in photography using a broad range of photographic practices and media. In addition to further mastering of technique and craft, students, through readings and class discussion, place their work within a context of contemporary issues in photographic image making, theory and criticism.
Credit 3 units.

F10 ART 317A Digital Imaging and Photography
Refining methods, materials and techniques of photography, as well as developing a working knowledge of chemistry, film and paper. Assignments challenge the students’ insight into their own portfolio of photographs as well as those of other photographers.
Credit 6.3 units.

F20 ART 317B Photography II (Black-and-White)
Course adds to the experience of Photography I (Black-and-White). Students investigate phenomena relative to the camera and photography. Students develop the vision necessary to take intelligent and articulate photographs, as well as establish the notion of high craft in terms of the negative and the print. Topics may include portrait, landscape, street photography, the figure and the photo story.
Credit 3 units.

F20 ART 317E Color Photography II
The use of color negative materials and the development of a technical and aesthetic vocabulary with color materials. Use of color analyzers, masking systems, and alternatives within negative color systems.
Credit 3 units.

F10,F20 ART 317G Photography: Theory and Practice
In a rigorous multilevel peer critique environment, students incorporate discourse and personal experience to create formal and conceptual intent with the photograph. Through assignments and individual projects, students experiment with narrative and non-narrative approaches intrinsic to series and installation-based photography. Investigation of various materials, venues and means distribution are complemented by praxes on their contemporary manifestations and discussed through multiple writing formats. Image capture through cameralss, digital SLR, medium- and large-format camera systems are covered in detail as well as advanced analog to digital scanning, editing and printing techniques. Required for photography majors.
Prerequisite: F10 217 or 218.
Credit 6,3 units.

F10,F20 ART 317I Advanced Photography Seminar
Designed for non-art students fulfilling Art Minor requirements in the Photography Minor. Topics covered include studio lighting and large-format photography.

Credit 3 units.

F20 ART 317J Alternative Process Photography
(Formerly Non-Silver Photography). Same as F20 Art 217J, F20 Art 317J. Juniors (only) register for F20 Art 317J. An exploration into the use of nonsilver and alternative photographic processes. The use of such processes as blue and brown printing and gum printing is explored, as well as photomechanical processes such as photocopying and color photocopying. Prerequisite: F10 Art 1186 Black-and-White Photography or permission of instructor.

Credit 3 units.

F10 ART 318 Photography
Refining methods, materials, and techniques of photography, as well as developing working knowledge of chemistry, film, and paper. Assignments challenge students’ insight into their own portfolios of photographs as well as those of other photographers.

Credit 8 units.

F20 ART 3183 Photography III
This class is designed for the student who is seeking to explore advanced issues in photography using a broad range of photographic practices and media. In addition to further mastering of technique and craft, students, through readings and class discussion, place their work within a context of contemporary issues in photographic image making, theory and criticism.

Credit 3 units.

F20 ART 3184 Photography III
This class is designed for the student who is seeking to explore advanced issues in photography using a broad range of photographic practices and media. In addition to further mastering of technique and craft, students, through readings and class discussion, place their work within a context of contemporary issues in photographic image making, theory and criticism.

Credit 3 units.

F10,F20 ART 318A Digital Imaging and Photography
Refining methods, materials and techniques of photography, as well as developing working knowledge of chemistry, film and paper. Assignments challenge the students’ insight into their own portfolios of photographs as well as those of other photographers.

Credit 8,3 units.

F10,F20 ART 318G Photography: Theory and Practice
In a rigorous multilevel peer critique environment, students incorporate discourse and personal experience to create formal and conceptual intent with the photograph. Through assignments and individual projects, students experiment with narrative and non-narrative approaches intrinsic to series and installation-based photography. Investigation of various materials, venues and means distribution are complemented by praxes on their contemporary manifestations and discussed through multiple writing formats. Image capture through cameraless, digital SLR, medium- and large-format camera systems are covered in detail as well as advanced analog to digital scanning, editing and printing techniques. Required for photography majors.

Prerequisite: F10 217 or 218; F10 317G.

Credit 6,3 units.
SLR, medium- and large-format camera systems are covered in detail as well as advanced analog to digital scanning, editing and printing techniques. Required for photography majors. Prerequisite: F10 217 or 218; F10 317G. Credit 6,3 units.

F20 ART 318I Advanced Photography Seminar
Designed for non-art students fulfilling Art Minor requirements in the Photography Minor. Topics covered include studio lighting and large-format photography. Credit 3 units.

F20 ART 319 Ceramics
Advanced ceramics/glass study focuses on the student acquiring working knowledge of a variety of available materials and technologies to develop a personal direction and pursue self-determined goals. Experimentation is encouraged in both glass and clay. This may involve working in traditional or contemporary, vessel or sculptural concepts. Available to students is a variety of materials, equipment and technical information. Ceramics, porcelain, stoneware, terra-cotta and low-temperature clays are used in conjunction with extensive study of glazing and firing technology. Students explore and develop skills in Raku, low-temperature, oxidation, reduction, electric, high-temperature and pit firings. Credit 3 units.

F20 ART 320 Ceramics
Advanced ceramics/glass study focuses on the student acquiring working knowledge of a variety of available materials and technologies to develop a personal direction and pursue self-determined goals. Experimentation is encouraged in both glass and clay. This may involve working in traditional or contemporary, vessel or sculptural concepts. Available to students is a variety of materials, equipment and technical information. Ceramics, porcelain, stoneware, terra-cotta and low-temperature clays are used in conjunction with extensive study of glazing and firing technology. Students explore and develop skills in Raku, low-temperature, oxidation, reduction, electric, high-temperature and pit firings. Credit 3 units.

F10 ART 323 Fashion Design
A creative approach to fashion design, with flat pattern and draping skills used in the development of original sample garments. Construction techniques and industrial methods are presented and applied to specific structured design problems. Students work with visiting designer-critics. Garments are reviewed by a professional jury in the spring semester and selected for the annual student fashion show. Credit 8 units.

F20 ART 323D Fashion Design 2-D
Designed to familiarize students with techniques and materials used in drawing flats, floats, croquis, specs and illustrations for fashion design. Design problems associated with designing groups, collections and lines of apparel for popular and selected consumption are included. Credit 3 units.

F20 ART 323E Fashion Design 3-D
Designed to familiarize students with the equipment and technology peculiar to a career in fashion design. Emphasis on increased awareness of the capabilities of the materials and equipment. Development of skills peculiar to apparel design, and appreciation of the processes involved in the design and manufacturing of apparel. Credit 3 units.

F20 ART 323G Fashion: Textile Design
Introductory study of textiles, beginning with study of the basic fibers used in textile production, through weaving, knitting, dyeing, printing and finishing. Class format includes lectures, field trips, garment study and a variety of creative projects that replicate current textile production techniques such as weaving, silkscreen, dyeing and printing. Credit 3 units.

F10 ART 324 Fashion Design
A creative approach to fashion design, with flat pattern and draping skills used in the development of original sample garments. Construction techniques and industrial methods are presented and applied to specific structured design problems. Students work with visiting designer-critics. Garments are reviewed by a professional jury in the spring semester and selected for the annual student fashion show. Credit 8 units.

F20 ART 324D Fashion Design 2-D
Designed to familiarize students with techniques and materials used in drawing flats, floats, croquis, specs and illustrations for fashion design. Design problems associated with designing groups, collections and lines of apparel for popular and selected consumption are included. Credit 3 units.

F20 ART 324E Fashion Design 3-D
Designed to familiarize students with the equipment and technology peculiar to a career in fashion design. Emphasis on increased awareness of the capabilities of the materials and equipment. Development of skills peculiar to apparel design, and appreciation of the processes involved in the design and manufacturing of apparel. Credit 3 units.
F20 ART 324I Fashion: Textile Design
Introductory study of textiles, beginning with study of the basic fibers used in textile production, through weaving, knitting, dyeing, printing and finishing. Class format includes lectures, field trips, garment study and a variety of creative projects that replicate current textile production techniques such as weaving, silkscreen, dyeing and printing.
Credit 3 units.

F20 ART 327A History of Photography
Survey of the history of photography and a look at the medium from the camera obscura to contemporary developments. Social and technological developments examined in terms of their influence on the medium.
Credit 3 units.

F20 ART 328A History of Photography
Survey of the history of photography and a look at the medium from the camera obscura to contemporary developments. Social and technological developments examined in terms of their influence on the medium.
Credit 3 units.

F20 ART 333 Visual Communication: Graphic Design
Offered as emphasis with the visual communications major, the course employs intensive projects in graphic design, typography and production to extend the student’s capacity for conceptual and visual thinking. Along with orientation toward professional standards and practices, students are encouraged to identify and develop their special talents and interests. Fundamentals in computer-assisted design are covered.
Credit 3 units.

F20 ART 334 Visual Communication: Graphic Design
Continuation of F10 ART 333. Offered as an emphasis within the visual communications major, the course employs intensive projects in graphic design, typography and production to extend the student’s capacity for conceptual and visual thinking. Along with orientation toward professional standards and practices, students are encouraged to identify and develop their special talents and interests. Fundamentals in computer-assisted design are covered.
Credit 3 units.

F20 ART 3352 Commercial Modernism in America 1865–1965
This course explores contributions to and expressions of image-based visual modernism in the commercial tradition. We focus on periodical illustration, the comic strip and animated film. Content addresses the birth and expansion of industrial image production; the history of relevant technologies; modernist art theory and the experience of modernity; the parallel but culturally distinct traditions of illustration and cartooning; and issues of race and gender in the production and reception of these works. A sampling of practitioners considered: E.W. Kemble, Howard Pyle, Jessie Willcox Smith, Elizabeth Shippen Green, N.C. Wyeth, Winsor McCay, J.C. Leyendecker, Norman Rockwell, Chester Gould, Milton Caniff, Al Parker, Robert Weaver, Mary Blair, Saul Bass, Paul Rand, Ezra Jack Keats and Jack Kirby. Three required film screenings are scheduled during the semester. Images from the commercial tradition typically fall into a cultural and academic blind spot. They exist outside the realm of art history as traditionally defined and receive primarily textual analyses in culture studies contexts. As a result, many careers and works that would otherwise attract interest remain effectively invisible. This course seeks to integrate the close study of objects associated with art history and the embrace of the embedded in culture studies. We draw on the collections of the recently founded Modern Graphic History Library at Washington University.
Credit 3 units.

F20 ART 335D Prototyping the Responsive Dynamic Media Wall
Same as Arch 326D.
Credit 3 units.

F20 ART 335F Interactivity and Web Design
This course combines investigations of image construction and editing, typography and basic issues in interactivity to explore the world of interface design and beginning web development.
Credit 3 units.

F20 ART 335G The Licensed Image: Development and Distribution
An introduction to the concept of image development, design, market distribution and methodology for creating licensed products. Projects involve product idea development, market and the development of image-driven products using images, design and writing. Traditional drawing skills not required. Students may work by hand or on the computer. Ideal course for College of Art students whose work focuses on images, Visual Communications minors, and students outside the College of Art interested in developing visual products, including business students.
Credit 3 units.

F20 ART 335I Communication Design I
An introduction to the field of communication design, combining principles from the fields of graphic design, advertising and illustration/image construction. Through studio exercises and lectures, students are exposed to the broad range of conceptual, aesthetic and strategic issues inherent to the field. Additionally, the similarities, differences and points of overlap within the
three areas are discussed. Strongly recommended for students considering the Communication Design major. An excellent introduction to the subject as a tool for business and marketing. Credit 3 units.

**F20 ART 335J Introduction to Animating in Three Dimensions**
This course explores 3-D animation in the short film format. Students move from an overview of the process and visual vocabulary of animation to defining filmic ideas, the visual gag and character-driven content. Cinematic shot design, timing, character design and sound design are studied for determining the most effective means of communicating desired content. Hand-drawn sketches are imported into a 3-D animation program as the basis to model and animate characters, create settings and add special effects. An animated sequence is produced to show evidence of personal inquiry and level of expertise.
Prerequisite: F10 ART 101 Drawing or equivalent or permission of instructor.
Credit 3 units.

**F20 ART 335L Communication Design and Business**
This course provides an introduction to business communications in a visual environment. Subjects addressed include visual organization, introductory typography, basic identity development, message construction and business presentation development.
Credit 3 units.

**F20 ART 336F Interactivity and Web Design**
This course combines investigations of image construction and editing, typography and basic issues in interactivity to explore the world of interface design and beginning web development.
Credit 3 units.

**F20 ART 336G The Licensed Image: Development and Distribution**
An introduction to the concept of image development, design, market distribution and methodology for creating licensed products. Projects involve product idea development, market and the development of image-driven products using images, design and writing. Traditional drawing skills not required. Students may work by hand or on the computer. Ideal course for College of Art students whose work focuses on images, Visual Communications minors, and students outside the College of Art interested in developing visual products, including business students.
Credit 3 units.

**F20 ART 336I Communication Design I**
An introduction to the field of communication design, combining principles from the fields of graphic design, advertising and illustration/image construction. Through studio exercises and lectures, students are exposed to the broad range of conceptual, aesthetic and strategic issues inherent to the field. Additionally, the similarities, differences and points of overlap within the three areas are discussed. Strongly recommended for students considering the Communication Design major. An excellent introduction to the subject as a tool for business and marketing.
Credit 3 units.
F10 ART 337C Communication Design: Typography I
This course examines typography as a vehicle for conveying information across contexts and as an expressive and interpretive medium. Students complete a series of exercises and projects. Prerequisite: junior standing, College of Art majors only. Students also must enroll in F10 337B and F10 337D. Credit 2 units.

F10 ART 337D Communication Design: Digital Adventure
Students are introduced to the digital tools of graphic design and image making. Through content-driven design projects, supplemented by in-class exercises, students explore and learn Adobe Illustrator, Photoshop and InDesign. Prerequisite: junior standing, College of Art majors only. Students also must enroll in F10 337B and F10 337C. Credit 3 units.

F20 ART 3386 The Art of Advertising
This course introduces students to the field by defining the role of advertising in American culture and economy. It begins by exploring the evolving and devolving aspects of American advertising and the forces that both compel and repel consumer audiences. The class explains the processes and criteria that, when properly utilized, elevate advertising and validate it as an art form. The course consists of lectures and visiting instructors, brief essay quizzes and a series of exercises designed to acquaint each student with administrative and creative processes and various disciplines within the advertising field. Major emphasis is placed upon the creative disciplines. Credit 3 units.

F10 ART 338B Communication Design: Word and Image II
This course continues the study of word-image relationships from Word and Image I. It focuses on methodologies for realizing clear communication across a range of problems, including the construction of narrative, messaging, poster design and information design. Students are expected to become self-directed about their own synthesis of word and image and select an area of emphasis within design and illustration for deeper study in the senior year. Prerequisites: Word and Image I, junior standing, College of Art majors only. Students also must enroll in F10 ART 338C and F10 ART 338D. Credit 3 units.

F10 ART 338C Communication Design: Typography II
This course builds on the basic typographic principles introduced in Typography I. Course work examines typography as a vehicle for conveying information across contexts and as an expressive and interpretive medium. Students complete a series of projects relevant to the development of professional practice in communication design. Prerequisites: Typography I, junior standing, College of Art majors only. Students also must enroll in F10 Art 338B and F10 Art 338D.

F10 ART 338D Communication Design: Introduction to Motion and Interactivity
This course explores screen-based experiences and uses the language of cinema as a tool for thinking about sequential narratives. The class provides a beginning experience with interactivity, using both digital and analog technologies. Students complete a series of projects. Prerequisite: Digital Adventure. Junior standing, College of Art majors only. Students also must enroll in F10 338B and F10 338D. Credit 2 units.

F20 ART 339A History of Communication Design
Historical development of communication design based on a survey of significant artists and designers and the ideas, styles, movements, forces and individuals who influenced their work. This course is a component of the Communication Design major. Credit 3 units.

F20 ART 345 Topics in the History of Book Illustration: The Book as Subject
Within the last half-century, the book has moved from periphery to center, becoming the subject of an expanding body of work by writers and artists. Its formal qualities and physical processes, its habitual means of organizing, its strengths, its limitations and the meanings we attach to them, have become the subject of seemingly self-conscious, inward-looking books. Postmodern as if by definition, playfulness and irony attend these works and their complexities and subtleties often prove elusiveness a virtue. They command a reshaping of our sense of how books, texts and illustrations react to and interact with one another and how a reader/viewer experiences and makes sense of them. We look at work by Vladimir Nabokov, Julio Cortazar, Italo Calvino, William H. Gass, Samuel Beckett, Jasper Johns, Tom Phillips, Anselm Kiefer, Susan Baron, Peter Greenaway and others. This seminar explores aspects of the history of image and text conjoined in the western book, at once an object and a concept, a thing experienced and a conduit, a means of transmission. Utilizing a variety of analytical and critical approaches-psychoanalytical, deconstructive, New Historicist — we examine the ways in which texts and images make and unmake meanings. Students are asked to write two papers, one brief (six to eight pages), the other more extended (12 to 20 pages) and to give one in-class presentation. Credit 3 units.

F20 ART 346 Topics in the History of Book Illustration: Technologies and Empires: The Book in the Age of Victoria
Credit 3 units.

F20 ART 347 The Illustrated Book: Design and Production
An investigation of text, image, design and production within the broad realm of illustrated books. A series of exploratory exercises in the beginning of the semester yields to a single sustained project proposed and developed by the student. Project emphases may include visual narrative, textual interpretation, creative writing, typography, structure and sequencing, and material investigation. Production methods may include relief and letterpress, engraving and intaglio, offset lithography, and digital, “virtual” media. Certain projects may require a second semester of study to complete. Credit 3 units.

F20 ART 348 The Illustrated Book: Design and Production
An investigation of text, image, design and production within the broad realm of illustrated books. A series of exploratory exercises in the beginning of the semester yields to a single sustained project proposed and developed by the student. Project emphases may include visual narrative, textual interpretation, creative writing, typography, structure and sequencing, and material investigation. Production methods may include relief and letterpress, engraving and intaglio, offset lithography, and digital, “virtual” media. Certain projects may require a second semester of study to complete. Credit 3 units.

F20 ART 3481 The Illustrated Book: Design and Production
An investigation of text, image, design and production within the broad realm of illustrated books. A series of exploratory exercises in the beginning of the semester yields to a single sustained project proposed and developed by the student. Project emphases may include visual narrative, textual interpretation, creative writing, typography, structure and sequencing, and material investigation. Production methods may include relief and letterpress, engraving and intaglio, offset lithography, and digital, “virtual” media. Certain projects may require a second semester of study to complete. Credit 3 units.

F20 ART 3482 The Illustrated Book: Design and Production
An investigation of text, image, design and production within the broad realm of illustrated books. A series of exploratory exercises in the beginning of the semester yields to a single sustained project proposed and developed by the student. Project emphases may include visual narrative, textual interpretation, creative writing, typography, structure and sequencing, and material investigation. Production methods may include relief and letterpress, engraving and intaglio, offset lithography, and digital, “virtual” media. Certain projects may require a second semester of study to complete. Credit 3 units.

F10,F20 ART 350 Independent Study
Designed for juniors fulfilling art minor requirements. Prerequisites: permission of instructor and submission of a written proposal to the associate dean of students (Room 1, Bixby Hall). Credit -3 unit.

F20 ART 350 Independent Study
Designed for juniors fulfilling art minor requirements. Prerequisites: permission of instructor and submission of a written proposal to the associate dean of students (Room 1, Bixby Hall). Credit -3 unit.

F20 ART 371 Introduction to Letterpress Printing
This class serves as an introduction to printing with the Vandercook handpress. Through a series of assignments students learn a systematic approach to planning, arranging and printing type on a page. The students receive a basic introduction to typography, history of letterforms, and history of the book. The mechanics of relief printing with the cylinder press, ink composition, and resolution of the typographic image also are explored. As an exploration of the publishing process students produce a chapbook of a short literary work. The class primarily focuses on typographic composition, but one assignment employs a combination of word and image. Credit 3 units.

F20 ART 371 Introduction to Letterpress Printing
Same as F20 ART 1713, F20 ART 2713, F20 ART 4713. Juniors (only) register for F20 ART 3713. This class serves as an introduction to the book as artifact of material culture. A variety of traditional and nontraditional book structures are explored. Students learn from historical approaches to constructing the codex form, including the single signature pamphlet, the multisignature case binding, the coptic and the medieval long stitch. Students learn Japanese binding and its many variations. Several contemporary variations are introduced, including the tunnel, the flag book, the accordion and the carousel. Students explore the visual book using found imagery and photocopy transfers and produce a variety of decorated papers to be used in their bindings. Credit 3 units.

F20 ART 3713 Introduction to Book Binding
Same as F20 Art 1714, F20 Art 2714, F20 Art 4714. Juniors (only) register for F20 Art 3714. This class serves as an introduction to the book as artifact of material culture. A variety of traditional and nontraditional book structures are explored. Students learn from historical approaches to constructing the codex form including the single signature pamphlet, the multisignature case binding, the coptic and the medieval long stitch. Students learn Japanese binding and its many variations. Several contemporary variations are introduced, including the
tunnel, the flag book, the accordion and the carousel. Students explore the visual book using found imagery and photocopy transfers, and produce a variety of decorated papers to be used in their bindings. Credit 3 units.

F20 ART 3715 Hybrid Studio
Same as F20 4715. Juniors (only) register for F20 3715. Hybrid Studio is an opportunity for undergraduate and graduate students from across the campus to engage the book as a truly interdisciplinary subject and object. This course combines equal parts seminar and applied studio experience. Historical models of the book as framework for ideas and physical artifact are studied and modeled. The intention of this course is to combine work in allied disciplines, supporting students in the integration of their chosen major areas of study and incorporating photography, painting, sculpture, design, architecture, engineering and writing and history. The class moves between group discussions and individual mentoring with regularly scheduled demonstrations of book studio equipment. Limited to junior level and above only. Prior experience in book studio courses is recommended, but not required. Undergraduates must have permission from faculty to miss major studio time on Friday afternoon to take this course. Credit 3 units.

F20 ART 3823 The Italian Renaissance in the City of Florence
This course encompasses the Renaissance from Giotto through the High Renaissance. Students are able to examine firsthand the works they are studying. Credit 3 units.

F20 ART 3824 The Italian Renaissance in the City of Florence
This course encompasses the Renaissance from Giotto through the High Renaissance. Students are able to examine firsthand the works they are studying. Included are field trips to Rome and Venice. Credit 3 units.

F20 ART 394 New Topic (Sam Fox School)
Credit 3 units.

F20 ART 396 Design, Artisanship and Sustainability as Cultural Catalyst
This course investigates the ways in which artisanship is a stimulus to design thinking and innovation. The prerequisite to the course is a 16-day trip to India over winter break where students work closely with leading Indian designers of textiles, products and architecture as well as accomplished artisans working with methods both ancient and modern. We discuss how craft informs design and how design acts as a force in entrepreneurship and job creation. A major focus of our research is investigating how craft and design are catalysts for innovation in a sustainable use of materials and water. For more information, contact Belinda Lee at Lee@samfox.wustl.edu. Students should obtain a visa on their own. Credit 3 units.

F20 ART 404A Contemporary Exhibition Studies: Maya Lin's Systematic Landscapes
Same as ARCH 404A
Credit 1 unit.

F10,F20 ART 411 Painting
Continuation of F10 ART 311-312. Advanced study in painting with individualized criticism, lectures and seminars, leading toward the development of personal idioms. Credit 10,3 units.

F10,F20 ART 411 Painting
Continuation of F10 ART 311-312. Advanced study in painting with individualized criticism, lectures and seminars, leading toward the development of personal idioms. Credit 10,3 units.

F20 ART 4115 Intensive Intermediate Painting
Same as F20 Art 2115, F20 Art 3115. Seniors (only) register for course F20 Art 4115. In this course we explore the genres of painting from the inside-out. We focus on process and technical skill as well as the political and social underpinnings of several painting genres. As the course progresses, you improve very much at oil painting, both in its traditional 20th-century use and gain some technical and conceptual experience with its contemporary manifestation. Our main focus is on perceptual studies, although we also work with notions of abstraction in painting. There are weekly homework assignments, as well as a few reading assignments. This is a very structured course, designed to develop your strengths and abilities as a painter and to further your conceptual understanding of the medium. Prerequisite: painting elective or permission of instructor. Credit 3 units.

F20 ART 4116 Intensive Intermediate Painting
Same as F20 Art 2116, F20 Art 3116. Seniors (only) register for course F20 Art 4116. In this course we explore the genres of painting from the inside-out. We focus on process and technical skill as well as the political and social underpinnings of several painting genres. As the course progresses, you improve very much at oil painting, both in its traditional 20th-century use and gain some technical and conceptual experience with its contemporary manifestation. Our main focus is on perceptual studies, although we also work with notions of abstraction in
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painting. There are weekly homework assignments, as well as a few reading assignments. This is a very structured course, designed to develop your strengths and abilities as a painter and to further your conceptual understanding of the medium. Prerequisite: painting elective or permission of instructor. Credit 3 units.

F10 ART 411A Painting: Theory and Practice
This major course of study for juniors and seniors expands the dialogue between material and cultural histories, personal experience, tradition and current practice in contemporary painting. The learning sequence consists of comprehensive investigations of painting processes and materials through assigned and self-directed projects, leading to the development of a unique body of work. Critical assessment of work produced occurs in discussion with faculty and peers. In addition to studio production, this course includes level-specific seminars and visits to galleries and museums. Required for painting majors. Prerequisites: F10 221 or 222; F10 311A and 312A. Credit 6 units.

F20 ART 411B Painting II
Same as F20 ART 311B. Seniors (only) register for F20 ART 411B. Intermediate painting focuses on the processes and concepts of oil painting. It is a structured course with an emphasis on perceptual studies as well as an overview of historical and contemporary painting issues. Students are expected to possess good drawing skills and a beginner’s familiarity with oil painting techniques. Critical readings and homework assignments are an important part of the course. College of Art majors and non-art students pursuing an art minor have priority. Prerequisite: senior standing and a beginning painting elective or permission of the instructor. Credit 3 units.

F10,F20 ART 412 Painting
Continuation of F10 ART 311-312. Advanced study in painting with individualized criticism, lectures and seminars, leading toward the development of personal idioms. Credit 10,3 units.

F10,F20 ART 412 Painting
Continuation of F10 ART 311-312. Advanced study in painting with individualized criticism, lectures and seminars, leading toward the development of personal idioms. Credit 10,3 units.

F20 ART 412B Painting II
Intermediate painting focuses on the processes and concepts of oil painting. It is a structured course with an emphasis on perceptual studies as well as an overview of historical and contemporary painting issues. Students are expected to possess good drawing skills and a beginner’s familiarity with oil painting techniques. Critical readings and homework assignments are an important part of the course. College of Art majors and non-art students pursuing an art minor have priority. Credit 3 units.

F10,F20 ART 413A Sculpture
Continuation of F10 ART 313A-314A. Exploration of advanced concepts and techniques. Involvement with larger scale, environmental relationships and architectural considerations. Processes and materials include construction in a large variety of materials, firing, plaster mold making, direct plaster work, wood and stone carving, foundry, plastics laminations, soft sculpture, welding, soldering, brazing, metalwork. Credit 10,3 units.

F10,F20 ART 413A Sculpture
Continuation of F10 ART 313A-314A. Exploration of advanced concepts and techniques. Involvement with larger scale, environmental relationships and architectural considerations. Processes and materials include construction in a large variety of materials, firing, plaster mold making, direct plaster work, wood and stone carving, foundry, plastics laminations, soft sculpture, welding, soldering, brazing, metalwork. Credit 10,3 units.

F10 ART 413D Sculpture: Theory and Practice
Contemporary practice in sculpture exists in plural modes at the intersection of diverse cultural traditions, material and process applications, and ideological positions. In this studio, students explore sculpture through sustained investigations in concept, material, media and process. Juniors and seniors participate in demonstrations, workshops and level-specific seminars that focus on individual topical research. Juniors expand their studio activity to include public art projects as part of a long-running program in University City. Seniors build a portfolio of work and prepare to enter the professional field. Critique structures are geared toward intellectual development, oral presentation and writing skills as they relate to studio practice. Required for sculpture majors. Prerequisite: F10 213 or 214; F10 313D and 314D. Credit 6 units.

F20 ART 413F Sculpture: Foundry
The focus of this course is to introduce students to the basic principles of bronze and aluminum casting according to the lost wax method. Students learn mold making, direct organic burnout, ceramic shell investment, metal chasing and patination in order to create finished sculpture. In addition to metal casting, students use other materials such as plaster, resin, steel, wood, rubber, plastic and foam to create a mixed-media project that explores a specific idea or theme. Additional work outside the regularly scheduled class time is required.
F20 ART 413G Sculpture: Wood
Same as F20 Art 113G, F20 Art 213G, F20 Art 313G. Seniors (only) register for F20 Art 413G. The focus of this course is to introduce students to the basic principles of wood sculpture with an emphasis on furniture making. College of Art majors and non-art students pursuing an art minor have priority. Prerequisite: senior standing or departmental approval. Credit 3 units.

F20 ART 413H Sculpture: Blacksmithing
This course is an introduction to blacksmithing materials, tools and techniques. Students explore the fundamental techniques of hand-forged metal. Metal can be manipulated as a plastic material and offers enormous possibilities for 3-dimensional form. In this class we explore these possibilities and expand our sculptural vocabulary. Credit 3 units.

F20 ART 413I Sculpture: Metal Fabrication
Metal is the backbone of our modern world and a viable medium for self-expression. It can be employed as structure or as surface, it can be deformed plastically to create compound shapes, or it can be connected to most any other material. Students explore the creative potential of this material in the fabrication of sculptural forms. Students learn to weld using both gas and electric arc machines and learn the safe operation of drilling, grinding and finishing tools. Credit 3 units.

F10,F20 ART 414A Sculpture
Continuation of F10 Art 313A-314A. Exploration of advanced concepts and techniques. Involvement with larger scale, environmental relationships and architectural considerations. Processes and materials include construction in a large variety of materials, firing, plaster mold making, direct plaster work, wood and stone carving, foundry, plastics laminations, soft sculpture, welding, soldering, brazing, metalwork. Credit 10,3 units.

F10,F20 ART 414A Sculpture
Continuation of F10 Art 313A-314A. Exploration of advanced concepts and techniques. Involvement with larger scale, environmental relationships and architectural considerations. Processes and materials include construction in a large variety of materials, firing, plaster mold making, direct plaster work, wood and stone carving, foundry, plastics laminations, soft sculpture, welding, soldering, brazing, metalwork. Credit 10,3 units.

F20 ART 414F Sculpture: Foundry
Same as F20 ART 114F, F20 ART 214F, F20 ART 314F. Seniors (only) register for F20 ART 414F. The focus of this course is to introduce students to the basic principles of bronze and aluminum casting according to the lost wax method. Students learn mold making, direct organic burnout, ceramic shell investment, metal chasing and patination in order to create finished sculpture. In addition to metal casting, students use other materials such as plaster, resin, steel, wood, rubber, plastic and foam to create a mixed-media project that explores a specific idea or theme. Additional work outside the regularly scheduled class time is required. Prerequisite: senior standing or departmental approval. Credit 3 units.

F20 ART 414G Sculpture: Wood
Same as F20 Art 114G, F20 Art 214G, F20 Art 314G. Seniors (only) register for F20 Art 414G. The focus of this course is to introduce students to the basic principles of wood sculpture with an emphasis on furniture making. Prerequisite: senior standing or departmental approval. Credit 3 units.

F20 ART 414I Sculpture: Metal Fabrication
Metal is the backbone of our modern world and a viable medium for self-expression. It can be employed as structure or as surface, it can be deformed plastically to create compound shapes, or it can be connected to most any other material. Students explore the creative potential of this material in the fabrication of sculptural forms. Students learn to weld using both gas and electric arc machines and learn the safe operation of drilling, grinding and finishing tools. Credit 3 units.

F20 ART 415 Printmaking
Survey of printmaking covering basic processes in intaglio, lithography, relief and monotype. Emphasis on mixed-media and experimentation with a foundation in traditional, historical and philosophical aspects of printmaking. Students are encouraged to work at a level suited to their individual technical skills and conceptual interests. Credit 3 units.

F10 ART 415A Printmaking/Drawing
Continuation of F10 Art 315A-316A. A comprehensive investigation of both traditional and experimental drawing and printmaking techniques. Students are encouraged to explore large-scale mixed-media processes with an emphasis on the development of individual images and marking styles. Students have facilities available in papermaking and printmaking with capabilities for computer and photographic techniques. Credit 10 units.
F10 ART 415B Printmaking: Theory and Practice
Students explore the spectrum of print media and culture, find points of intersection with other media and disciplines, and develop and individual, sustained investigation as an artist. Advanced techniques and concepts are imparted through participatory workshops, focusing on sets of skills such as silkscreen, etching and monotype around strategies in the field of printmaking and contemporary art. Juniors and seniors participate in level-specific seminars that are focused on topical research and critique structures, and are geared toward intellectual development, oral presentation and writing skills as they relate to studio practice. Required for printmaking majors. Prerequisites: F10 215 or 216; F10 315B and 316B. Credit 6 units.

F20 ART 416 Printmaking
Students explore various mixed-media approaches to relief printmaking in combination with collagraph, photo lithography and drawing. Relief techniques covered include wood and linoleum cuts using the black line and white line approaches. (Students are encouraged to work at a level suited to their individual technical skills and conceptual interests.). Credit 3 units.

F10 ART 416A Printmaking/Drawing
*Continuation of F10 ART 315-316, 415A. A comprehensive investigation of both traditional and experimental drawing and printmaking techniques. Students are encouraged to explore large-scale mixed-media processes with an emphasis on the development of individual images and marking styles. Students have facilities available in papermaking and printmaking with capabilities for computer and photographic techniques.* Credit 10 units.

F10,F20 ART 417A Digital Imaging and Photography
Courses deal with the establishment of the student’s personal vision and the presentation of that vision. Weekly critiques and in-class discussions are primary format, in conjunction with visiting artists and professionals. The class assists students in preparing their portfolios and provides the necessary support material to enter the post-academic environment. Credit 10,3 units.

F20 ART 417B Photography II (Black-and-White)
Course adds to the experience of Photography I (Black-and-White). Students investigate phenomena relative to the camera and photography. Students develop the vision necessary to take intelligent and articulate photographs, as well as establish the notion of high craft in terms of the negative and the print. Topics may include portrait, landscape, street photography, the figure and the photo story. Credit 3 units.

F20 ART 417E Color Photography II
The use of color negative materials and the development of a technical and aesthetic vocabulary with color materials. Use of color analyzers, masking systems and alternatives within negative color systems. Credit 3 units.

F10,F20 ART 417G Photography: Theory and Practice
Introduction to the use of a wide range of color photographic materials. Students learn the fundamentals of working with color negative films and the craft of making color prints from negatives. Emphasis on camera work with color materials and on beginning to develop a personal color vision. Credit 6,3 units.

F20 ART 417J Alternative Process Photography
(Formerly Non-Silver Photography). Same as F20 Art 217J, F20 Art 317J. Seniors (only) register for F20 Art 417J. An exploration into the use of non-silver and alternative photographic processes. The use of such processes as blue and brown printing and gum printing explored, as well as photomechanical processes such as photocopying and color photocopying. Prerequisite: Black-and-White Photography or permission of instructor. Credit 3 units.

F10,F20 ART 418A Digital Imaging and Photography
Courses deal with the establishment of the student’s personal vision and the presentation of that vision. Weekly critiques and in-class discussions are primary format, in conjunction with visiting artists and professionals. The class assists students in preparing their portfolios and provides the necessary support material to enter the post-academic environment. Credit 10,3 units.
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F10, F20 ART 418A Digital Imaging and Photography
Courses deal with the establishment of the student’s personal vision and the presentation of that vision. Weekly critiques and in-class discussions are primary format, in conjunction with visiting artists and professionals. The class assists students in preparing their portfolios and provides the necessary support material to enter the post-academic environment.
Credit 10.3 units.

F20 ART 418B Photography II (Black-and-White)
Course adds to the experience of Photography I (Black-and-White). Students investigate phenomena relative to the camera and photography. Students develop the vision necessary to take intelligent and articulate photographs, as well as establish the notion of high craft in terms of the negative and the print. Topics may include portrait, landscape, street photography, the figure and the photo story.
Credit 3 units.

F20 ART 418E Color Photography II
This course adds to the experience of Color Photography I. Students expand their knowledge and handling of color negative materials and begin to learn the basics of color printing with transparency films and reversal printing. Some advanced printing and shooting techniques covered. Emphasis on developing a personal color sensibility and producing a cohesive body of work that represents that vision.
Credit 3 units.

F20 ART 418G Color Photography I
Introduction to the use of color photographic materials using 35mm transparency and reversal printing processes, with emphasis on camera work with color materials and developing a personal color vision.
Credit 3 units.

F20 ART 418I Advanced Photography Seminar
Designed for non-art students fulfilling Art Minor requirements in the Photography Minor. Topics covered include studio lighting and large format photography.
Credit 3 units.

F20 ART 419 Ceramics
Continuation of F10 ART 319-320. Advanced ceramics/glass study focuses on the student acquiring working knowledge of a variety of available materials and technologies to develop a personal direction and pursue self-determined goals. Experimentation is encouraged in both glass and clay. This may involve working in traditional or contemporary, vessel or sculptural concepts. Available to students is a variety of materials, equipment and technical information. Ceramics, porcelain, stoneware, terra cotta and low-temperature clays are used in conjunction with extensive study of glazing and firing technology. Students explore and develop skills in Raku, low-temperature, oxidation, reduction, electric, high-temperature and pit firings.
Credit 3 units.

F20 ART 420 Ceramics
Continuation of F10 ART 319-320. Advanced ceramics/glass study focuses on the student acquiring working knowledge of a variety of available materials and technologies to develop a personal direction and pursue self-determined goals. Experimentation is encouraged in both glass and clay. This may involve working in traditional or contemporary, vessel or sculptural concepts. Available to students is a variety of materials, equipment and technical information. Ceramics, porcelain, stoneware, terra and low-temperature clays are used in conjunction with extensive study of glazing and firing technology. Students explore and develop skills in Raku, low-temperature, oxidation, reduction, electric, high-temperature and pit firings.
Credit 3 units.

F10 ART 423 Fashion Design
Original design concepts are developed in sketch, pattern and muslin stages, prior to constructing each garment. Senior Design Studio is professionally equipped, affording the student an opportunity to work in design room setting. Fashion drawing develops techniques and skills necessary for preparing a senior portfolio. Designer-critics work with students on specific design problems in the development of a senior collection. Garments are reviewed by a jury in the spring semester and selected for the annual student fashion show — a professional showcase for student work.
Credit 10 units.

F20 ART 423A Fashion Design (Surface Textile Design)
Same as F20 Art 123A, F20 Art 223A, F20 Art 323A. Seniors only register of F20 Art 423A. Introductory study of textiles, beginning with study of the basic fibers used in textile production, through weaving, knitting, dyeing, printing and finishing. Class format includes lectures, field trips, garment study and a variety of creative projects that replicate current textile production techniques such as weaving, silkscreen, dyeing and printing.
Credit 3 units.

F20 ART 423D Fashion Design 2-D
Designed to familiarize students with techniques and materials used in drawing flats, floats, croquis, specs and illustrations for fashion design. Design problems associated with designing groups, collections and lines of apparel for popular and selected consumption are included.
F20 ART 423E Fashion Design 3-D
Designed to familiarize students with the equipment and technology peculiar to a career in fashion design. Emphasis on increased awareness of the capabilities of the materials and equipment. Development of skills peculiar to apparel design, and appreciation of the processes involved in the design and manufacturing of apparel.
Credit 3 units.

F20 ART 423G Fashion: Textile Design
Same as F20 ART 123G, F20 ART 223G, F20 ART 323G.
Seniors (only) register for F20 ART 423G. Introductory study of textiles, beginning with study of the basic fibers used in textile production, through weaving, knitting, dyeing, printing and finishing. Class format includes lectures, field trips, garment study and a variety of creative projects that replicate current textile production techniques such as weaving, silkscreen, dyeing and printing. College of Art majors and non-art students pursuing an art minor have priority. Prerequisite: senior standing or departmental approval.
Credit 3 units.

F10 ART 424 Fashion Design
Original design concepts are developed in sketch, pattern and muslin stages, prior to constructing each garment. Senior Design Studio is professionally equipped, affording the student an opportunity to work in design room setting. Fashion drawing develops techniques and skills necessary for preparing a senior portfolio. Designer-critics work with students on specific design problems in the development of a senior collection. Garments are reviewed by a jury in the spring semester and selected for the annual student fashion show — a professional showcase for student work.
Credit 10 units.

F20 ART 424D Fashion Design 2-D
Designed to familiarize students with techniques and materials used in drawing flats, floats, croquis, specs and illustrations for fashion design. Design problems associated with designing groups, collections and lines of apparel for popular and selected consumption are included.
Credit 3 units.

F20 ART 424E Fashion Design 3-D
Designed to familiarize students with the equipment and technology peculiar to a career in fashion design. Emphasis on increased awareness of the capabilities of the materials and equipment. Development of skills peculiar to apparel design, and appreciation of the processes involved in the design and manufacturing of apparel.
Credit 3 units.

F20 ART 424I Fashion: Textile Design
Introductory study of textiles, beginning with study of the basic fibers used in textile production, through weaving, knitting, dyeing, printing and finishing. Class format includes lectures, field trips, garment study and a variety of creative projects that replicate current textile production techniques such as weaving, silkscreen, dyeing and printing.
Credit 3 units.

F20 ART 427A History of Photography
Survey of the history of photography and a look at the medium from the camera obscura to contemporary developments. Social and technological developments examined in terms of their influence on the medium.
Credit 3 units.

F20 ART 428A History of Photography
Survey of the history of photography and a look at the medium from the camera obscura to contemporary developments. Social and technological developments examined in terms of their influence on the medium.
Credit 3 units.

F20 ART 429D Special Topics
Credit 3 units.

F20 ART 430D Special Topics: Beyond Words, Beyond Images: Representation After History
Credit 3 units.

F10 ART 431 Visual Communication: Advertising Design
Continuation of F10 Art 331 and F10 Art 332 Visual Communication: Advertising Design, with advanced projects in advertising design and the development of a professional portfolio. Options within the major include History of Graphic Design, a senior studio working with actual clients, and internships.
Credit 10 units.

F20 ART 433 Visual Communication: Graphic Design
Continuation of F10 ART 333 and F10 ART 334 Visual Communication: Graphic Design, with advanced projects in graphic design, a senior thesis project, and the development of a professional portfolio. Options within the major include History of Graphic Design, senior design studio working with actual clients, and internships.
Credit 3 units.
Continuation of F10 ART 333, F10 ART 334 and F10 ART 433 with advanced projects in graphic design, a senior thesis project, and the development of a professional portfolio. Options within the major include History of Visual Communication, senior design studio working with actual clients, and internships. Credit 3 units.

F20 ART 434L Material Study: History, Technology and Design: Concrete
Same as ARCH 434L
Credit 3 units.

F20 ART 4354 Readings in Post-war American Visual Culture: 1945–1965
This course explores the interpretation of visual artifacts from the post-war period in America, including book and periodical illustration, animation design in film and television, and package design for music and consumer products. A basic grounding in visual modernism is established. Readings include John Updike’s *Rabbit Run*, Betty Friedan’s *The Feminine Mystique*, David Halberstam’s *The Fifties*, Ben Shahn’s *The Shape of Content*, and other works. Students draw on the resources of the Modern Graphic History Library at Washington University to view, read and explicate primary materials from the period. One research report and a major paper are required. Credit 3 units.

F20 ART 4355 Drawing Conclusions
When Harper’s Weekly published its first issue in 1857, not a single image appeared on the front page. Within five years, wood-engraved pictures dominated the publication. In the process, a new profession was created: that of the artist-correspondent. Baudelaire called such people flaneurs, or passionate observers. Others saw them as visual stenographers. This course addresses the artist-correspondent as a cultural figure, shifting conceptions of the press, and modes of visual reportage. The course focuses primarily on illustration, but also touches upon photojournalism, newsreels, television news and contemporary social media. We draw on the periodical illustration collections of the Modern Graphic History Library. The student selects a research topic and presents findings to the seminar, culminating in a substantial paper/project. NOTE: The illustrated newspaper was an international phenomenon from the mid-19th century to the turn of the 20th century. Such publications provided a first chapter in the development of global visual culture. Research projects that focus on international publications are supported if sufficient language skills and subject knowledge can be established. Credit 3 units.

F20 ART 435A Interaction Design Workshop: Introduction to Research About People
A deep understanding of people with an emphasis on behavior is central to contemporary design, as IDEO’s Tim Brown explained in the *Harvard Business Journal* in 2008. This workshop introduces students from all disciplines across the university to ethnography data communication and synthesis as a way to begin the process of designing effective and innovative interactive tools. Credit 1 unit.

F10 ART 435B Interaction Design Workshop: Introduction to (Rapid) Prototyping
Students learn a broadly relevant process for generating ideas and prototypes quickly, based on user and context insight. This workshop is open to students from all disciplines across the university. Credit 1 unit.

F10 ART 435C Interaction Design Workshop: Visualizing Data
Information visualization has permeated much of online media. This workshop challenges Communication Design majors to create an interactive data visualization. Senior standing; College of Art majors only. Credit 1 unit.

F10 ART 435D Interaction Design Workshop: Building a Mobile App
Communication Design majors work in groups to develop a prototype application for a mobile device, targeted to a particular, universal challenge. Prerequisites: F10 435A, 435B and 435C. Senior standing; College of Art majors only. Credit 2 units.

F20 ART 435F Interactivity and Web Design
This course combines investigations of image construction and edging, typography and basic issues in interactivity to explore the world of interface design and beginning web development. Credit 3 units.

F20 ART 435G The Licensed Image: Development and Distribution
An introduction to the concept of image development, design, market distribution and methodology for creating licensed products. Projects involve product idea development, market and the development of image-driven products using images, design and writing. Traditional drawing skills not required. Students may work by hand or on the computer. Ideal course for College of Art students whose work focuses on images, Visual Communications minors, and students outside the College of Art interested in developing visual products, including business students. Credit 3 units.
F20 ART 435I Communication Design I
An introduction to the field of communication design, combining principles from the fields of graphic design, advertising and illustration/image construction. Through studio exercises and lectures, students are exposed to the broad range of conceptual, aesthetic and strategic issues inherent to the field. Additionally, the similarities, differences and points of overlap within the three areas are discussed. Strongly recommended for students considering the Communication Design major. An excellent introduction to the subject as a tool for business and marketing. Credit 3 units.

F20 ART 435J Introduction to Animating in Three Dimensions
This course explores 3-D animation in the short film format. Students move from an overview of the process and visual vocabulary of animation to defining filmic ideas, the visual gag and character-driven content. Cinematic shot design, timing, character design and sound design are studied for determining the most effective means of communicating desired content. Hand-drawn sketches are imported into a 3-D animation program as the basis to model and animate characters, create settings and add special effects. An animated sequence is produced to show evidence of personal inquiry and level of expertise. Prerequisite: F10 ART 101 Drawing or equivalent or permission of instructor. Credit 3 units.

F20 ART 435L Communication Design and Business
This course provides an introduction to business communications in a visual environment. Subjects addressed include visual organization, introductory typography, basic identity development, message construction and business presentation development. Credit 3 units.

F20 ART 436F Interactivity and Web Design
This course combines investigations of image construction and editing, typography and basic issues in interactivity to explore the world of interface design and beginning web development. Credit 3 units.

F20 ART 436G The Licensed Image: Development and Distribution
An introduction to the concept of image development, design, market distribution and methodology for creating licensed products. Projects involve product idea development, market and the development of image-driven products using images, design and writing. Traditional drawing skills not required. Students may work by hand or on the computer. Ideal course for College of Art students whose work focuses on images, Visual Communications minors, and students outside the College of Art interested in developing visual products, including business students. Credit 3 units.

F20 ART 436I Communication Design I
An introduction to the field of communication design, combining principles from the fields of graphic design, advertising and illustration/image construction. Through studio exercises and lectures, students are exposed to the broad range of conceptual, aesthetic and strategic issues inherent to the field. Additionally, the similarities, differences and points of overlap within the three areas are discussed. Strongly recommended for students considering the Communication Design major. An excellent introduction to the subject as a tool for business and marketing. Credit 3 units.

F20 ART 436J Introduction to Animating in Three Dimensions
This course explores 3-D animation in the short film format. Students move from an overview of the process and visual vocabulary of animation to defining filmic ideas, the visual gag and character-driven content. Cinematic shot design, timing, character design and sound design are studied for determining the most effective means of communicating desired content. Hand-drawn sketches are imported into a 3-D animation program as the basis to model and animate characters, create settings and add special effects. An animated sequence is produced to show evidence of personal inquiry and level of expertise. Prerequisite: F10 ART 101 Drawing or equivalent or permission of instructor. Credit 3 units.

This course explores the function of information in visual design in a wide variety of contexts. Students develop multiple kinds of information (from analytic to poetic) and employ a variety of approaches for conceptual and visual realization. Deliverables include books, maps and presentations; motion graphics optional. Students must enroll in any two courses numbered F10 437x at times that do not conflict. Prerequisites: F10 337B, 337C, 337D, 338B, 338C, 338D. Senior standing, College of Art majors only. Credit 5 units.

F10 ART 437C Communication Design: Voice
Type and image work together to foment social awareness and political change. Poster, magazine, book, newspaper, flyer, advertising design and the web are all media that directly influence public opinion, alter our perceptions and expose social and political ills. This course integrates research, writing and design to voice perspectives on current issues. Students must enroll in any two courses numbered F10 437x at times that do
not conflict. Prerequisites: F10 337B, 337C, 337D, 338B, 338C, 338D. Senior standing, College of Art majors only.
Credit 5 units.

**F10 ART 437D Communication Design: Vision (and the Brain)**
Studying the physical and cognitive function of the visual stream is an important step in understanding the many factors influencing interpretation of visual design. Students conduct directed research on one aspect of the visual processing stream, design fundamental visual models and author a chapter based upon their research which is part of a publication produced by the class. Emphasis on research, authorship and publication design. Students must enroll in any two courses numbered F10 437x at times that do not conflict. Prerequisites: F10 337B, 337C, 337D, 338B, 338C, 338D. Senior standing, College of Art majors only.
Credit 5 units.

**F10 ART 437E Communication Design: Editorial Illustration**
This class focuses entirely on the professional practice of conceptual illustration for editorial venues. We practice the methodology of creating visual metaphors, visualizing concise ideas and working under short deadlines. The projects cover the range of editorial image making in the professional world today including portraiture, multiple images, working with text/layouts, time and color restrictions, Op-Ed and difficult art direction. Students must enroll in any two courses numbered F10 437x at times that do not conflict. Prerequisites: F10 337B, 337C, 337D, 338B, 338C, 338D. Senior standing, College of Art majors only.
Credit 5 units.

**F10 ART 437F Communication Design: Motion Graphics II**
Students are introduced to motion applications taken from various contexts of graphical motions and computer-animated information. Channels for this course include public interest motion, i.e., title sequence design, animated logos/brands, mobile phone graphic applications and kiosk/museum display graphics. Students develop kinetic and informational sequences for the screen to explore the public interest motion, applying methodological guidelines that articulate motion grouping principles to influence interpretation and that ensure efficient communication of expressive content. Students must enroll in any two courses numbered F10 437x at times that do not conflict. Prerequisites: F10 337B, 337C, 337D, 338B, 338C, 338D. Senior standing, College of Art majors only.
Credit 5 units.

**F10 ART 437G Communication Design: Visual Worlds: Image Development for Illustrators and Cartoonists**
All professional cartoonists and illustrators must bring a coherent vision and reliable approach to their work. Each successful practitioner builds his/her own world, guided by a set of conceptual and visual "rules" that emerge over time. This course poses a series of problems designed to identify the visual themes, formal properties and conceptual patterns present in the work of every student. Shared studio projects yield to directed assignments. Focused research, methodological experimentation and class critique play important roles in the course. Students should be well advanced toward the definition and development of an appropriate individualized visual signature in pictorial work. Applicable to anticipated career directions in illustration, comics, visual development for animation and image licensing. Students must enroll in any two courses numbered F10 437x at times that do not conflict. Prerequisites: F10 337B, 337C, 337D, 338B, 338C, 338D. Senior standing, College of Art majors only.
Credit 5 units.

**F10 ART 437H Communication Design: Illustrating Texts**
Most illustration is in service of a verbal concept, typically a form of text. Using different applied outcomes — nonfiction and fiction illustration, including graphic novels/mini comics and advertising — this studio introduces different strategies for visualizing texts. Students should have a coherent set of methodologies to draw upon when setting the communication goals for their illustrations. Along with producing illustrations, students write both analyses of assigned texts and are responsible for creating and writing their final project. Students must enroll in any two courses numbered F10 437x at times that do not conflict. Prerequisites: F10 337B, 337C, 337D, 338B, 338C, 338D. Senior standing, College of Art majors only.
Credit 5 units.

**F20 ART 4386 The Art of Advertising**
This course introduces students to the field by defining the role of advertising in American culture and economy. It begins by exploring the evolving and devolving aspects of American advertising and the forces that both compel and repel consumer audiences. The class explains the processes and criteria that, when properly utilized, elevate advertising and validate it as an art form. The course consists of lectures and visiting instructors, brief essay quizzes and a series of exercises designed to acquaint each student with administrative and creative processes and various disciplines within the advertising field. Major emphasis is placed upon the creative disciplines.
Credit 3 units.

**F10 ART 438B Communication Design: Designer as Author**
What are the principles of authorship? How do we set out to develop content for publication? What role could a designer have in shaping that content? Can design itself function as content? These questions and others are confronted and challenged in a semester-long capstone project. Each student produces a project, ambitious in scope, in which they act as both author and designer. The work may be either print or screen-based, but
must have a rationale for being one or the other. This course is appropriate for developing graphic designers, writers, visual journalists, art directors and students seeking to enter the publishing industry. Topic definition occurs before the winter break in consultation with the professor. Co-requisites: Students must enroll in any two courses numbered F10 438x at times that do not conflict. Prerequisites: F10 337B, 337C, 337D, 338B, 338C, 338D. Senior standing, College of Art majors only.
Credit 5 units.

F10 ART 438C Communication Design: Information Design—Building Sets
Students investigate subject areas drawing on a body of data provided by the instructor, which may include material from the fields of health, culture studies and the sciences. Two projects are assigned to enable students to create contemporary visual products from the source data. Students choose from a menu of formats: print or online journalism; maps; multiframe animations; touch-screen or product/service designs; and other such visualizations. This course emphasizes content development, targeted visual exploration, and the development of a system of designs across multiple-media forms and modes. This course is appropriate for developing information designers, graphic designers, content developers, visual journalists and art directors. Corequisites: Students must enroll in any two courses numbered F10 438x at times that do not conflict. Prerequisites: F10 337B, 337C, 337D, 338B, 338C, 338D. Senior standing, College of Art majors only.
Credit 5 units.

F10 ART 438D Communication Design: Illustrated Fiction — A Sustained Investigation
Students select a work of fiction [a poetry collection, a novel, a short story collection, a children’s tale or mythological narrative] of sufficient length and depth to accommodate a minimum of 15 story illustrations, including one double page spread and three additional images for cover, title page and dedication — making a total of 18. Text and image relationships are addressed and considered, leading to a final project that includes both. This course is appropriate for developing illustrators, writers, art directors and students seeking to enter the publishing industry. Topic definition occurs before the winter break in consultation with the professor. Students must enroll in any two courses numbered F10 438x at times that do not conflict. Prerequisites: F10 337B, 337C, 337D, 338B, 338C, 338D. Senior standing, College of Art majors only.
Credit 5 units.

F10 ART 438E Communication Design: Nonfiction Illustrated for Page and Screen
This course is devoted to the development and production of a visual book or screen-based illustrated work which communicates nonfictional content. Project content is produced in one of two ways: onsite social observation and reportage (example: the culture of amateur wrestling), or the presentation of preexistent factual material (e.g., the evolution of hominids). In the latter case, the student is expected to present evidence of substantial subject knowledge before the project begins. Screen-based texts may be typeset or delivered through the use of a soundtrack. This course is appropriate for developing illustrators, writers, visual journalists, story artists and designers for image-driven contexts. Topic definition occurs before the winter break in consultation with the professor. Co-requisites: Students must enroll in any two courses numbered F10 438x at times that do not conflict. Prerequisites: F10 337B, 337C, 337D, 338B, 338C, 338D. Senior standing, College of Art majors only.
Credit 5 units.

F10 ART 438F Communication Design: Exhibition Design
This course exposes students to the fundamental principles of exhibition design. We begin through the translation of a 2-dimensional design to one that is 3-dimensional. Issues of scale, line, shape and form in space, and the translation of typographic material to human scale make up the focus of the first assignment. The second assignment focuses on how space may be used expressively to translate a historic, social or scientific event into a more visceral experience for the viewer. The final project is based on subject matter of the student’s choice. Final designs are presented as Illustrator drawings: to scale elevations and plan views, along with rough working models. Photography is used as a design tool. The class takes a field trip (required) to Washington, D.C., as part of the work of the course. Corequisites: Students must enroll in any two courses numbered F10 438x at times that do not conflict. Prerequisites: F10 337B, 337C, 337D, 338B, 338C, 338D. Senior standing, College of Art majors only.
Credit 5 units.

F10 ART 438G Communication Design: The Narrative Sketchbook
The sketchbook has long been seen as an artist’s greatest internal resource. In this course, students make images that explore visual narratives — but the raw materials for these stories come from exploration inside the pages of their sketchbook. This course develops the vital discipline of daily drawing. The assignments include both conceptual and applied projects such as illustrated book jackets and short stories. Significant time is spent in media exploration, technical mastery and professional practices. Co-requisites: Students must enroll in any two courses numbered F10 438x at times that do not conflict. Prerequisites: F10 337B, 337C, 337D, 338B, 338C, 338D. Senior standing, College of Art majors only.
Credit 5 units.

F10 ART 438H Communication Design: Motion/Web Design — Visualizing Information in Time
In this class, we explore motion, sound and interactivity to produce dynamic visual information for the screen. The first assignment reviews differences and similarities between print-based media and motion design. The second assignment creates a real-time production using interactivity and concurrency. The final project includes theme development, self-running (synchronized) diagrams and animation. Incorporating sound effects and/or music is required for all projects. We intend to gather and upload all three projects for a website. For example, the first assignment is used for a banner, the second assignment is used for an optional link, and the final project is used as the main information of the website. Software for this course includes Illustrator and Photoshop; Flash and/or After Effects for motion, and Dreamweaver for web editing. This course focuses more on the quality of ideas and the structuring of visual information in time than on software instruction. Corequisites: Students must enroll in any two courses numbered F10 438x at times that do not conflict. Prerequisites: F10 337B, 337C, 337D, 338B, 338C, 338D. Senior standing, College of Art majors only. Credit 5 units.

F10 ART 438I Communication Design: Visual Identities and Symbols
This course builds on previously learned graphic design principles including a continued investigation of typography and its application. Students explore the representation of abstract ideas in the form of symbols for the purpose of building identity. The class focuses on the development of visual identity through a systems approach to design with application to various printed collateral. This course prepares students to design a symbol, a logotype, stationery system, and collateral products, keeping the identity consistent and intact throughout the process. Students must enroll in any two courses numbered F10 438x at times that do not conflict. Prerequisites: F10 337B, 337C, 337D, 338B, 338C, 338D. Senior standing, College of Art majors only. Credit 5 units.

F10 ART 438K Communication Design: Informational Books
Students enrolled in InfoBooks select a subject and create a single or set of books. The project moves from content development and research to concept, visual development, and final execution and craft. Emphasis is placed on clear communication of the content through a mix of complementary visual languages (typographic, information design, photographic, illustrated, etc.). Appropriate for students who are interested in pursuing professional work in publishing, book design, information design and brand/print collateral literature. Students must enroll in any two courses numbered F10 438x at times that do not conflict. Prerequisites: F10 337B, 337C, 337D, 338B, 338C, 338D. Senior standing, College of Art majors only. Credit 5 units.

F20 ART 439A History of Communication Design
Historical development of communication design based on a survey of significant artists and designers and the ideas, styles, movements, forces and individuals who influenced their work. This course is a component of the Communication Design major. Credit 3 units.

F20 ART 445 Topics in the History of Book Illustration: The Book as Subject
Within the past half-century, the book has moved from periphery to center, becoming the subject of an expanding body of work by writers and artists. Its formal qualities and physical processes, its habitual means of organizing, its strengths, its limitations, and the meanings we attach to them, have become the subject of seemingly self-conscious, inward-looking books, Postmodern as if by definition, playfulness and irony attend these works, and their complexities and subtleties often prove elusiveness a virtue. They command a reshaping of our sense of how books, texts and illustrations react to and interact with one another, and how a reader/viewer experiences and makes sense of them. We look at work by Vladimir Nabokov, Julio Cortazar, Italo Calvin, William H. Gass, Samuel Beckett, Jasper Johns, Tom Phillips, Anselm Kiefer, Susan Baron, Peter Greenaway and others. This seminar explores aspects of the history of image and text conjoined in the Western book, at once an object and a concept, a thing experienced and a conduit, a means of transmission. Utilizing a variety of analytical and critical approaches — psychoanalytical, deconstructive, New Historicism — we examine the ways in which texts and images make and unmake meanings. Students are asked to write two papers, one brief (six to eight pages), the other more extended (12 to 20 pages), and to give one in-class presentation. Special topics rotate from semester to semester. Credit 3 units.

F20 ART 446 Topics in the History of Book Illustration: Technologies and Empires: The Book in the Age of Victoria
The history of 19th-century book illustration is the story of the search for an ever more perfect and more direct medium of reproduction, gradually eliminating the layers of artisans between the artist and the finished page, from the steel engravings of Cruikshank and Phiz early in the century through the reemergence of wood cut in the form of wood engraving to lithography and chromolithography to the increasing use of photography. By century’s end, the photograph offered what seemed to some the perfect, nearly unimpeding medium for artistic expression, eliminating the intercessions of engravers and artisans: the eye’s triumph over the hand. In photography, the artist’s “pure vision” could be discovered and, perhaps more importantly, readily reproduced within a text, as advances made it possible to produce typographically compatible plates, merging text and image into a single reproductive process. Yet technology ran counter to the developing aesthetic theories and to the unfolding trends of high art and low. In an ever more
mechanized age, the hand-crafted, the unique, the anciently
done underwent a renaissance, a reevaluation. Both Pater and
the Arts and Crafts Movement set themselves against the new
age, reclaiming for a luxuriant market processes that had once
been commonplace for all production. Aesthetics experienced
itself as nostalgia, and merged a hatred of industrialized life
and its cheapened products with the moral injunction to purity
and simplicity. This seminar explores aspects of the history of
image and text conjoined in the Western book, at once and
object and a concept, a thing experienced and a conduit, a
means of transmission. Utilizing a variety of analytical and critical
approaches — psychoanalytical, deconstructive, New Historicist
— we examine the ways in which texts and images make and
unmake meanings. Students are asked to write two papers,
one brief (six to eight pages), the other more extended (12 to
20 pages), and to give one in-class presentation. Special topics
rotate from semester to semester.
Credit 3 units.

F20 ART 447 The Illustrated Book: Design and Production
An investigation of text, image, design and production within
the broad realm of illustrated books. A series of exploratory
exercises in the beginning of the semester yields to a single
sustained project proposed and developed by the student.
Project emphases may include visual narrative, textual
interpretation, creative writing, typography, structure and
sequencing, and material investigation. Production methods
may include relief and letterpress; engraving and intaglio; offset
lithography; and digital, “virtual” media. Certain projects may
require a second semester of study to complete.
Credit 3 units.

F20 ART 4472 Topics in the Illustrated Book: Advanced
Topics in the Book
This class is intended for students who have taken “Special
Topics in the Illustrated Book: Design and Production” and desire
to do advanced work. This course is a further examination of
the book structure and relationship of content to form. Special
attention is paid to integration of text and image and to a variety
of compositional techniques with image as well as text. Students
are expected to begin the semester with a concept for an
advanced book project and spend the semester in consultation
with the instructor and in intensive investigation of the book form.
Demonstrations of advanced techniques accompany lectures.
Primary modes of production include letterpress and computer
applications, among others.
Credit 3 units.

F20 ART 448 The Illustrated Book: Design and Production
An investigation of text, image, design and production within
the broad realm of illustrated books. A series of exploratory
exercises in the beginning of the semester yields to a single
sustained project proposed and developed by the student.
Project emphases may include visual narrative, textual
interpretation, creative writing, typography, structure and
sequencing, and material investigation. Production methods
may include relief and letterpress; engraving and intaglio; offset
lithography; and digital, “virtual” media. Certain projects may
require a second semester of study to complete.
Credit 3 units.

F20 ART 4481 The Illustrated Book: Design and Production
An investigation of text, image, design and production within
the broad realm of illustrated books. A series of exploratory
exercises in the beginning of the semester yields to a single
sustained project proposed and developed by the student.
Project emphases may include visual narrative, textual
interpretation, creative writing, typography, structure and
sequencing, and material investigation. Production methods
may include relief and letterpress; engraving and intaglio; offset
lithography; and digital, “virtual” media. Certain projects may
require a second semester of study to complete.
Credit 3 units.

F10,F20 ART 450 Independent Study
Designed for seniors fulfilling art minor requirements. Permission
of instructor and submission of a written proposal to the
associate dean of students (Room 1, Bixby Hall).
Credit -3 unit.

F10,F20 ART 450 Independent Study
Designed for seniors fulfilling art minor requirements. Permission
of instructor and submission of a written proposal to the
associate dean of students (Room 1, Bixby Hall).
Credit -3 unit.

F20 ART 455A Urban Books: Imag(en)ing St. Louis
Since the beginning of the 20th century, art, architecture and
urbanism together have investigated the production of images
that shape the symbolic dimension of our experience of large
cities. This seminar critically embraces this tradition and brings
together different methodologies for the visual analysis and
representation of contemporary urban phenomena, using St. Louis as a focal point. The goal is to design and produce individual books as a result of research, visual documentation, readings and discussions in seminar and workshop structure. Each student selects and develops a theme related to the urbanization of St. Louis that are organized into books that present how this metropolitan area has been conceived through images. The course is divided into three parts combining readings, research and design activities, each of which culminates in the presentation of an individual project; a total of two study books; and a final book.

Seniors (only) register for F20 ART 4713. This class serves as an introduction to the book as artifact of material culture. A variety of traditional and nontraditional book structures are explored. Students learn from historical approaches to constructing the codex form, including the single signature pamphlet, the multisignature case binding, the coptic and the medieval long stitch. Students learn Japanese binding and its many variations. Several contemporary variations are introduced, including the tunnel, the flag book, the accordion and the carousel. Students explore the visual book using found imagery and photocopy transfers and produce a variety of decorated papers to be used in their bindings.

Credit 3 units.

F20 ART 4713 Introduction to Book Binding

Same as F20 ART 1713, F20 ART 2713, F20 ART 3713. Seniors (only) register for F20 ART 4713. This class serves as an introduction to the book as artifact of material culture. A variety of traditional and nontraditional book structures are explored. Students learn from historical approaches to constructing the codex form, including the single signature pamphlet, the multisignature case binding, the coptic and the medieval long stitch. Students learn Japanese binding and its many variations. Several contemporary variations are introduced, including the tunnel, the flag book, the accordion and the carousel. Students explore the visual book using found imagery and photocopy transfers and produce a variety of decorated papers to be used in their bindings.

Credit 3 units.

F20 ART 4714 Introduction to Book Binding

Same as F20 ART 1714, F20 ART 2714, F20 ART 3714. Seniors (only) register for F20 ART 4714. This class serves as an introduction to the book as artifact of material culture. A variety of traditional and nontraditional book structures are explored. Students learn from historical approaches to constructing the codex form, including the single signature pamphlet, the multisignature case binding, the coptic and the medieval long stitch. Students learn Japanese binding and its many variations. Several contemporary variations are introduced, including the tunnel, the flag book, the accordion and the carousel. Students explore the visual book using found imagery and photocopy transfers and produce a variety of decorated papers to be used in their bindings.

Credit 3 units.

F20 ART 4715 Hybrid Studio

Same as F20 ART 3715. Seniors (only) register for F20 4715. Hybrid Studio is an opportunity for undergraduate and graduate students from across the campus to engage the book as a truly interdisciplinary subject and object. This course combines equal parts seminar and applied studio experience. Historical models of the book as framework for ideas and physical artifact are studied and modeled. The intention of this course is to combine work in allied disciplines, supporting students in the integration of their chosen major areas of study and incorporating photography, painting, sculpture, design, architecture, engineering and writing and history. The class moves between group discussions and individual mentoring with regularly scheduled demonstrations of book studio equipment. Limited to junior level and above only. Prior experience in book studio courses is recommended, but not required.
Undergraduates must have permission from faculty to miss major studio time on Friday afternoon to take this course. Credit -3 unit.

F20 ART 476 Approach: A Studio in Publication Design
Same as A46 476.
Same as ARCH 476
Credit 3 units.

F20 ART 484D Space, Society and the Digital
Same as ARCH 484D
Credit 3 units.

F20 ART 494 Advanced Visualization Studio: Research
Credit 3 units.

F20 ART 496 Design, Artisanship and Sustainability as Cultural Catalyst
This course investigates the ways in which artisanship is a stimulus to design thinking and innovation. The prerequisite to the course is a 16-day trip to India over winter break where students work closely with leading Indian designers of textiles, products and architecture as well as accomplished artisans working with methods both ancient and modern. We discuss how craft informs design and how design acts as a force in entrepreneurship and job creation. A major focus of our research is investigating how craft and design are catalysts for innovation in a sustainable use of materials and water. For more information, contact Belinda Lee at Lee@samfox.wustl.edu. Students should obtain a visa on their own. Credit 3 units.

Sam Fox School of Design & Visual Arts
Carmon Colangelo, MFA
Dean
E. Desmond Lee Professor for Collaboration in the Arts

Peter MacKeith, BA, MArch
Associate Dean

Georgia Binnington, BA
Associate Dean of Students

College of Architecture/Graduate School of Architecture & Urban Design
Bruce Lindsey, A.I.A., MFA, MArch
Dean

E. Desmond Lee Professor for Community Collaboration
Kathryn Dean, M.Arch.
Director of the Graduate School of Architecture & Urban Design
JoAnne Stolaroff Cotsen Professor of Architecture

College of Art/Graduate School of Art
Buzz Spector, MFA
Dean
Jane Reuter Hitzeman and Herbert F. Hitzeman Jr. Professor of Art

Patricia Olynyk, MFA
Director of the Graduate School of Art
Florence and Frank Bush Professor of Art

Mildred Lane Kemper Art Museum
Sabine Eckmann, PhD
William T. Kemper Director and Chief Curator

The Sam Fox School of Design & Visual Arts is a unique collaboration in architecture, art and design education, linking professional studio programs with one of the country’s finest university art museums in the context of an internationally recognized research university.

The Sam Fox School is composed of the College of Architecture, the Graduate School of Architecture & Urban Design, the College of Art, the Graduate School of Art and the Mildred Lane Kemper Art Museum.

The College of Art, founded in 1879, was the first professional, university-affiliated art school in the United States. In the 1940s, its broad-based core program helped set the standards for the bachelor of fine arts degree. Faculty over the years have included Max Beckmann, Philip Guston and other internationally known artists.

The College of Architecture, established in 1910, was one of eight founding members of the Association of Collegiate Schools of Architecture (ACSA). In 1962, Architecture launched one of the nation’s first Master of Urban Design programs. Four winners of the Pritzker Prize, considered architecture’s highest honor, have taught at the school.

The Mildred Lane Kemper Art Museum dates back to 1881, making it the first art museum west of the Mississippi River. The collection has historically focused on contemporary work. Today the Kemper Art Museum holds roughly 3,500 important paintings, sculptures, photographs, and installations by 19th-, 20th- and 21st-century American and European artists, along with significant antiquities and a large number of prints and drawings.
Additional collaborative opportunities are provided by the Department of Art History & Archaeology in Arts & Sciences and the Kenneth and Nancy Kranzberg Art & Architecture Library.

Inquiry, Creativity and Synthesis

The Sam Fox School offers rigorous art and architecture education at both the undergraduate and graduate levels, within the unique context of an independent, nationally prominent research university.

The student body is composed of approximately 300 undergraduate and 50 graduate students in Art, as well as 200 undergraduate and 280 graduate students in Architecture. In all, they represent 17 countries, 47 states and the District of Columbia. Roughly 30 percent of undergraduates pursue combined studies within another University area.

Both core and advanced studios integrate contemporary theory and practice. Among the innovative programs are:

- Multidisciplinary courses co-taught by Art, Architecture and Art History & Archaeology faculty. Recent seminars have explored the history of illustrated entertainment, combined urban theory with book design and production, and crafted a variety of online publications. Courses in exhibition studies are being offered and a new program of exhibition studies is under development.
- International studios in Barcelona, Buenos Aires, Florence and Helsinki are taught by Washington University faculty and offer a range of distinctive programs in art and architecture.
- Community projects include the University City Sculpture Series, which funds student-designed public artworks; WashUCity, a mentoring program for local high school artists; and Architecture’s Building Community/Community Building, which explores relationships between St. Louis’ inner city, nearby municipalities and outlying suburbs.

Uniting Creativity and Scholarship

The Sam Fox School boasts a unique combination of academic and intellectual resources.

The Architecture faculty includes practicing architects, urban designers and landscape architects as well as eminent architectural theorists and historians and a select number of international visitors. The resident, full-time faculty members have won national and regional awards for design excellence and planning, including more than two dozen from the American Institute of Architects alone.

Art’s full-time faculty members include prominent painters, sculptors, printmakers and mixed-media artists as well as leading illustrators, graphic designers, fashion designers and photographers. In the past decade, design faculty have won numerous professional honors while fine art faculty have been featured in more than 100 solo exhibitions and 300 group shows on five continents.

The nationally recognized Kemper Art Museum maintains a vital program of exhibitions, publications and educational events. Major thematic shows are drawn from institutions and private collections around the world, while the Contemporary Projects Series highlights nationally and internationally emerging artists. The acclaimed permanent collection includes key works by modern and contemporary artists from Henri Matisse, Pablo Picasso and Jackson Pollock to Christian Boltanski, Candida Hofer and Olafur Eliasson.

Public events include concerts, film screenings, lectures and discussions with distinguished visitors, and museum tours led by student docents. The museum also provides workspace for faculty- and student-curated exhibitions (usually relating to Sam Fox School curriculum). Courses in Art History and Archaeology further complement the critical and practical study of exhibitions while facilitating student involvement in professional curatorial projects.

A Comprehensive Campus

The Sam Fox School is housed in a comprehensive, five-building campus for design and the visual arts. Conceived around a central courtyard, it both reflects and updates Washington University’s original campus plan, developed in 1895 by Frederick Law Olmstead, the founder of American landscape architecture.

The architectural centerpiece is prize-winning Japanese architect Fumihiko Maki’s Kemper Art Museum. This elegant, 65,000-square-foot limestone clad structure — a gathering point for scholars and the general public — includes more than 10,000 square feet of exhibition space, art storage facilities and the Florence Steinberg Weil Sculpture Garden. The museum also houses the Kranzberg Art & Architecture Library, Art History & Archaeology and the Newman Money Museum, a state-of-the-art numismatics center.

Adjacent to the Kemper Art Museum is Maki’s Earl E. and Myrtle E. Walker Hall. The three-story, 38,000-square-foot building contains painting and sculpture studios and the Nancy Spirtas Kranzberg Studio for the Illustrated Book.

Flanking these buildings are Bixby and Givens Halls — historic homes to Art and Architecture, respectively — as well as Steinberg Hall, Maki’s iconic modernist pavilion. Recent renovations include state-of-the-art computing environments; accessible, light-filled studios; additional workspaces; an auditorium; and a café.

Visiting Artists and Architects

The Sam Fox School invites distinguished academics and professionals to lecture, attend critiques and visit major studios. Recent visitors include:

**2011-12**

Radcliffe Bailey
Art

Claudia Bernardi
Phyllis Bramson
Julia Bryan-Wilson
Adam Budak
Thomas Demand
Patrick Dougherty
Theaster Gates Jr.
Trenton Doyle Hancock
Jessica Hische
Barbara Kasten
Balázs Kicsiny
Chelsea Knight
Susan Laxton
Ellen K. Levy
Richard Meyer
Tomás Saraceno
John Stezaker
Renata Stih and Frieder Schnock
Diane Victor

E-mail: artinfo@samfox.wustl.edu
Departmental website: http://www.samfoxschool.wustl.edu/

Associate Dean
Peter MacKeith
BA, MArch, Yale University
(College of Architecture, Graduate School of Architecture & Urban Design)

Associate Dean of Students
Georgia Binnington
BA, Washington University

Director of the Graduate School of Architecture & Urban Design
Kathryn Dean
JoAnne Stolaroff Cotsen Professor of Architecture
MArch, Oregon School of Architecture and Allied Arts
(College of Architecture/Graduate School of Architecture & Urban Design)

Director of the Graduate School of Art
Patricia Olynyk
Florence and Frank Bush Professor of Art
MFA, California College of the Arts
(College of Art, Graduate School of Art)

William T. Kemper Director
Sabine Eckmann
William T. Kemper Director and Chief Curator
PhD, University of Erlangen–Nürnberg
(Mildred Lane Kemper Art Museum)

Degree Requirements

To receive the Bachelor of Fine Arts degree, you must meet the requirements of the College of Art and take academic courses with other undergraduates. Work in art can be combined with studies in architecture, business, humanities, natural and social sciences, and the other arts. You may take these courses for educational and intellectual enrichment or in direct correlation with your primary interests.

The specified number of credit units in courses in the areas listed below are required for the B.F.A., in addition to the Studio Art and additional art elective requirements. (Specific courses that meet these requirements are listed in the College of Arts & Sciences section.)

Writing: (C+ or better) is required in the first year. Transfer students must fulfill the Writing 1 requirement by taking Writing 1 or by review of a writing portfolio. For more information, go to http://transferportfolio.artsci.wustl.edu.

Art History: Two one-semester introductory courses (Art-Arch 112 or 113 and 211 or 215) and three additional courses (or related courses with permission of the associate dean of
students). Courses designated “FA AH” fulfill an art history requirement.

**Literature:** Courses in English literature, comparative literature, classics or literature courses in translation in the language departments. Courses designated “FA LIT” fulfill a literature requirement.

**Natural Sciences or Mathematics:** Courses in biology, chemistry, earth and planetary sciences, physics and mathematics. Courses designated “FA NSM” fulfill a natural sciences or mathematics requirement.

**Social Sciences or Philosophy:** Courses in anthropology; economics; history; political science; psychology; philosophy; and women, gender and sexuality studies. Courses designated “FA SSP” fulfill a social sciences or philosophy requirement.

**Academic Electives:** Additional electives chosen from any of the academic areas listed above including art history and foreign language studies.

### Required Units for the Classes of 2015 and 2016:

Students in the classes of 2015 and beyond must fulfill the following degree requirements:

<table>
<thead>
<tr>
<th>Academic Requirements</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing I</td>
<td>3</td>
</tr>
<tr>
<td>Literature</td>
<td>6</td>
</tr>
<tr>
<td>Natural sciences or mathematics</td>
<td>6</td>
</tr>
<tr>
<td>Social sciences or philosophy</td>
<td>6</td>
</tr>
<tr>
<td>Academic electives (Arts &amp; Sciences)</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
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<table>
<thead>
<tr>
<th>Art History Requirements</th>
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</thead>
<tbody>
<tr>
<td>History of Western Art, Architecture &amp; Design</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Modern Art, Architecture &amp; Design</td>
<td>3</td>
</tr>
<tr>
<td>Art and/or design history electives (Arts &amp; Sciences)</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sam Fox Foundation Sequence</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>Drawing II</td>
<td>3</td>
</tr>
<tr>
<td>2-D Design</td>
<td>3</td>
</tr>
<tr>
<td>3-D Design</td>
<td>3</td>
</tr>
<tr>
<td>Practices: Art + Architecture + Design I</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sam Fox Commons (Studio and Theory)</th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Major Area Requirements</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory Sequence</td>
<td></td>
</tr>
<tr>
<td>Major Area Studios</td>
<td></td>
</tr>
<tr>
<td><strong>Capstone</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>42</strong></td>
</tr>
<tr>
<td><strong>Studio electives</strong></td>
<td><strong>9</strong></td>
</tr>
<tr>
<td><strong>Art and/or academic electives</strong></td>
<td><strong>6</strong></td>
</tr>
<tr>
<td><strong>Total Credit Units Required</strong></td>
<td><strong>128</strong></td>
</tr>
</tbody>
</table>

This curriculum includes several new elements, including the Sam Fox Foundation Sequence, which replaces the second-year Core program; the Sam Fox Commons, consisting of three art, architecture and design interdisciplinary courses; and the Capstone studio for all seniors in the College of Art. The Capstone studio brings together all seniors in the studio areas and separately in the Communication Design and Fashion areas for critical dialogue beyond disciplinary boundaries and to guide preparation for each area's culminating B.F.A. exhibition.

### Required Units for the Classes of 2012, 2013 and 2014

Students in the classes of 2012, 2013 and 2014 must fulfill the following degree requirements:

<table>
<thead>
<tr>
<th>Academic Requirements</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing I</td>
<td>3</td>
</tr>
<tr>
<td>Literature</td>
<td>6</td>
</tr>
<tr>
<td>Natural sciences or mathematics</td>
<td>6</td>
</tr>
<tr>
<td>Social sciences or philosophy</td>
<td>6</td>
</tr>
<tr>
<td>Academic electives</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Art History Requirements</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Western Art</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sam Fox Foundation Sequence</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>Drawing II</td>
<td>3</td>
</tr>
<tr>
<td>2-D Design</td>
<td>3</td>
</tr>
<tr>
<td>3-D Design</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Studio Art Requirements</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>Drawing II</td>
<td>3</td>
</tr>
<tr>
<td>2-D Design</td>
<td>3</td>
</tr>
<tr>
<td>3-D Design</td>
<td>3</td>
</tr>
<tr>
<td>Core program (2nd year)</td>
<td>9</td>
</tr>
</tbody>
</table>
Critical Frameworks in the Visual Arts

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Junior: Studio major</td>
<td>16</td>
</tr>
<tr>
<td>Senior: Studio major</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>60</strong></td>
</tr>
<tr>
<td>Art electives</td>
<td>15</td>
</tr>
<tr>
<td>Art and/or academic electives</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>128</strong></td>
</tr>
</tbody>
</table>

### Academic Honors & Awards

**Dean's List**: In recognition of exceptional scholarship, first-year, sophomore, junior and senior art students who have completed at least 12 credit hours (excludes courses taken P/F or Audit) with a semester grade point average of 3.5 or higher during a semester will be cited on the Dean's List.

**Latin Honors**: You may be considered for the Bachelor of Fine Arts degree *cum laude*, *magna cum laude* or *summa cum laude* as determined by the dean.

**Senior Honors**: As an undergraduate art student, you may be named an Eliot Scholar if your academic performance has been outstanding, with a cumulative grade point average of 3.5 or higher through the final semester.

### Prizes and Awards

The Scholars in Art Program provides named scholarship funds that have been donated to the university by individuals or companies specifically for this purpose. Selection is based on financial need and academic achievement. There is no application process.

### Academic Scholarships

The College of Art offers one full-tuition and up to five partial-tuition scholarships each year solely on the basis of merit. Applicants for this award may also qualify for scholarship aid based on need and will be considered for this as well. The full-tuition Conway or Proetz Scholarship is awarded to an entering first-year student whose artistic and academic potential is judged outstanding by a faculty selection committee. The scholarship is supported by two endowed funds. The Fred Conway Scholarship was established in memory of a distinguished professor of painting in the College of Art. The Arthur and Esther Proetz Scholarship was established to honor the commitment and dedication to the arts of these two individuals.

Competition is national in scope, with finalists invited each year to visit the College of Art at the college's expense. At this time, one student is chosen to receive the full-tuition scholarship, and the other finalists are awarded partial scholarships. These are renewable for each year of undergraduate study, assuming continued academic and artistic excellence.

To be eligible, an applicant must be a high school senior who meets the following criteria:

1. Ranks high in the senior class.
2. Has SAT or ACT scores in the upper range.

To enter the competition, the applicant must follow the usual admission application procedures by completing a Washington University freshman application and sending a digital portfolio of art work. All materials must be sent to the following address:

Office of Undergraduate Admissions
Washington University in St. Louis
Campus Box 1089
One Brookings Drive
St. Louis, MO 63130-4899

### Awards and Prizes

Several awards are made each year to art students who are selected by the faculty. These awards and prizes include the following:

- **The Paul Edward Birdsall Award in Visual Communications**
- **The Susan Sanders Block Silver Ripper Award in Fashion Design**
- **The Belle Cramer Award in Printmaking**
- **The Eda L. and Clarence C. Cushing Memorial Prize in Painting**
- **The Anne Fuller Dillon Prize in Graphic Communications**
- **The Mary Cowan Harford Award in Watercolor**
- **The Charles Harmon Memorial Award in Graphic Design**
- **The Marsha Hertzman Blasingame Award in Printmaking**
- **The Morris M. Horwitz Award in Photography**
- **The Hazel H. Huntsinger Memorial Prize in Painting**
- **The Caroline Risque Janis Prize in Sculpture**
- **The Kellwood Foundation Award in Fashion Design**
- **The Nancy Spirtas Kranzberg Illustrated Book Award**
- **The John J. and Marjory B. Lewin Photography Prize**
- **The Peter Marcus Prize in Printmaking**
- **The Dominic Michael Silver Scissors Designer of the Year Award**
- **The John T. Milliken Foreign Travel Award**
- **The Al Parker Award for Excellence in Illustration**
- **The Jayne Ball Rousseau Memorial Prize in Graphic Communications**
- **The Margo Trump Memorial Award**
The Jeffrey Frank Wacks Scholarship Award
The Herb Weitman Prize in Photography

Academic Regulations

Students in the College of Art are required to complete 48 credits in Arts & Sciences. University College courses do not count toward these 48 credits.

No more than 15 units of pre-matriculation credit from all sources — Advanced Placement (AP) examinations, International Baccalaureate (IB), British Advanced (A) Levels — will be awarded. The units of credit awarded do not apply toward the 48 credits required in Arts & Sciences.

Transfer credit may not count toward the 48 units required in Arts & Sciences or toward the art major. Students wishing to transfer credit for course work completed at another institution must bring a course description to the associate dean of students for review. Grades for transfer courses will not appear on the student’s Washington University record and will not figure into the student’s grade point average.

Attendance

The College of Art allows the professor of each course to decide how many absences you may have and still pass the course. Professors are expected to give reasonable consideration to unavoidable absences and to the feasibility of making up work that has been missed. You are expected to explain to your professors the reasons for any absences and to discuss with them the possibility of making up missed assignments.

Units and Grades

In the College of Art, one semester unit of credit is assigned for every two hours of work completed in class and one hour of work completed outside of class per week for one semester. Your undergraduate grade point average is determined by dividing the number of grade points earned by the number of semester units for which grades of A, B, C, D or F have been recorded. Grades of P and F received for courses taken on the pass/fail option are not figured into the grade point average. A grade of C– or better must be received in major classes during the second, third and fourth year to count toward degree requirements. You must maintain a minimum 2.0 cumulative grade point average to graduate.

A grade point is a measure of quality assigned to units according to the following system:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points per Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>4.0</td>
</tr>
<tr>
<td>A</td>
<td>4.0</td>
</tr>
<tr>
<td>A−</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
</tr>
<tr>
<td>B−</td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
</tr>
<tr>
<td>C−</td>
<td>1.7</td>
</tr>
<tr>
<td>D+</td>
<td>1.3</td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
</tr>
<tr>
<td>D−</td>
<td>0.7</td>
</tr>
<tr>
<td>F</td>
<td>0.0</td>
</tr>
<tr>
<td>P</td>
<td>0.0</td>
</tr>
<tr>
<td>I</td>
<td>0.0</td>
</tr>
<tr>
<td>W</td>
<td>0.0</td>
</tr>
<tr>
<td>R</td>
<td>0.0</td>
</tr>
<tr>
<td>L</td>
<td>0.0</td>
</tr>
<tr>
<td>Z</td>
<td>0.0</td>
</tr>
<tr>
<td>N</td>
<td>0.0</td>
</tr>
<tr>
<td>X</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Grades of I, X and N will become grades of F if the deficiency is not made up within the next two semesters of residence. For a course repeated, students earn credit and grade points based on the second grade received.

Auditing a Course

A student must get permission from the associate dean of students or the assistant dean/registrar in the College of Art before auditing a class.

Incomplete Grades

If, following the last day for withdrawal from courses, you experience medical or personal problems that make satisfactory completion of course work unlikely, you may request a grade of I (incomplete) from one or more instructors and should take the following steps:

1. Discuss the request with the instructor before the final critique or portfolio review.
2. With the instructor’s consent, complete an Incomplete Grade Petition signed by both the instructor and the student.
3. Return the signed petition to the associate dean of students for final approval.

Pass/Fail Option

You may take one non-art course per semester on a pass/fail basis (exclusive of courses that must be taken pass/fail). Any additional courses taken pass/fail in a given semester will not be counted toward the degree. All courses with an F10, F20, X10 and X20 department number must be taken for credit, unless
otherwise noted. WRIT 100 Writing 1 also must be taken for credit.

Repeating a Course
If a student retakes a course, both registrations will show on the transcript. The symbol R will appear next to the grade for the first enrollment; the grade and units in the second enrollment will be used to calculate the GPA. No student may use the retake option to replace a grade received as a sanction for the violation of the Academic Integrity Policy. A retaken course must be taken for the same grade option as the original course.

Academic Probation and Suspension
A student whose semester grade point average is below 2.0 (equal to the grade of C) or has earned fewer than 12 credit hours toward the degree, will be placed on academic probation. If, after the following semester, the semester grade point average is still below 2.0, or if the student has earned fewer than 12 credit hours toward the degree, the student may be ineligible for normal advancement or may be suspended. While the college desires to give all students the opportunity to prove themselves, it is not in the best interest of either the students or the college to permit students to continue indefinitely in educational programs in which they are not producing satisfactory results.

Major Declaration and Transfer
You declare an art major simply by registering for one using the university’s online registration system (WebSTAC). Once you have selected and registered for a major in the College of Art, you must obtain written permission to change to another major within the College. Students requesting a transfer of major must be in good academic standing. Major Transfer Request forms are available in Bixby Hall, Room 1, and must be filed before the course drop deadline of the semester in which they wish to transfer. Credit transfers between majors are at the discretion of the accepting major faculty.

Study Abroad
The Sam Fox School has undergraduate study abroad programs that draw on the rich traditions as well as the contemporary design strengths in carefully selected locations. The programs are led by faculty from the Sam Fox School. Each program leverages its unique location by inviting local artists, designers and architects to serve as instructors and visiting lecturers, incorporating local sites into course assignments and studio projects and arranging numerous excursions to nearby sites and cities. All Sam Fox School programs work hand-in-hand with the School’s curriculum to ensure that students can study abroad while earning required degree credits.

Florence
The Sam Fox School Florence Spring Semester Program offers undergraduate students in both Art and Architecture the opportunity to study during the spring semester of their junior year in Florence, Italy, the birthplace of Western cultural modernity. Classes make use of the rich artistic and cultural environment, urban and architectural history, and contemporary aspects of Florence, as well as other locations in Italy.

The Florence Summer Program provides an interdisciplinary learning environment within the framework of art, architecture and art history in Florence. This program is an intensive two-month, 9-credit program in studio art/architecture and art history for students of all levels.

Copenhagen/DIS
Architecture students also may study at the Danish Institute of Study Abroad (DIS) in the first semester of their senior year. This studio program in architecture is approved by the College, and the studio courses are approved for full transfer to degree studies in the College of Architecture. This program is limited to six students per year. Students also may apply for the DIS summer program.

Copenhagen Summer/Graphic Reportage Workshop
Throughout this three-week, 3-credit communication design workshop, students will draw on the city of Copenhagen as a source to work toward a multilayered understanding of what turns a location into a place. The program will provide an immersive experience in visual reporting, concept development and nonfiction writing in an international setting. This course is open to all students at the undergraduate level or beyond.

ASA Summer Program
Rising juniors and seniors from the Colleges of Architecture and Art may participate in the Architecture Study Abroad Program. This six-week, 6-credit program takes students through significant South American cities in a directed curriculum of urban and building analysis and appreciation. ASA is offered every other summer.

Berlin
Sommerakademie is a month-long course of art research and practice designed for graduate and advanced undergraduate art students. Students receive 3 credits for this course, which explores several modes of creative practice in relation to the material, social and political conditions in Berlin, one of the world’s most important contemporary art centers. This program is offered every other summer.

Special Additional Summer Programs
Washington University in St. Louis, Summer in DC Program. In this two-month program students will take a public policy course with students from schools across the university and participate
in an internship to earn up to 6 credits. The program is housed in the Washington University DC Center.

Semester Abroad for Communication Design and Fashion Design students in the College of Art. Semester Abroad Options for these students are currently being explored.

Finances
Tuition and fees will be billed directly to students through their WU accounts where credits and financial aid will be adjusted. Students are responsible for their own air fare.

Non-Sam Fox School Programs
For most students, the study abroad programs offered by the Sam Fox School fulfill expectations for a stimulating international semester of course work relevant to their major area of concentration in art or architecture. On occasion, a student may determine that his or her interests fall outside the Sam Fox School-sponsored program options and may wish to pursue either one of the WUSTL-sponsored Study Abroad programs or an alternative program. Participation in alternative programs requires a formal petition and pre-approval. If the petition is not approved, the student may take a Leave of Absence to participate in a non-WUSTL program (without WUSTL credit and fees).

WUSTL-Sponsored Study Abroad Programs
Sam Fox School students are eligible to participate in the University’s Study Abroad programs in order to pursue broader academic interests. Since these programs are not in the areas of art, architecture or design, they are intended to expand students’ liberal arts education and must be taken within an academic area approved by the College of Arts & Sciences for a particular institution or location abroad. Upon successful completion of the study abroad program, general academic credit for participation in these programs will be awarded according to the guidelines of the College of Arts & Sciences and its approved academic area. Predeparture advising by the student’s adviser, the Assistant Director of Special Programs and Area Coordinator/Director of Undergraduate Programs will determine whether credit transfer to the major is possible. If a student takes an elective course in art, architecture or design while studying abroad with the College of Arts & Sciences or its approved program partners, a limited credit transfer toward the major requirements will be considered based on a portfolio review by the student’s Area Coordinator in Art or the Director of Undergraduate Programs in Architecture and granted on a case-by-case basis as it corresponds to Sam Fox School curriculum and degree requirements. Students who would like to participate in a WUSTL-sponsored program should contact Assistant Director of Special Programs, Belinda Lee lee@samfox.wustl.edu. Washington University tuition and fees will be billed directly to the student through their WU accounts where credits and financial aid will be adjusted.

Petition to Study Abroad in an Alternative Program
Students in the Sam Fox School who wish to pursue semester-long study abroad programs other than those offered by the School or the university may petition the School for consent. Petitions must be approved by the Sam Fox School Study Abroad Committee and the Dean of Art or Architecture.

Petitions for study abroad should be completed by October 1 for a spring semester program or by February 1 for a fall semester program.

A petition to study abroad in a non-WU program includes the following:
1. One-page proposal that specifically outlines a compelling reason why participation in the program is of importance to the student’s course of study
2. Study plan that is signed by the Area Coordinator (art) or Director of Undergraduate Programs (architecture)
3. Official Academic Transcript (minimum 3.3 cumulative GPA required)
4. Letter of recommendation from a studio faculty member other than the Area Coordinator (art) or Director of Undergraduate Programs (architecture) addressing the student’s potential for working independently.
5. Program-specific forms and supplements

Complete petitions to study abroad in non-WU programs will be reviewed by the Study Abroad Committee. Petitions that are approved by the Committee will be forwarded to the Dean of Art or Architecture for final approval and signature.

Submit all materials by October 1 (spring semester abroad)
February 1 (fall semester abroad)

To:
Belinda Lee
Assistant Director of Special Programs
Bixby Office Suite 1C
lee@samfox.wustl.edu

Once a petition is approved, WU will assume responsibility for paying the program sponsor, and the program price will be set in the same way as for WU programs. For a fall and/or spring program, WU charges tuition equivalent to the on-campus fee plus the WU student health insurance. WU tuition covers only the academic portion of any study abroad program. Housing, food, airfare and individual program fees must be paid directly by the student. The WU tuition and other applicable fees will be posted to the student’s WU account, where financial aid and other credits can be applied. (Exception: participants in approved summer programs should pay all fees directly to the program sponsor rather than via WU).
After completion of a petition-approved alternative study abroad program, the program transcript and portfolio will be reviewed for transferrable credit in the same way as WU-sponsored programs.

**Leave of Absence**

Students interested in pursuing a leave of absence for study abroad are required to set up an appointment with the Study Abroad Adviser, Belinda Lee, lee@samfox.wustl.edu, and must fill out a Sam Fox School Leave of Absence Form.

While on leave of absence, students will retain their WU email account; however, students will not be enrolled in the WU student health insurance plan nor will they be considered full-time WU students. Students will be responsible for paying tuition and fees directly to the non-WU program in which they are participating. Students are normally reinstated prior to registration when they return to WU.

**Requesting General Credit**

Academic credit earned through study abroad while on leave of absence will not be transferred automatically to WU. Sam Fox School students may request up to three general elective credits for course work completed abroad while on a leave of absence. After successfully completing an alternative study abroad program not approved by petition, students may request transfer credit by completing a transfer credit application, providing detailed descriptions of course work and outcomes, and presentation of a portfolio of work completed during the course of the program.

All requests for general credit earned during a leave of absence are reviewed by the Sam Fox School Study Abroad Committee at regularly scheduled meetings (two times per year). Please note that the Committee retains the right to deny a request for credit based on a variety of factors including the academic merit and rigor of the program and the availability of similar programs through the Sam Fox School or University. Requests for credit are reviewed on a case-by-case basis and cannot be guaranteed in advance.

**Leave of Absence**

You may request a leave of absence from the college for one semester at a time, up to one year. If this is granted, you may re-enroll at the end of that time without going through further admission or readmission procedures. A “Request for Leave of Absence” form, available in Bixby Hall, Room 1, must be completed before a leave of absence will be granted. In the case of a medical leave of absence, a letter of clearance is required from the director of Student Health Services before a student will be permitted to re-enroll.

**Required Computer Purchase Program**

Students entering the communication, fashion design and photography majors are required to purchase a specified computer and software. The computer and software are purchased through the College of Art to yield the greatest possible savings to the student through educational discounts and bulk purchasing. The package for each major varies, but include all the software and peripherals needed to provide full functionality and address all requirements for digital imaging and other studio needs. Because hardware and software prices fluctuate, the estimated cost is $3,500 to $4,000.

Computers are purchased in the fall of the sophomore year. Charges are assessed according to course registration on June 15. If you have not registered for a major introduction course by this deadline, you are responsible for any price increases and run the risk of not having a computer available at the start of classes. In the event you change your major after this date, payment for the computer remains your responsibility.

The charge for the computer will become part of your total cost of education, upon which financial assistance will be based. Questions regarding the effect of the computer purchase on financial assistance should be directed to the Office of Student Financial Services at 314/935-5900 or 888/547-6670.

**Retention of Student Work**

The college reserves the right to hold your work(s) for exhibition purposes and holds reproduction rights of any work(s) executed in fulfillment of course requirements.

**Administration**

**College of Art/Graduate School of Art**

Buzz Spector, MFA
Dean
Jane Reuter Hitzeman and Herbert F. Hitzeman Jr. Professor of Art

Patricia Olynyk, MFA
Florence and Frank Bush Professor of Art

**Majors**

Below is a list of majors offered by the College of Art. Click the link to view more information about a specific major.

- Communication Design (p. 73)
- Fashion Design (p. 73)
- Painting (p. 73)
Minors

Below is a list of minors offered by the College of Art. Click the link to view more information about a specific minor.

- Art: General Studies (p. 73)
- Book Arts (p. 73)
- Communication Design (p. 73)
- Painting (p. 73)
- Photography (p. 73)
- Printmaking (p. 73)
- Sculpture (p. 73)
- Textiles (p. 73)

See the most recent Course Listings for specific requirements.
Arts & Sciences

The College of Arts & Sciences is the largest undergraduate program at Washington University, offering you the most diverse range of courses in more than 50 different fields, ranging from anthropology and biochemistry to mathematics and performing arts.

The college draws on the rich and varied resources that this distinguished university has to offer — a creative and internationally recognized faculty, a diverse and able student body, a superior library and excellent opportunities for advanced study. As the center of intellectual life of the campus, the College of Arts & Sciences benefits from and contributes to the studies of architecture, art, business, engineering, law, medicine and social work.

Of central importance to the life of the college is the quality of teaching. As an undergraduate student, you have the opportunity to learn from and work beside stimulating teacher-scholars who are leaders in their fields. Our nationally recognized faculty, which numbers more than 500, is made up of artists, biologists, chemists, economists, historians, philosophers and poets, who bring the excitement of new ideas into the classroom. Their varied intellectual pursuits add richness to your undergraduate experience.

Governance

The College of Arts & Sciences is bound by the charter of the university and is ultimately responsible to the University Board of Trustees, which delegates to the chancellor the administration of the university. In turn, the chancellor delegates to the deans and faculty of the College of Arts & Sciences responsibility for its internal governance.

Because the college is continually reassessing its objectives and policies, faculty and students alike may take the initiative in proposing changes in curriculum and policies. New programs or proposed modifications are reviewed by committees whose members represent the diverse points of view of the academic community.

By action of the Faculty of Arts & Sciences in January 1969, revised in May 1971, the ArtSci Council shares joint responsibility with the faculty for collegewide degree requirements, the grading system and those policies that directly affect the lives of students. The ArtSci Council appoints representatives to various standing and ad hoc college committees.

The Curriculum

The College of Arts & Sciences fosters in its students the quintessential qualities of a liberal arts education: a heightened spirit of inquiry, an ability to organize and synthesize information, skills in written and oral expression, and a familiarity with the ways in which thoughtful men and women have discovered those commitments and values that make life worthwhile. By incorporating the College’s manifold intellectual resources — people, libraries, laboratories, studios — Arts & Sciences students “learn how to learn,” developing both the flexibility and the habits of thought necessary to the ever-evolving worlds of work and global citizenship.

The College’s academic program has two principal objectives. First, it provides you with an understanding of the range of human knowledge and attainment by developing an appreciation of the characteristic problems, achievements and limitations of the various fields of human endeavor. The Curriculum works to ensure this understanding by requiring a minimum amount of study (9 units/three courses) in each of three broad areas of study — Natural Sciences & Mathematics; Social & Behavioral Sciences; and The Humanities — and three to four courses (9-12 units) in a fourth area, Linguistic & Cultural Diversity. Collectively, these area requirements make up approximately one quarter of the units needed to graduate.

Secondly, the College’s academic program gives you the opportunity to study a subject or area in a sustained, intensive way. After a period of exploration, (typically two to three semesters) during which you achieve an awareness of the richness inherent in the various fields of study, you declare your area of concentration, your major. The College offers more than 30 traditional subject majors, such as Chemistry, English and Music, and more than 20 interdisciplinary majors, such as American Culture Studies, International & Area Studies, and Women, Gender, and Sexuality Studies. Students also may develop an individualized special major.

In all departments, you are encouraged to proceed as your strengths and experiences permit. Placement examinations are used in many departments to enroll you in courses at the levels your previous training warrants; in other departments, proficiency examinations are available (see the Proficiency and Placement Examinations page of this Bulletin, or the website at college.artsci.wustl.edu/placement_credit). The degree requirements and policies in the 2012–13 Undergraduate Catalog apply to students entering Washington University during the 2012–13 academic year. To view catalogs from prior years, choose Prior Bulletins from the left-hand menu, or click here.

Academic Advising

To assist you with your undergraduate planning, the college provides a closely coordinated academic advising program. As a first-year student, you will have a specially selected four-year academic adviser with whom you will meet periodically during the first year to help you with the transition into the university and to help you select courses for the fall and spring semesters. After the first year, you will meet each semester with your four-year academic adviser prior to registration to discuss your interests, goals and academic course work. You are encouraged...
to consult with your four-year academic adviser any time you need assistance throughout the school year.

When you declare a major, you are assigned a major adviser in the department of your principal area of study. The extent of the adviser's assistance depends on your individual needs and wishes. Consultation with a major adviser, in addition to your four-year academic adviser is required each time you prepare to register for courses.

Students with problems or questions related to academic issues are invited to visit the College Office at any time. One of the deans is available every day on a drop-in basis to help you or refer you to an appropriate source of help. Important among these sources are individual faculty members with particular specialties who may be able to answer your questions. In addition, the Writing Center, Career Center, Student Health Services and Cornerstone: The Center for Advanced Learning provide a wide range of services, including individual and group instruction; interest tests and advice; individual sessions with trained counselors about educational and personal problems; and the improvement of skills in learning.

Pre-Matriculation Credit

Pre-matriculation units of credit are earned before your enrollment at Washington University as a first-year student, which can be applied toward a Washington University degree. Sources for pre-matriculation units of credit include Advanced Placement (AP) examinations, International Baccalaureate (IB), British Advanced (A) Levels, course credit earned by proficiency (e.g., back credit), and college credit earned after your junior year in high school. Students in the College of Arts & Sciences have all accepted pre-matriculation work noted on their transcript so they may go directly into advanced courses, but the maximum number of pre-matriculation units of credit awarded is 15 units. Pre-matriculation course work does not fulfill distribution requirements, but it may fulfill requirements for majors and minors. If a student enrolls in and completes a course equivalent to that for which pre-matriculation credit has been granted, the pre-matriculation units for the course in question will be removed from the student's record. For more information see the section titled Pre-Matriculation Units on the Admissions Procedures (p. 12) page of this Bulletin.

Academic Programs for Entering Students

As a first-year student, you may choose one of the following programs that provide a basic structure for your course selection. Each option provides an effective means of discovering personal and educational interests.

FOCUS Program

FOCUS is a one-year seminar program designed to bring you into close relationship with professors and other first-year students with similar interests. Several FOCUS plans are offered every year, each built around a seminar topic reflecting the professor's particular area of expertise. Students in each FOCUS seminar also may attend a “companion” course chosen to encourage exploration of the seminar topic from varying perspectives. The FOCUS program provides a coherent, group-oriented learning experience, while still allowing time for electives (see FOCUS page).

International Leadership Program

The International Leadership Program introduces freshmen to International and Area Studies and fosters the development of the skills and attitudes needed to thrive in the globalized world through uniquely designed courses and special events. In addition to a core academic class each semester that explores the nuances and complexity of globalization from a variety of academic disciplines, students hear from guest speakers, participate in social gatherings, receive targeted advising about such issues as study abroad and international careers, and develop leadership skills by planning and carrying out their own internationally focused events on Washington University’s campus.

The Mind, Brain and Behavior Program

The Mind, Brain and Behavior Program is a two-year program that introduces students to the key ideas about the mind-brain interaction by examining attention, memory and language — three central mental abilities that are primary areas of research in cognitive science. Professor-led discussion groups explore questions such as: What is the relation between attention and consciousness? Why do we misremember past experience? When the brain is damaged, why are only certain functions lost? In the second year, students engage in hands-on research under the guidance of a faculty mentor (see Mind, Brain and Behavior).

Medicine and Society

The Medicine and Society Program is an exciting opportunity for undergraduate students in Arts & Sciences to address the important social and cultural foundations of health and illness in human societies, with a specific emphasis on service and research opportunities in health-related sites in St. Louis. Students who are accepted into the Medicine and Society Program are enrolled in a year-long Freshman Seminar on culture, health and society in the Department of Anthropology. This seminar provides the academic foundation for future community health work in St. Louis.

Beginning in the sophomore year, students identify and select a local community health site for their internship. Internship sites may include the St. Louis city and county health departments, various nongovernmental health aid agencies, sites for delivery of clinical care and research, and health-related philanthropic foundations.
During the junior and senior years, academic and service activities intensify at the internship site, culminating in a senior project or honors thesis based on original research, conducted at the community health internship site. This experience provides an excellent foundation for future study in medicine and public health, as well as any of the allied health professions (see Medicine and Society).

**Pathfinder Program**

The Pathfinder Program in Environmental Sustainability gives participating students a chance to engage in interactive study of the environment with a small group of motivated undergraduates and a senior faculty member. Through case studies and field trips, students examine the issues surrounding environmental sustainability and the preservation of the environment for future generations. While participating in the Pathfinder Program, you may pursue a major in biology, chemistry, Earth and planetary sciences, environmental studies, mathematics, or physics in the College of Arts & Sciences, or pursue a major within the School of Engineering & Applied Science. The Pathfinder Program supports the concept that taking interrelated courses and learning both analytical and technical skills not only helps you complete a senior-year capstone research experience, but also helps you with your career or graduate studies in the future (see Pathfinder).

**Text and Tradition Program**

This two-year program explores many of the fundamental texts and concepts of Western history, which have served as both foundations and obstacles for the development of some of the most significant cultural, moral and political institutions of modern society. Through close reading, critical analysis and frequent short papers, two seminars each term explore texts by such writers as Homer, Plato, Machiavelli, Cervantes, Locke and Marx. The discovery of the self, the origin of ideas such as liberty and property, and the impact of the scientific revolution are some of the themes examined. The program’s professors serve as academic advisers. Text and Tradition courses serve as beginning courses in the major programs of many of the humanities departments and programs in Arts & Sciences; they also provide a foundation for students interested in pursuing an interdisciplinary major in the humanities under the auspices of the Interdisciplinary Project in the Humanities (see Interdisciplinary Project in the Humanities).

**Standard Program**

This option is an excellent choice for you whether you already have made a firm commitment to a particular discipline in the natural sciences, social sciences or humanities or you are uncertain about what you would like to pursue. In the standard program, we suggest that you consider a freshman seminar when you select courses in consultation with your four-year academic adviser. The course schedule can be either widely exploratory or oriented toward a particular objective such as medical school.

**Major Fields of Study**

A student graduating with a Bachelor of Arts may receive no more than a total of two majors and a minor or one major and two minors.

To declare a major, you must secure the permission of the department or interdisciplinary committee. Log on to WebSTAC and do the following:

* Click the Change First Major button to request a declaration.
* Select the major you would like to declare.
* Click Yes when the confirmation box appears.
* Review the Current Requests section that explains what you should do, such as meet with a department representative, to finalize your declaration.

The department will receive an email notification of your request to declare the major. The declaration of major will not be processed until you complete the action required by the department. When the declaration of major process is complete, your new major should appear in the Current Programs section of your Major Programs page.

An adviser for the major also will be assigned by the department. You may complete more than one major; including a second major in the Olin Business School or in the School of Engineering & Applied Science.

If a student has two majors, each major must have 18 upper-level units of credit independent of each other. If a student has a major and a minor, the major must have 18 upper-level units independent of the minor. The minor must have 12 units independent of the major. Individual academic departments may have and enforce a stricter rule regarding double-counting of courses between major and minor programs.

A minimum grade of C–, unless otherwise specified by a department, is required for major courses.

If you are a student in business, engineering, architecture or art, you may choose to pursue a second major in the College of Arts & Sciences. You will receive one degree, a B.S. or B.F.A., with two majors — one in the professional school and one in the College of Arts & Sciences.

**Minor Fields of Study**

If you develop a significant interest in one or more fields of study besides your major field, you may choose to pursue a minor in those fields. Optional minors may be fulfilled in an area closely related to the major or, to add breadth as well as depth to your educational program, in a different discipline. A minor normally consists of 15 to 21 units of credit with a grade of C– or better. At least half or 9 to 11 units of credit must be at the 300 level or above and must be completed in residence at Washington.
University. The course requirements for a minor are determined by each department or program.

If a student has a major and a minor, the major must have 18 upper-level units independent of the minor. The minor must have 12 units independent of the major. If a student has two minors, each minor must have 12 units independent of the other.

The departments and interdisciplinary committees of the college have designed a broad array of minor programs, both general and specific. In addition, you may undertake minors in Architectural Studies, Art, Business and Computer Science in the engineering school.

To declare a minor, you must secure the permission of the department or interdisciplinary committee. Log on to WebSTAC. Navigate to the Major Programs menu item (under Academic Records) and do the following:

* Click the Add a Minor button to request a declaration.
* Select the minor you would like to declare.
* Click Yes when the confirmation box appears.
* Review the Current Requests section that explains what you should do, such as meet with a department representative, to finalize your declaration.

The department will receive an email notification of your request to declare the minor. The declaration will not be processed until you complete the action required by the department. When the declaration process is complete, your new minor should appear in the Current Programs section of your Major Programs page.

The Special Major and Special Minor

If you are interested in creating a special major or minor, you should confer with the dean charged with coordinating this program. After consultation, you must submit to the coordinator a formal proposal consisting of: (1) a description of the program of study, including an explanation of the integrating idea in the program; (2) a list of courses to be taken; (3) a letter of support from the proposed academic adviser; and (4) a letter of support from a faculty member in a second department who has approved the proposal.

A proposal for a special major or minor must be submitted no later than the fifth semester of your undergraduate enrollment. The Committee on the Special Major and Minor is responsible for final action on proposals.

Special Academic Options

Overseas Study Programs

For information about study abroad, visit the Overseas Programs web page or the information on your specific program of study.

Individual and Group Performance

Opportunities for individual and group performance include participation in various musical organizations sponsored by the Department of Music (such as symphony orchestra, wind ensemble, mixed choir) and courses offered in physical education. To encourage you to pursue such physical, social and creative activities, the college allows up to 12 units of credit toward the bachelor’s degree for successful completion of enrollment in individual and group performance. This does not include music lessons or courses in the Performing Arts Department.

Internships

1. Students may not receive credit for work done for pay.
2. Each internship must have a sponsor. The sponsor’s primary role is to ensure that requirements for credit are met and that the work is of a substantial nature commensurate with the skills of college-educated employees. Detailed supervision of the intern in his or her job is the responsibility of the intern’s site supervisor.
3. Registration in an internship for credit shall be conditional on satisfactory completion of the “Learning Agreement” form provided by the Career Center and the submission of this form to the Career Center and sponsor. The Career Center provides assistance in locating and organizing a good internship experience. If a student finds his or her own internship opportunity (either in the St. Louis area or another city), the student must contact the Career Center to file a Learning Agreement.
4. Work completed during the internship should contribute to the student’s academic or professional development. Work should be of the type that requires a college education. (Completion of the Career Center Learning Agreement will help to ensure that this requirement is satisfied.)
5. The credit awarded for an internship shall correspond to the time spent in work activities. The student is expected to work 60 hours of internship experience over a period of six to eight weeks for each unit of credit. Registration for 1 to 3 units of credit is possible.
6. Students may complete the work for an internship over the summer and receive credit during the subsequent semester. Any internship completed this way, however, must satisfy all requirements outlined here. The learning agreement must be filed and approval must be obtained prior to beginning work at the internship site.
7. Every internship shall require written work to be reviewed by the sponsor. The assignments shall be specified before work on the internship begins, and they shall be written into the Learning Agreement signed by the student and the sponsor. Suggestions for written assignments include a
periodic report on work activities and a brief end-of-term paper that describes the student’s experience and links it to academic studies.

8. Students may count no more than 6 units of internship credit toward the 120 units required for graduation.

9. Students may not receive more than 3 units of internship credit in any semester.

10. Internship units do not count toward major or advanced unit requirements.

11. Because faculty are not involved in detailed supervision of the student’s work during an internship, internship courses shall be offered for credit/no credit grades only. Internship credits therefore count toward the maximum of 24 credit/no credit units that may be applied toward graduation requirements.

Part-Time Study: Nontraditional Students

The university recognizes that for certain students with high educational goals, full-time study may not be feasible or appropriate. Employment in demanding positions, extensive family responsibilities or other obligations may prevent an otherwise serious and competent student from completing the bachelor’s degree at a rate of 15 units a semester. With their varied experiences outside the university, such students make valuable contributions to the classroom environment as they pursue programs of study suitable to their special circumstances. Please contact University College at 314/935-6700 for more information about part-time study.

Tuition Reduction

Students who have completed eight full-time semesters in the College of Arts & Sciences and paid full tuition for eight semesters may seek reduced tuition for a ninth or subsequent semester. Students must petition the Dean’s Office, College of Arts & Sciences, 104 Cupples II Hall. Those who successfully petition for tuition adjustment for the ninth or subsequent semester will pay only for the units of credit that they attempt, fewer than 12 (full-time standard for tuition).

Combined Undergraduate Degree Opportunities

You may work toward the Bachelor of Arts degree in the College of Arts & Sciences at the same time you earn another undergraduate degree in business, engineering, architecture or art. To do so, you must earn 150 units, 90 of the units in the College of Arts & Sciences; fulfill the minimum degree requirements for a major in each of the two schools, as well as fulfill the distribution requirements for both schools. You should contact both a dean in the college and the designated dean in the appropriate professional school as early as possible in your undergraduate career.

Majors Across Schools

You may get an A.B. degree with a first major in the College of Arts & Sciences and a second major in business or engineering by fulfilling all the distribution requirements for the A.B. degree, completing the requirements for the first major in Arts & Sciences and the second major in business or engineering. With careful planning this can be done within the 120 units required for the A.B. degree. For further information on second majors in business go to the website: www.oiln.wustl.edu, and for further information on the second major in engineering, go to the website: engineering.wustl.edu.

The Accelerated A.B./A.M. Program

If you are an exceptional student who brings to the University a definite commitment to a field of study in the College of Arts & Sciences and a demonstrated capacity for intensive work, you may be able to complete a Master of Arts (A.M.) degree in a one-year accelerated program after completing your A.B. degree. The program, which begins each year in the fall semester, is open exclusively to students graduating in the immediately preceding December, May or August. There are no application deadlines (applications may be submitted anytime during the senior year and up to the beginning of classes in the fall) and GRE tests are not required. The admission application is a brief one-page form available on the website of the Graduate School of Arts & Sciences. Some departments may not participate in this program, and some departments that do not otherwise offer a master’s degree may provide this opportunity to Washington University undergraduates. Contact your department for further information about their admission policies and requirements.

Most A.M. degrees in Arts & Sciences require 36 credits. The accelerated program allows Washington University undergraduates to complete a master’s degree in one academic year by applying up to five 3-credit courses or four 4-credit courses (a maximum of 16 units), taken as an undergraduate at the 400 level or above, toward the master’s degree requirements. For master’s programs requiring fewer than 36 units, three courses at the 400 level or above (9-12 units) may be considered toward the A.M. degree. These undergraduate courses must be in an appropriate discipline, approved by the department and completed with a final grade of B or higher.

Some master’s programs are based entirely on course work, and others require or have the option for a thesis. In thesis programs, up to 6 credits can be awarded for thesis research. Please check the policies of individual departments and programs to determine the structure of the A.M. degree in each discipline.

Students admitted to the program will be regular full-time graduate students enrolled in the Graduate School of Arts & Sciences at Washington University. The application for admission must be made to the department, which forwards the application and recommendation for admission to the Graduate School.
The A.B. and Master’s Degrees in the Professional Schools

The College of Arts & Sciences — with the Olin Business School, the School of Engineering & Applied Science, the School of Medicine (Program in Occupational Therapy) and the George Warren Brown School of Social Work — offers joint (3/2) degree programs. If accepted into a 3/2 degree program a student may work toward the A.B. degree during the initial three years at Washington University and the first professional degree during the fourth and fifth years at the University.

A student electing to do a 3/2 program must complete 150 academic units, 90 of which must be in the College of Arts & Sciences. Prior to entry into a 3/2 program, a student in the College of Arts & Sciences must complete:

1. 90 academic units in courses offered in the College of Arts & Sciences.
2. All distribution requirements.
3. All requirements for an A&S major.
4. 18 of the 30 required units in upper-level course work.

Thirty units of graduate academic credit taken during the fourth year will complete the required 120 academic units required for the A.B. degree. The professional degree is earned when 150 academic units and all degree requirements for the professional school are completed. A student must be recommended by the faculty of the professional school to the Dean of the College of Arts & Sciences.

Students interested in the joint degree program should: (1) discuss degree options with a dean in the College of Arts & Sciences and with a dean in the professional school, (2) request the Eligibility Certification Form in the College of Arts & Sciences, and (3) turn in the completed Eligibility Certification Form with the application for the 3/2 program to the professional school early in the spring semester of the junior year. A.B. joint master’s degree students are formally admitted into the graduate program of the professional school. The professional school becomes the prime school and the College of Arts & Sciences becomes the joint school. The tuition rate is determined by the rate for the student’s prime division. The undergraduate scholarship and financial aid commitment is honored for the student’s fourth year and is funded by the school that is the prime division during the fourth year. There is no commitment for financial aid beyond the fourth year. Students may apply for graduate student financial aid, if applicable for their particular graduate program, in the fifth year.

A transfer student who seeks the A.B. under this plan must complete at least four semesters in full-time residence in the College of Arts & Sciences at Washington University. All other conditions must also be fulfilled.

Olin Business School

A five-year program combining an undergraduate degree and a master’s degree is available to a select number of students. (See Olin Business School 3+2 Program.)

School of Engineering & Applied Science

A student may apply for the A.B./M.S. program that leads to both a Bachelor of Arts and a Master in Computer Science. For further information visit cse.wustl.edu or contact the department in 509 Bryan Hall.

Occupational Therapy

Admission to the Program in Occupational Therapy at the School of Medicine requires a bachelor’s degree or participation in the 3-2 program. Occupational therapy is an application of the basic biological and social sciences; hence, bachelor’s degrees in psychology and biology are useful. Other suitable majors include business, engineering, computer science and art. Undergraduate students are encouraged to contact the pre-health professions adviser to discuss academic plans.

The 3-2 program blends three years of undergraduate liberal arts (90 academic units) with two years of graduate study in occupational therapy. If you elect the 3-2 option, you will complete the general requirements for the bachelor’s degree in Arts & Sciences during the initial three academic years, while simultaneously completing the prerequisites for entry into the Program in Occupational Therapy (OT). Application to the OT program occurs in the fall of your junior year. Qualified, recommended 3-2 students from Washington University receive priority admission status to the Program in Occupational Therapy. The A.B. will be awarded following successful completion of the fourth year. You are awarded an M.S.O.T. following the fifth academic year and six months of fieldwork.

The following prerequisite courses must be completed with a grade of B– or better prior to matriculation in the Program in Occupational Therapy:

- 3 units in biology (200 level or above)
- 3 units in physiology
- 3 units in other physical sciences, such as anatomy, neuroscience, chemistry or physics
- 3 units in developmental psychology
- 3 units in other social sciences, such as abnormal psychology, sociology, anthropology or economics
- 3 units in statistics (behavioral, psychological, educational or mathematical).

Pre-health professions students are encouraged to take OT courses offered to undergraduates, such as Issues of Disability in Society and Promoting Meaning and Quality of Life.

Applicants must also take the Graduate Record Exam and demonstrate competency in medical terminology and computer
skills. Completion of at least 30 hours of volunteer/observation time in an occupational therapy-related setting is required.

The Doctor of Occupational Therapy (O.T.D.) is a professional degree providing students the opportunity to focus their OT studies in one of four areas of concentration: Productive Aging, Social Participation and the Environment, Work and Industry, and Pediatrics. The O.T.D. requires 39 months of course work and fieldwork. A full description of degrees in occupational therapy is available from the office of the Program in Occupational Therapy, or you can visit the website: www.ot.wustl.edu.

Information on financial aid for this program may be obtained from the Office of Financial Aid at the medical school. Occupational therapy merit scholarships are available for students entering the program.

Social Work
This joint degree program leads to the A.B. and M.S.W. from the George Warren Brown School of Social Work. Prerequisites for admission to the George Warren Brown School are the same for those holding the A.B. or for those students who seek admission after the junior year in the College of Arts & Sciences. All applicants must have completed at least 30 units in the social sciences (anthropology, economics, political science or psychology) and must have maintained at least a B+ average in all undergraduate work.

If you wish to enter the joint degree program, you should apply with the George Warren Brown School of Social Work during the first semester of your junior year. You will be evaluated on the same basis as students applying with an undergraduate degree. If you enroll for a joint degree, you will complete the A.B. after the fourth year and the M.S.W. at the end of five years of study.

Undergraduate Preprofessional Preparation
If you plan to pursue professional studies, you should refer to the recommendations given below.

Architecture
See the College of Architecture (p. 37) section in this Bulletin.

Business Administration
Students in the College of Arts & Sciences are welcome to consult with the associate dean for the undergraduate program in the Olin Business School concerning any aspect of preparation for careers in business.

Law
The two most significant factors law schools use in determining whom to admit for legal study are the undergraduate GPA (taking into consideration the difficulty of courses attempted and the breadth of study) and the score on the Law School Admission Test (LSAT). Admission to law school requires a bachelor’s degree. There is no required set of courses for pre-law study at the undergraduate level.

Many law school applicants have majors in political science, history, philosophy, economics and English, but law schools also seek students with undergraduate majors in science, engineering, business and other disciplines. Whatever area(s) you choose to emphasize in your undergraduate studies, be sure to take courses that require significant amounts of writing and courses that train you to think analytically. Seek out courses that require application of principles or theories to new situations, and courses requiring original writing and revision of your written work in response to comment and critique. It is also important to learn to read and analyze complex written material and to develop sound research skills.

Political science, history, philosophy and economics courses can help you develop an understanding of the traditions behind and the development of our legal system. Logic, accounting and statistics courses also provide valuable background for legal study and the practice of law.

The pre-law adviser in the College of Arts & Sciences is available to help you plan your course of study and prepare a strategy for applying for admission to law school.

Medicine
Premedical students in the College of Arts & Sciences of Washington University must complete the bachelor’s degree before admission to a medical school. Besides fulfilling the requirements for the A.B., you must fulfill the entrance requirements of the medical schools where you plan to apply. Specific requirements, which may vary, are summarized in the handbook Medical College Admission Requirements, published annually by the Association of American Medical Colleges.

As a premedical student, you must demonstrate high achievement in academic work and must possess the character, responsibility and level of commitment suitable for a career in medicine. Since the competition for admission to medical schools is keen, you should follow an educational program that will provide competence in a field that may serve as an alternative to medicine.

All medical schools require at least one year each of English, general biology, inorganic chemistry, organic chemistry and physics. Laboratory courses also are required in all the science core courses. Most medical schools require a year of college mathematics. Medical schools also encourage applicants to develop a broad intellectual background that includes the humanities and the social and behavioral sciences.

Students interested in the health professions may choose a major in any field — the humanities, the social sciences or the sciences — as long as they complete the premedical requirements. All students who plan to apply to M.D.–Ph.D. programs are advised to major in the sciences and begin
a research experience no later than the beginning of their sophomore year. Research opportunities are available both on the Danforth Campus and at the School of Medicine and are open to both science and nonscience majors. Health-related volunteer opportunities also are widely available.

If you enter the university planning to apply to medical school, you should, with the aid of your adviser, structure your course of study to include the medical school requirements. It is strongly recommended that mathematics and chemistry be among the first courses taken and that the medical school requirements be completed by the end of the third college year, when you would normally take the Medical College Admission Test (MCAT).

If you are interested in careers in the health professions, you can draw on the advice and counsel not only of your advisers, but of the associate dean for pre-health professions in the college.

Physical Therapy

If you are interested in pursuing a career in physical therapy, you must complete a bachelor’s degree before entering the Doctor of Physical Therapy (D.P.T.) program. This degree replaced the Master of Science in Physical Therapy (M.S.P.T.) in fall 2001.

Currently, preparation for the D.P.T. degree should include the following course work:

- 8 units in general biology
- 8 units in chemistry with laboratories
- 8 units in physics with laboratories
- 3 units in anatomy (human, vertebrate, comparative or anatomical kinesiology)
- 3 units in physiology (human physiology preferred)
- 3 units in trigonometry (calculus is acceptable)
- 3 units in statistics
- 6 units in psychology (to include abnormal psychology)
- 6 units in English (to include English composition or an upper-level writing course)
- 6 units in social sciences or the humanities

You also must take the Graduate Record Examination and demonstrate competence in medical terminology. Among the factors on which admission is based are your grade point average (GPA), GRE scores, letters of recommendation, and written essays.

The web address is physicaltherapy.wustl.edu.

University College

Students in the college may enroll in course work offered by University College provided they do not exceed one course a semester. University College courses are subject to the degree requirement that stipulates only 30 units from one of the other schools of the university may be applied to the Bachelor of Arts degree. University College courses, unless so designated, do not fulfill distribution requirements. Students in the College of Arts & Sciences do not receive credit for online courses offered by University College.

Degree Requirements

Arts & Sciences places the primary responsibility for selection of an academic program on the student, in consultation with advisers. This freedom of choice carries with it a corresponding responsibility for the consequence of such choices. The faculty believes each student should strive toward breadth and intensity of study. This is represented in the formal requirements.

Planning

The degree requirements for the Bachelor of Arts degree in Arts & Sciences are designed to provide you with strong and sustained training in writing and numerical applications; to enable you to construct a coherent program in which courses reinforce each other in challenging and productive ways; and to take advantage of two distinctive features of the academic environment at Washington University — the strong tradition of cooperation among faculty working in different intellectual disciplines and the fact that teaching and learning at Washington University draw energies from an environment of vigorous and creative research.

We regard active student engagement in curricular planning as central to successful student learning. Each semester, your advisers will help you project a personalized academic plan that responds to what you have already learned — about the university, about the structure and aims of intellectual disciplines, and about yourself.

By the end of your sophomore year, you must have declared a major and constructed and nominated online to your four-year academic adviser a curricular plan that will satisfy all the following General Education requirements:

Basic Skills

A. Writing I (3 units): You must demonstrate proficiency in reading and writing English and must begin to develop mature skills in framing and revising arguments by completing course work determined by The Writing Center with grades of C– or better. This should be completed in the freshman year.

B. Applied Numeracy (3 units): You must develop your skills in numerical applications by completing one of an approved list of “AN” courses with a grade of C– or better. You may find that there is an “AN” course in your major field of interest.

C. Social Differentiation (3 units): You must take one course that substantially engages in the analysis of such forms of social differentiation as race, class, ethnicity and gender. This course, which may be taken credit/no credit, must be selected from an approved list of “SD” courses; it may satisfy other requirements.
D. Writing-Intensive Course (3 units): So that you can consolidate your communications skills, you must take a writing-intensive course, preferably in your major field. The course, which may satisfy other degree requirements, must be completed with a C– or better.

Area Requirements
A. You must complete course work in each of the following four academic areas:

1. Humanities (HUM), 9 units
2. Natural Sciences and Mathematics (NSM), 9 units
3. Social Sciences (SSC), 9 units
4. Linguistic and Cultural Diversity (LCD), in this area, students take either three sequenced courses of at least three units each in a single foreign language, or at least four courses of at least three units each:

Up to 12 units of distribution requirements may be taken credit/no credit.

B. To achieve depth and coherence, students must complete three integrations in at least two of the four areas of study (HUM, NSM, SSC, LCD). There are four types of integrations:

• Majors, second majors and minors
• Focus and other two-semester first-year programs
• Designated study abroad programs
• Integrated inquiries

You may propose your own integrated inquiry, which will be reviewed by the student-faculty Curriculum Committee. You are permitted only one student-proposed integration.

The Major
You must complete a major of no fewer than 18 units of courses numbered 300 or above with a grade of C– or better. A major consists of a regular major (a core specified by a department or area studies committee, plus a supporting program proposed by the student and approved by the department or area committee) or a special major (a program of studies planned by the student, together with a faculty adviser in one of the departments where the concentration will fall, and approved by the Committee on the Special Major and Minor). Degree completion is based on the primary major of record. At least half of the units for the major must be completed in residence. You are especially encouraged to complete a capstone experience in your major as a way of culminating your undergraduate education.

Additional Requirements
A. You must complete 120 units with at least 30 units in advanced courses (numbered 300, 400 or 500). The 30 units in advanced courses may include the number of advanced units required by the major.

B. You must have an overall G.P.A. of 2.0.
C. You must earn the final 30 units toward the degree at Washington University, enrolled in the College of Arts & Sciences. Students pursuing 3/2 degrees should follow the requirements laid out by their master’s programs.
D. You must be recommended by Arts & Sciences to the Board of Trustees.

Regulations
A. No more than 24 units may be earned using the credit/no credit option, and no more than 12 of the 24 units may be for distribution requirements.
B. No more than 15 units of pre-matriculation credit may be counted toward graduation. Pre-matriculation sources include Advanced Placement (AP), International Baccalaureate (IB), British Advanced (A) Levels, course credit earned by proficiency (i.e. back credit) and college courses taken after the junior year in high school.
C. You may not earn more than 12 units toward the bachelor’s degree in group and individual performance courses combined.
D. No more than 12 units of work may be taken outside the College of Arts & Sciences during the first and sophomore years. Thereafter, additional work may be taken with the approval of your adviser, provided the total applicable toward the A.B. does not exceed 30 units.
E. No more than 18 units of credit in independent study may be applied to the A.B.; no more than 6 units of independent study may be attempted in a single semester.
F. No more than 6 units of internship credit may be applied to the A.B.
G. A student may receive no more than a total of two majors and one minor or one major and two minors.

Transfer Students
A. Transfer students matriculating in the academic year 2012–13 will follow the requirements of the Discovery Curriculum. Where appropriate, previous course work may be applied to the distribution requirements based on the following guidelines.
B. For a student entering at the sophomore level (24+ units):

1. one cluster may be fulfilled or
2. one course may count as units in an area (NS, SS, TH or LA) and one course may fulfill a basic attribute (QA if a grade of C+ or better was received, SD or CD)
3. the writing-intensive course must be completed at Washington University

C. For a student entering at the junior level (57+ units):

1. two clusters may be fulfilled or
2. one cluster may be fulfilled and one basic attribute fulfilled (QA if a grade of C+ or better was received, SD or CD) or
3. two courses may count as units in two different distribution areas (NS, SS, TH or LA) and one course (not two) may fulfill one of the basic requirements (QA if a grade of C+ or better was received, SD or CD)
4. the writing-intensive course must be completed at Washington University

D. Transfer students must be enrolled for at least four consecutive full-time semesters to satisfy the residency requirement. They must complete a minimum number of units at Washington University, and a minimum number of units in the College of Arts & Sciences, according to the following table. No more than 3 units per semester may be taken on a credit/no credit basis.

<table>
<thead>
<tr>
<th>Semesters in Residence</th>
<th>A&amp;S Units in Residence</th>
<th>Total WU Units in Residence</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 semesters</td>
<td>78 units</td>
<td>105 units</td>
</tr>
<tr>
<td>6 semesters</td>
<td>69 units</td>
<td>90 units</td>
</tr>
<tr>
<td>5 semesters</td>
<td>57 units</td>
<td>75 units</td>
</tr>
<tr>
<td>4 semesters</td>
<td>45 units</td>
<td>60 units</td>
</tr>
</tbody>
</table>

**Final Transcripts of the Degree**

Conferral of the degree finalizes the student’s academic record at Washington University. No changes can be made to the student’s academic record after May 31 for a spring degree, October 31 for a summer degree, or January 31 for a fall degree. All students are strongly advised to obtain a copy of their final transcript, available for order from the Office of the University Registrar via WebStac.

**Academic Honors & Awards**

**Dean’s List:** In recognition of exceptional scholarship at the end of each semester, the College Office compiles a list of those students whose work has been particularly worthy of commendation. You will be cited on the Dean’s List if you meet the following academic standards: completion of a minimum of 14 units of graded work while achieving a grade point average of 3.6 during that semester. No incomplete or "N" grades may be outstanding as part of your semester record. All work must be completed and grades posted by the first day of the following semester in order to be considered for Dean’s List. For Spring semester courses this means the beginning of Summer Session II (roughly mid-June).

**College Honors:** The A.B. with College Honors will be awarded to you, upon assessment by the College Office, if you have achieved collegewide academic excellence as measured by a cumulative average of 3.5 or better throughout eight semesters but have chosen not to participate in a departmental honors program.

**Latin Honors:** Latin Honors are determined on the basis of your performance throughout eight semesters in the college. To be eligible for such honors, you must have maintained a 3.65 grade point average through the sixth semester and must be accepted for candidacy by the department or area committee concerned. You must enroll in such courses as the department or interdisciplinary committee may require, complete satisfactorily a significant project appropriate to the nature of the discipline and pass such written or oral examinations as the department or area committee may set. Upon certification by the department of completion of the Honors program, you may be awarded the A.B. *cum laude*, magna *cum laude* or *summa cum laude* according to the following proportions: the top 15 percent in overall grade point average of Latin honors candidates who complete the necessary requirements of their major departments will graduate *summacum laude*; the next 35 percent *magna cum laude*; the next 50 percent *cum laude*.

To be eligible for Latin Honors, transfer students must have earned a minimum of 48 letter-graded Washington University units prior to the final semester; grades earned at other institutions do not figure in the calculation of minimum averages required for eligibility for Latin Honors.

**Phi Beta Kappa:** For more than 200 years, election to Phi Beta Kappa has been a distinctive recognition of intellectual accomplishment in the liberal arts and sciences. The Washington University Chapter, Beta of Missouri, established in 1913, strives to enhance worthy intellectual endeavors and to recognize individual achievement.

Candidates for Phi Beta Kappa should have demonstrated both superior scholarship, as well as breadth and depth of interest in the liberal arts. Study of a foreign language and of mathematics, while not required, strongly enhances candidacy. Extensive study in professional fields detracts from candidacy.

Each year the Washington University chapter elects students into membership from the College of Arts & Sciences. Students do not apply for membership. The chapter also gives the annual Burton M. Wheeler Book Award for distinguished achievement in the first year. Selection committees are composed of Washington University faculty who are members of Phi Beta Kappa.

**Departmental Prizes and Awards**

Several departments recognize the superior achievement of graduating seniors with election to the honor societies in their major fields. These honor societies include Sigma Gamma Epsilon for Earth and planetary sciences students, Omicron Delta Epsilon for economics students, Delta Phi Alpha for German students, Phi Alpha Theta for history students, Pi Mu Epsilon for mathematics students, Mu Phi Epsilon for music students, Pi Sigma Alpha for political science students, and Psi Chi for psychology students.
In a number of academic fields, special recognition is given to students whose accomplishments have been noteworthy. The majority of such awards carry modest monetary benefits. They include the following:

- Academy of American Poets Prize
- Achievement in German Prize
- Richard Admussen Prize in Romance Languages
- Leota Diesel Ashton Prize in Playwriting
- Award for Contributions to Anthropology
- Award for Excellence in Research in Anthropology
- Award for Outstanding Leadership in Anthropology
- Award for Outstanding Senior Research in Social Thought and Analysis
- James Baldwin Essay Prize in African and African-American Studies
- John W. Bennett Prize to the Outstanding Graduate in Anthropology
- Rowland T. Berthoff Award in History
- Best Honors Thesis in Political Science
- Margaret E. Bewig Memorial Field Camp Scholarship in Earth and Planetary Sciences
- Leanna Boysko Essay Prize
- David Bronsen Prize
- David Bronsen Prize (German)
- Ralph Bunche Prize in African and African-American Studies
- Ian D.W. Cramer Award in Dance
- Antoinette Dames Prize in Political Science for the Outstanding Senior Honors Thesis
- F. Ward Denys Prize in English
- Liselotte Dieckmann Prize for Excellence in Comparative Literature
- Dramatics Club Prize
- Stephen H. Duncan Prize for Technical Theatre
- Sherman Eoff Prize for Excellence in Spanish
- Essay Prize in Literary Criticism in Russian
- Margaret Ewing Prize for Acting
- Excellence in Anthropology
- Joy Ezra Book Prize in English
- Todd Lewis Friedman Prize in Political Science
- Carrie S. Galt Award in Fiction
- Goff Prize in English
- J. Walter Goldstein Prize in History
- Robert J. Greef Award in English
- Henry Hampton Prize in African and African-American Studies
- Roger Conant Hatch Prize in English
- John G. Jutkowitz Memorial Fund Prize in Performing Arts
- Harriet Schwenk Kluver Prize for Excellence in Writing
- Arnold J. Lien Prize in Political Science
- Norma Lowry Memorial Fund Prize in English
- Roberta Luery Award for Study in France
- Patrice Lumumba Award in Black Studies
- The Nishi Luthra Prize for Excellence in Philosophy
- The William H. Matheson Prize for Excellence in Comparative Literature
- Hyman Meltzer Memorial Award for Undergraduate Research in Psychology
- Hyman P. Mensley Prize in Economics
- Herbert E. Metz Prize for Dramatic Literature
- Ross Middlemiss Prize in Mathematics
- Howard Nemerov Prize in Creative Writing
- Ernest L. Ohle Award in Earth Sciences
- John M. Olin Prize for Excellence in Economics
- Outstanding Paper for an Upper-Division Undergraduate Class in Political Science
- William Benton Parshall Prize in Political Science
- Prize for Excellence in Russian
- Putnam Examination Prize in Mathematics
- Paul and Silvia Rava Prize for Excellence in Italian Studies
- Robert H. Salisbury Prize in Political Science
- Senior Honors in Anthropology
- Senior Physics Prize for Outstanding Performance
- Service in Anthropology
- Adam Smith Prize in Economics
- John C. Sowden Prize in Chemistry
- Marian Smith Spector Prize in Biology
- Harrison Dailey Stalker Award in Biology
- Helen Stenner Memorial Essay Prize in Philosophy
John A. Stern Award for Undergraduate Research in Psychology
Tavenner Prize in Classics
Percy Tucker Scholarship in Economics
Robert N. Varney Prize for Introductory Physics
Jinx Walker Poetry Prize of the Academy of American Poets
Shirley McDonald Wallace Prize in History
Edward Weltin Prize in Ancient History
Courtney Werner Memorial Prize in Earth Sciences
Louis G. Zelson Prize in Spanish

Academic Regulations

Attendance
Successful education at the college level depends to a large extent on regular attendance at classes and laboratories. The College of Arts & Sciences has no fixed rules for “cuts” or “excused absences” but leaves to the judgment of each department or instructor the number of absences of any kind a student may have and still expect to pass a course. The faculty expects each instructor to give reasonable consideration to unavoidable absences and to the feasibility of making up missed work. The student is expected to explain to instructors the reasons for such absences and to discuss the possibility of completing missed assignments.

Units and Grades
The system now in use in the College of Arts & Sciences assumes that evaluation is useful to effective learning and that grades provide an indicator of accomplishment to the student, to advisers and the College Office, to graduate and professional schools, and to employers to whom the student chooses to submit them. Grades are symbols of achievement in a particular endeavor and should not be confused either with achievement itself or with personal worth.

Grades are important, particularly for students with preprofessional interests, but the student whose concern for grades is primary may lose sight of the total educational process.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points per Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0</td>
</tr>
<tr>
<td>A–</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
</tr>
<tr>
<td>B–</td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
</tr>
</tbody>
</table>

C–   1.7
D+   1.3
D    1.0
D–   0.7
F    0.0
CR   Credit awarded, work not given finer evaluation 0.0
NCR  No credit awarded due to unsatisfactory work 0.0
I    Course work incomplete
W    Withdrawal
R    Repeat
L    Successful audit
Z    Unsuccessful audit
N    No grade submitted
S    Satisfactory thesis work
U    Unsatisfactory thesis work

Grades earned in physical education courses are not included in calculating the student’s GPA.

Auditing a Course
You may register for a specific course as an auditor. This status entitles you to all the privileges of a regularly enrolled member of the class. Audit courses do not count toward the degree. Consult the instructor on the requirements of a successful audit, as unsatisfactory performance results in a grade of Z. A successful audit results in a grade of L.

Incomplete Grades
By action of the Faculty and the ArtSci Council, the college limits the number of accrued grades of Incomplete (I). The policy is intended to protect the student from building an overwhelming burden of unfulfilled course work. The regulation reads as follows: “Students who accrue three or more Incompletes will not be permitted to enroll for any subsequent semester until the number is reduced to two or fewer.” Should students have too many Incompletes, they will be declared ineligible for the following semester until they have satisfied enough of their outstanding work. This is normally achieved by the posting of grades online, but it also may be achieved by a note from a professor (or professors) to the College Office confirming that the student has turned in all requisite assignments for the relevant class (or classes).

If you experience medical or personal problems that make satisfactory completion of course work difficult or unlikely, you may request a grade of Incomplete (I) from one or more instructors. In such a situation you should take the following steps:

1. Meet with the instructor before the final examination or due date for the final paper to discuss the request.
2. If the instructor consents, agree on the work remaining to complete the course and on a date when it will be submitted.

If these steps are not followed, the instructor is under no obligation to award a grade of I. Failure to submit completed work by the last day of classes of the next full semester will result in the I grade being changed automatically to a grade of F.

**Pass/Fail Option**

To encourage students to enroll in courses they might not otherwise take, the faculty has established the credit/no credit option under which you may register in courses and receive a grade of credit (CR) or no credit (NCR). In any semester, a full-time student may enroll in one course under the credit/no credit option. You may not apply toward the A.B. more than 24 units earned under this option. You must designate which course is to be taken under the credit/no credit option each semester at the time of registration. No change into or out of the option may be made after the dates designated in the calendar of the College of Arts & Sciences, published in Course Listings each semester.

No more than 12 of the 24 units allowed for the credit/no credit option may be applied to distribution requirements.

The first-year writing course, the writing-intensive course, the applied numeracy course, and courses in the major and minor, are excluded from the credit/no credit option. Preprofessional and prospective graduate students should also consider seriously the strong probability that professional schools may seek more definite grades than CR in courses that are required or strongly recommended for admission to professional or graduate study.

A few courses particularly designated by departments may require enrollment on a credit/no credit basis. When so required, you are permitted to elect an additional course to be taken credit/no credit but should consider carefully the consequences of that choice. You should be sure you understand from the instructor what the lowest letter grade is that will equate to passing in a credit/no credit course.

**Reading Days and Final Examination Period**

When registering for classes at Washington University, students commit to all course requirements including the examination procedures chosen and announced by the course instructor. In selecting courses, students are advised to take note of all final exam information. Students anticipating conflicts in their final examination schedule should seek to resolve these with the course instructors involved before enrolling. Students should not register for courses that result in three or more final examinations on one day. For further information, visit the website of the Office of the Provost.

Final exam days and times published in Course Listings each semester are subject to change. The most current final exam schedule information can be found online.

**Minimum and Maximum Course Loads**

The average course load necessary to fulfill the required 120 units for the bachelor’s degree in timely fashion is 15 units — typically, five courses — in each semester. If you receive grades of C– or better in all courses in the previous semester, however, you may carry up to 18 units. If you have completed outstanding work in previous semesters, you may take up to 21 units of work. You may not enroll for more than 21 units without permission and additional per-unit tuition charge.

Courses in the college that require more preparation and class time than average — foreign languages, mathematics and science — may carry 4 or 5 units of credit. When enrolled in these and other demanding courses, you are advised to take fewer than 15 units of academic work in particular semesters, then to balance such intensive semesters with modest increased units in subsequent semesters.

Except for reasons of health or other special circumstances, the minimum load is 12 units, but any enrollment between 12 and 18 units is considered normal.

**Repeating a Course**

Students whose performance in a course has not met their expectations are permitted to retake the course, receive a second grade, and have the symbol R, denoting the retake, placed next to the grade for the first enrollment. The course must be retaken for the same grade option as the course originally was taken. Both registrations will show on the transcript, however only the grade and units of the second enrollment will be used to calculate the GPA. No student may use the retake option to replace a failing grade received as a sanction for violation of the Academic Integrity Policy.

This procedure is not pedagogically sound and should be avoided in all but serious cases, such as a grade of D in a course required for the major.

To repeat a college course in Washington University Summer School or in University College requires the department to certify in advance the course’s equivalence to the college course.

**Academic Probation and Suspension**

Students are expected to maintain the highest level of scholarship during their time at Washington University. At a minimum, however, students must meet the standards set by the faculty as well as those mandated by the Department of Education. Those who do not complete at least 12 units or achieve a semester grade point average of C or better for each
semester are subject to academic warning, probation or, in extreme cases of poor academic performance, suspension. Students also must make acceptable progress toward meeting degree requirements. Students must be on pace to complete their program by attempting no more than 150 percent of the credits required. Anytime students fall below completing 2/3 or fewer of the credits they have attempted overall, they are considered to not be achieving satisfactory academic progress (SAP). The College will work with those students to develop a plan to help them achieve acceptable pace within a set period of semesters. Additionally, if it is determined that a student cannot complete his or her program within the 150 percent maximum credits, the student may not continue their program of study at Washington University.

In the event of an academic warning or probation, the student will be matched with a progress counselor for the following semester. The student must complete an academic agreement with the progress counselor to map out how improvement will be achieved. Failure to establish these guidelines with the progress counselor by the end of the second week of the relevant semester may result in the termination of the student’s enrollment for that semester. Furthermore, should a student agree to, but persistently fail to, abide by the terms established in the agreement, suspension may be invoked during the semester.

In order to return to good academic standing, a student on warning or probation must complete at least 12 units of credit and earn no single grade of C– or lower. Students who do not meet this standard are subject to academic suspension from the college. Students suspended for academic deficiency are not eligible for readmission to the College of Arts & Sciences until they demonstrate, under the conditions set for each individual case, a capacity to work productively at the level required by the college curriculum.

Leaves of Absence

For certain students, time spent away from the academic setting is of great value in discovering objectives and gaining experience not available within the academic community. If you are an undergraduate in good standing at the completion of a term, you are eligible to take a leave of absence upon petition to the College Office. On a leave of absence you are assured re-enrollment within the next two years. Before returning you are asked to notify the College Office and submit a Reinstatement Form at least six weeks prior to the beginning of the appropriate term. A student wishing to take a medical leave of absence must have a recommendation for the MLOA from Student Health Services submitted to the appropriate dean in the College Office prior to leaving and prior to re-enrollment. The dean in the College Office will decide whether or not to grant the request for the MLOA and re-enrollment upon reviewing the recommendations from Student Health Services and the student’s file.

Transfer Credit

See Pre-matriculation Credit and/or Transfer Students under Bachelor of Arts Degree Requirements.

University College Courses

Students in the college may enroll in course work offered by University College as long as they do not exceed one course a semester for a maximum total of 24 units. University College courses are subject to the degree requirement that stipulates only 30 units from one of the other schools of the university may be applied to the Bachelor of Arts degree. University College courses, unless so designated, do not fulfill distribution requirements. Students in the College of Arts & Sciences do not receive credit for online courses offered by University College.

Administration

Gary S. Wihl, PhD
Dean of Arts & Sciences and Hortense & Tobias Lewin
Distinguished Professor in the Humanities in Arts & Sciences

Jennifer R. Smith, PhD
Dean of the College of Arts & Sciences and Associate Professor of Earth and Planetary Sciences and Environmental Studies

Darla Dale, PhD
Assistant Dean

Warren Davis, MA
Assistant Dean

Matthew DeVoll, PhD
Assistant Dean

Nicole Gore, JD
Assistant Dean

Carolyn Herman, EdD
Assistant Dean

Diana Hill, PhD
Assistant Dean

Kristin Kerth, JD
Assistant Dean

Joy Kiefer, PhD
Assistant Dean

Dirk Killen, PhD
Associate Dean

Mary Laurita, PhD
Assistant Dean

Sean McWilliams, PhD
Assistant Dean

Jennifer Romney, PhD candidate
Assistant Dean
Wilmetta Toliver-Diallo, PhD
Assistant Dean

Majors

Below is a list of majors offered by the College of Arts & Sciences. Click the link to view more information about a specific major. To see the entire list of majors offered by all the schools please click on Majors (all schools) displayed in the menu on the left.

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- American Culture Studies (p. 156)
- Ancient Studies (p. 267)
- Anthropology (p. 180)
- Arabic (p. 209)
- Archaeology (p. 213)
- Art History and Archaeology (p. 219)
- Biology (p. 235)
- Chemistry (p. 256)
- Chinese Language and Culture (p. 261)
- Classics (p. 267)
- Comparative Arts (p. 273)
- Comparative Literature (p. 273)
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- Education (p. 326)
- Educational Studies (p. 326)
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- English Literature (p. 340)
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- Environmental Studies (p. 359)
- European Studies /International and Area Studies (p. 365)
- Film and Media Studies (p. 379)
- French (p. 389)
- Germanic Languages and Literatures (p. 405)
- Hebrew (Biblical and Modern) (p. 412)
- History (p. 418)
- Interdisciplinary Project in the Humanities (p. 451)
- International and Area Studies (p. 461)
- Italian (p. 494)
- Japanese Language and Culture (p. 499)
- Jewish, Islamic and Near Eastern Studies (p. 505)
- Latin American Studies/International and Area Studies (p. 524)
- Linguistics (p. 536)
- Mathematics (p. 541)
- Middle School Teacher Education (p. 326)
- Music (p. 554)
- Persian Language and Literature (p. 576)
- Philosophy (p. 580)
- Philosophy–Neuroscience–Psychology (p. 592)
- Physics (p. 604)
- Political Economy (p. 613)
- Political Science (p. 615)
- Psychology (p. 637)
- Religious Studies (p. 656)
- Romance Languages and Literatures (p. 667)
- Secondary Teacher Education (p. 326)
- Spanish (p. 674)
- Urban Studies (p. 693)
- Women, Gender, and Sexuality Studies (p. 703)

Minors

Below is a list of minors offered by the College of Arts & Sciences. Click the link to view more information about a specific minor. To see the entire list of minors offered by all the schools please click on Minors (all schools) displayed in the menu on the left.

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- American Culture Studies (p. 157)
- Ancient Studies (p. 268)
- Anthropology (p. 182)
- Applied Microeconomics (p. 320)
- Arabic (p. 210)
- Archaeology (p. 213)
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- Ballet (p. 282)
- Biology (p. 238)
- Biomedical Physics (p. 605)
- Chemistry (p. 257)
- Children’s Studies (p. 250)
- Chinese Language and Culture (p. 262)
- Classics (p. 268)
African and African-American Studies

The program in African and African-American Studies offers opportunities for students to explore the social, political and intellectual history as well as the literature, culture and artistic life of various peoples in the world who are African or of African descent.

The program examines a wide spectrum of experiences and issues and is both multidisciplinary and interdisciplinary in its approach. Courses are offered in the humanities, the social sciences and the performing arts. Main areas of concentration are East, West and Central Africa; the United States; and the Caribbean.

Students who major in the program are encouraged to design a course of study that focuses on either a particular area of interest or a more comprehensive examination of black culture and life. You also have opportunities to do research with faculty or to take internships with organizations such as the Missouri Historical Society. Our summer programs in Kenya and Senegal as well as study abroad in other African countries can further enrich your experience.

Courses in the program are numbered to assist students to progress from introductory courses (100–200 level), to intermediate courses (300 level or higher), to advanced courses (400 level). The program also regularly sponsors lectures on topics of interest in all areas of the black experience. In many cases, lecturers participate in classes by giving special lectures within the classroom setting.

Departmental Prizes: The program also sponsors writing competitions that include monetary awards. They include the James Baldwin Prize for the best essay on any aspect of black culture and life in the United States; the Julius Nyerere Prize for the best essay on any aspect of black culture and life in Africa; the Sylvia Wynters Prize for the best essay on any aspect of black culture and life in the Caribbean, Central America, South America or North America (outside of the United States); the Henry Hampton Prize for the best essay on the civil rights movement or any book by the Rev. Dr. Martin Luther King Jr.; and the Ralph Bunche Prize for the best essay related to Africans or people of African descent and political science.
Director
Garrett Albert Duncan
Associate Professor
PhD, The Claremont Graduate School
(Education)

Endowed Chairs
Jean Allman
J. H. Hexter Professor in the Humanities
PhD, Northwestern University
(History)

John Baugh
Margaret Bush Wilson Professor in Arts & Sciences
PhD, University of Pennsylvania
(Linguistics)

Gerald Early
Merle Kling Professor of Modern Letters
PhD, Cornell University
(English)

William F. Tate IV
Edward Mallinckrodt Distinguished University Professor in Arts & Sciences
PhD, University of Maryland–College Park
(Education)

Professors
Timothy Parsons
PhD, Johns Hopkins University
(History)

Carl Phillips
MA, Boston University
(Creative Writing)

Carol Camp Yeakey
PhD, Northwestern University
(Education)

Rafia Zafar
PhD, Harvard University
(English)

Associate Professors
William J. Maxwell
PhD, Duke University
(English)

Shanti Parikh
PhD, Yale University
(Anthropology)

Assistant Professors
J. Dillon Brown
PhD, University of Pennsylvania
(English)

Korina M. Jocson
PhD, University of California–Berkeley
(Education)

Sowande' Mustakeem
PhD, Michigan State University
(History)

Artist-in-Residence
Ron Himes
Henry Hampton Distinguished Artist-in-Residence
BA, Washington University

Senior Lecturers
Rudolph Clay
MLS, University of Michigan
/Library Science/

Mungai Mutonya
PhD, Michigan State University
(Linguistics)

Wilmetta Toliver-Diallo
PhD, Stanford University
(History)

The Major in African and African-American Studies
Total units required: 27 credits

Required courses:
AFAS 208B African-American Studies: An Introduction 3
AFAS 209B African Studies: An Introduction 3
AFAS 401 Senior Seminar 3

Elective courses: 18 units in advanced classes from the selections within our course offerings

Additional Information
Co-Curricular Requirements for Majors: The program regularly sponsors lectures and events, such as plays, film festivals, exhibits, field trips, and panels and speakers, which focus on contemporary or perennial topics of interest in all areas of the black experience. In many cases, guest lecturers and artists visit classes and interact directly with students. These program-sponsored events are, in part, designed to foster a
vibrant social and intellectual community within the program and to give majors and minors a sense of identity of what it means to be part of the African and African-American Studies community. Majors must attend a minimum of six (and at least two per year) and minors must attend a minimum of three (and at least one per year) such African and African-American Studies–sponsored events to fulfill the program’s co-curricular requirement. (African and African-American Studies subsidizes events that require admission fees.)

Senior Honors: If a student maintains an overall grade point average of at least 3.65 and a major grade point average of 3.50 by the second semester of her or his junior year, she or he may be eligible to conduct a Latin Honors thesis with a core faculty member in the program in African and African-American Studies. Completed application forms for Honors should be submitted to the honors program director as early as possible, preferably before May 1 of your junior year.

The Minor in African and African-American Studies

Units required: 18

Required courses:

AFAS 208B African-American Studies: An Introduction 3
AFAS 209B African Studies: An Introduction 3

Elective courses: 12 units at the 300 level or above. Courses should be selected in consultation with the adviser.

Additional Information

Co-Curricular Requirements for Minors: The program regularly sponsors lectures and events, such as plays, film festivals, exhibits, field trips, and panels and speakers, which focus on contemporary or perennial topics of interest in all areas of the black experience. In many cases, guest lecturers and artists visit classes and interact directly with students. These program-sponsored events are, in part, designed to foster a vibrant social and intellectual community within the program and to give majors and minors a sense of identity of what it means to be part of the African and African-American Studies community. Majors must attend a minimum of six (and at least two per year) and minors must attend a minimum of three (and at least one per year) such African and African-American Studies–sponsored events to fulfill the program’s co-curricular requirement. (African and African-American Studies subsidizes events that require admission fees.)

African and African-American Studies

L90 AFAS 1002 Foundations in African & African-American Studies

Designed to introduce the student to issues in African & African American Studies and how students with AFAS degrees utilize their knowledge in graduate and professional programs or the working world. Particular attention will be paid to the discipline of African & African American studies, which engages with the artistic, cultural, historical, literary, and theoretical expressions of the peoples and cultures of Africa and the African Diaspora. Faculty members as well as Saint Louis professionals will give one-hour lectures on their particular disciplinary approach, their research, or their professional life. Students will be required to attend 3 outside lectures or performances. May be taken before declaring major, and may be taken by non-majors.

Credit 1 unit. A&S : TH

L90 AFAS 103D Beginning Swahili I

A beginning language course emphasizing acquisition of reading, writing and conversational skills in Swahili language. Through video and other multimedia presentations, students also are introduced to the culture of Swahili-speaking communities living in more than a dozen African countries. Five hours a week including culture and language laboratory hours. This course is strongly recommended for students participating in the Summer in Kenya Program. CBTL course.

Credit 5 units. A&S : LA A&S : IQ, LCD LS BU : IS

L90 AFAS 1045 Wolof Language and Culture

This course introduces students to Wolof language and culture. Wolof is a West African language spoken in Senegal and the Gambia. It is also spoken on a smaller scale in Mauritania, Mali, French Guinea and in the migrant communities in the United States and France. This is the first course of a beginning-level of a Wolof program. In order to acquire a basic proficiency, students practice speaking, reading, writing and listening. Each module begins with a thematic and practical dialogue from which we can study vocabulary, aspects of grammar as well as a cultural lesson. Interactive material, including texts, images, videos, films and audio, are provided. Its aim is to provide students with knowledge of the basic structures of the language and the ability to communicate. Students also learn important aspects of life and culture of the Wolof.

Credit 3 units. A&S : LA A&S : IQ, LCD

L90 AFAS 104D Beginning Swahili II

Second-semester Swahili language course emphasizing conversational competence and knowledge of Swahili-speaking cultures of East Africa. In addition to learning grammar and vocabulary sufficient to allow a student to perform basic survival tasks (asking for directions, buying a ticket for travel, checking into a hostel, ordering food) in Swahili, students also are introduced to authentic Swahili texts including plays, short stories and newspapers. Students have an opportunity to practice their acquired language skills by interacting with Swahili-speakers in the St. Louis region. Prerequisite: AFAS 103D. CBTL course.
L90 AFAS 1096 Ragtime
Same as Music 109
Credit 2 units. A&S : LA A&S : IQ, HUM BU : HUM FA : AH

L90 AFAS 111 Freshman Seminar: Race and Ethnicity on American Television
Same as Film 110
Credit 3 units. A&S : TH, CD, SD A&S : IQ, HUM, LCD BU : BA FA : SSP

L90 AFAS 1181 Freshman Seminar: Beats and Rhymes — Hip-Hop in American Culture
On its surface, hip-hop is fundamentally about making music: a creative combination of beats, flow, samples and rhymes. And yet, beneath the surface lies so much more. Although hip-hop culture writ large (lyrics, fashion, dance and lifestyle) influences many on a global level, this class explores the meaning of hip-hop primarily from African-American informed social and political perspectives. In what ways does hip-hop intersect with American culture, specifically on the fields of race, ethnicity, class, gender and sexuality? Without a doubt, it does so in intriguing, contested and often problematic ways.
Credit 3 units. A&S : TH A&S : IQ, HUM

L90 AFAS 127 Popular Music in American Culture
Same as Music 1022
Credit 3 units. A&S : LA, SD A&S : IQ, HUM, SD BU : HUM FA : AH

L90 AFAS 1277 Musics of the World
Same as Music 1021
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : HUM FA : AH

L90 AFAS 136 Freshman Seminar: The Concept of Race in Black Thought
Although many people now believe that the idea of biologically distinct human races is a socially constructed fiction, the color of one’s skin can play a major role in determining such aspects of life as where one lives, the quality of one’s education, and one’s access to health care. Clearly, perceptions of race still hold a great deal of power, whether or not they are based upon scientifically sound reasoning. Therefore, we must attempt to understand how notions of race emerged and where they seem to be headed. In this course, we examine the role of race in American life, past and present.

L90 AFAS 162 Freshman Seminar: Contextualizing Problems in Contemporary Africa
Africa is typically presented in the United States and international media as a continent in constant turmoil. This freshman seminar challenges this simplistic and common myth by exploring the historical and global roots of key issues facing contemporary Africa. Case studies include the 1994 genocide in Rwanda; post-Apartheid violence in South Africa; HIV/AIDS in Africa; oil and corruption in Nigeria; the legacy of colonialism; the quest for modernity; refugees and forced migration; and commercial sex work. In each of these cases students explore how the issue emerged within a specific historical, social and global context. We investigate the implications of various forms of inequalities (e.g., between the global north and global south, within Africa, and among generations and genders) in shaping each topic and how differently situated people within Africa understand, respond to and cope with everyday realities. Readings include anthropological and historical analysis, African literature, journalist’s accounts and popular articles. By the end of the course, students should be able to critically assess the value of using a contextual analysis in understanding problems in contemporary Africa. This class is a discussion-based seminar and students are expected to actively participate. Students are graded on a series of analytical essays, a final project and in-class participation.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : IS

L90 AFAS 188 Freshman Seminar: Self and Identity in African-American Literature
This course offers an introductory examination of classic African-American literary texts that deal with identity and the quest for self. Among authors we may read: Gwendolyn Brooks, Richard Wright, Nella Larsen and W.E.B. DuBois. Freshmen only.
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : BA, ETH FA : Lit

L90 AFAS 195C Introduction to African-American Images in Film: A Freshman Seminar
This seminar for freshmen introduces students to an array of films depicting African Americans at different points in the history of filmmaking, as well as the relevance of these films to the advancement of civil rights in America and, by extension, the world. Students are introduced to elementary documentary film production in collaboration with Washington University library staff and hands-on utilization of the Henry Hampton Archive. The course provides a balanced introduction to various civil rights topics that are relevant to African Americans, their depiction in film, and knowledge of how documentary film production can be used to overcome past discrimination.
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : HUM EN : H
L90 AFAS 196C Images of Africa in Literature and Art, ca. 1800 to Present Day
This course examines representations of Africa, African peoples and African cultures from the early 19th-century to the present day. Drawing on a wide variety of African and colonial source materials — including novels, photographs, art, advertising and movies — we critically explore the ways in which historical developments and cultural products helped to shape conceptions of African identities and ethnicities. Among other issues, we address the legacy of the slave trade; gender and the construction of cultural "traditions"; colonial society, nationalist resistance and the rise of pan-Africanism; and South African Apartheid. Emphasis is placed on critical engagement with the source materials through written assignments and participation in class discussion. Freshmen only.
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD  BU : HUM FA : Lit

L90 AFAS 203D Intermediate Swahili III
Enhanced acquisition of language fundamentals acquired in first-year Swahili through performance, reading and writing. Students gain skills performing role-plays such as asking for directions, booking a bus ticket, ordering food in a restaurant, etc. Students read more authentic Swahili texts including plays, short stories, newspapers and poems. Prerequisite: AFAS 103D(Q) –104D(Q) or the equivalent. CBTL course.
Credit 3 units.  A&S : LA  A&S : IQ, LCD, LS  BU : HUM, IS

L90 AFAS 204D Intermediate Swahili IV
Fourth-semester Swahili language course emphasizes the development of the ability to discuss a wide range of cultural and literary topics with native speakers of the language. These topics are introduced by reading authentic Swahili texts such as plays, novels, poems and newspapers. Students enhance their writing skills and creativity in the language through group-writing projects. Prerequisite: Swahili 103D(Q), 104D(Q) and 203 D(Q). CBTL course.
Credit 3 units.  A&S : LA  A&S : IQ, LCD, LS  BU : HUM, IS

L90 AFAS 208B African-American Studies: An Introduction
Lectures, readings, films and discussions reflect a range of academic approaches to the study of African-American people. Course materials drawn from literature, history, archeology, sociology and the arts to illustrate the development of an African-American cultural tradition that is rooted in Africa, but created in the Americas. Required for the major.
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD  BU : HUM FA : SSP

L90 AFAS 209B African Studies: An Introduction
This course introduces students to a variety of approaches to the study of Africa by considering the ways that scholars have understood the African experience. It exposes students to the history, politics, literary and artistic creativity of the continent. Emphasis is placed on the diversity of African societies, both historically and in the present, and explore Africa’s place in the wider world. Required for the major.
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD  BU : IS FA : SSP

L90 AFAS 210 The Linguistic Legacy of the African Slave Trade in Interdisciplinary Perspective
This course explores the linguistic consequences of the African slave trade, and in so doing introduces students to basic concepts in linguistic science that are relevant to human language development and controversial educational theories that are based on race. Anthropological, linguistic and psychological dimensions of African-American culture are embedded within complementary evaluations of educational controversies surrounding the teaching of (standard) English to American slave descendants, including the Ebonics controversy and its relevance to larger questions of social efficacy, and the affirmative action debate that has consumed the nation. Students work individually or in groups to produce a major intellectual artifact (e.g., a term paper, a scholarly web page or a project) pertaining to the linguistic plight of citizens within this African Diaspora. Students are introduced to foundational African-American studies in anthropology, education, English, linguistics and psychology.
Credit 3 units.  A&S : SS, SD  A&S : IQ, SSC, SD  BU : BA

L90 AFAS 2150 Freshman Seminar: The Enigma of Thomas Jefferson
See L22 2030.
Same as History 2030
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L90 AFAS 215C Topics in African-American Studies
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD

L90 AFAS 221 African Urban History
Same as History 2188
Credit 3 units.  A&S : TH  A&S : IQ, HUM  EN : H

L90 AFAS 2231 Cross-Cultural Women Playwrights
Same as Drama 223
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD  BU : BA FA : AH, Lit

Black women, much like their male counterparts, have shaped the contours of African-American history and culture. Still, close study of African-American women's history has burgeoned only within the past few decades as scholars continue to uncover the multifaceted lives of Black women. This course explores the lived experiences of Black women in North America through a significant focus on the critical themes of violence and sexuality. We examine African-American women as the perpetrators and the victims of violence and as the objects of sexual surveillance and we explore a range of contemporary debates concerning the intersections of race, class and gender, particularly within the evolving hip-hop movement. We take an interdisciplinary approach through historical narratives, literature, biographies, films and documentaries. Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : BA

L90 AFAS 251 Topics: The Ebonics Controversy
This course examines the controversy regarding the status of Ebonics and its role in education. Ebonics is the term often used to describe the distinct speech of 85 percent of the African-American population. The controversy reached the national limelight in 1996 and 1997 due to a resolution by the Oakland (California) School Board, which identified Ebonics as a legitimate form of speech that should be respected. The arguments about Ebonics are multifaceted and highlight significant linguistic as well as educational and political issues. There is the basic question of just what is Ebonics: Is it a separate language, a dialect, slang, bad grammar, broken English or really not a distinct entity? There are issues related to the term Ebonics as evidenced by the various names that academicians have used for the speech of African Americans, i.e. African-American (vernacular) English and African-American Language. Its origins and history also have been debated: Is it a variant of Southern English or are its origins traceable to the language systems of Africa? Further, there is a fundamental, practical question of how to approach the education of African-American children whose home speech is Ebonics: Should a goal in the education of these children be the purging of Ebonics so that it does not interfere with the mastery of Standard English, or should Ebonics be used as a vehicle for learning Standard English? This course examines these and other issues, such as the portrayal of Ebonics in the popular media as well as its use within African-American communities, through readings, films, small and large group discussions, writing assignments and lectures. Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD

L90 AFAS 2674 Sophomore Seminar: Slavery and Memory in American Popular Culture
Same as History 2674
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L90 AFAS 301 A History of African-American Theater
A survey of African-American theater from post-Civil War “coon” shows and reviews to movements for a national black theater, such as Krigwa, Lafayette and Lincoln, and the Black Arts Movement. Early black theater and minstrels; black theater movement and other ethnic theater movements in America. Critical readings of such plays as Amiri Baraka’s Dutchman, Lorraine Hansberry’s A Raisin in the Sun, and Langston Hughes and Zora Neale Hurston’s Mule Bone. Also works by August Wilson, Ed Bullins, Charles Fuller, Georgia Douglas Johnson. Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : HUM FA : AH

L90 AFAS 3015 Speaking Truth to Power: The Black Prophetic Voice in America
To comprehend the origins and development of the Black prophetic voice, one must first understand the religious history of African Americans. As such, this course investigates how African Americans have historically employed Christianity as a vessel of protest and empowerment. To illustrate how African Americans practiced faith has ultimately become a platform for speaking out against their oppression, students engage some of the following questions: What makes Black Christianity so distinct, if at all? What is the so-called “prophetic voice”? And how have African Americans used this prophetic voice to bring attention to various issues of social, political and economic concern? Ultimately students decide for themselves what Black prophetic voice is and if it is still a viable part of the American fabric. Credit 3 units. A&S : TH

L90 AFAS 302 Black Theater Workshop III
A performance-oriented course that explores the black experience through acting, directing and play writing. Students develop through classroom improvisation short performance pieces during the semester. They also are required to attend three to five plays. Each student must participate in a final performance, which is in lieu of a written final examination. Credit 3 units. A&S : LA, SD A&S : IQ, HUM, SD

L90 AFAS 3061 Literacy Education in the Contexts of Human Rights and Social Justice
Same as Educ 306
Credit 3 units. A&S : SS BU : BA

L90 AFAS 3062 Islam, Culture and Society in West Africa
This course explores the introduction of Islam into West Africa beginning in the 10th Century and explores its expansion and development in the region, placing emphasis on the 19th century to present day. It focuses on the development of West African Muslim cultural, social, religious and political life, to understand not only how the religion affected societies, but also how West African local societies shaped Islam. The course also aims to introduce students to a critical understanding of Islamic writing
in West Africa. It also examines the organization of Muslim Sufi orders in West Africa through time and space. The course is organized around a series of lectures and readings, as well as print and visual media. 
Credit 3 units.  A&S : SS, CD  A&S : IQ, SSC, LCD

L90 AFAS 306B Africa: Peoples and Cultures
Same as Anthro 306B
Credit 3 units.  A&S : SS, CD  A&S : IQ, SSC, LCD  BU : HUM, IS  FA : SSP

L90 AFAS 3071 Caribbean Literature in English
Same as E Lit 3071
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD

L90 AFAS 3101 “Give Up the Mic”: Black Feminism in the United States
It is a mistaken, but widely held assumption that Black feminism in the United States emerged from the second-wave women's movement of the 1960s. This course offers a different view: the black feminist movement has a long history with roots in the slavery era. This course charts the historical evolution of black feminist theory and praxis from the 19th century to the present through reading texts from a variety of black feminists including abolitionists, anti-lynching advocates, clubwomen, blues artists, unionists, communists, civil rights and black power movement activists, poets, leaders of formal feminist organizations, and hip-hop feminists. We examine essays and books that articulate the complexity of black American women's demand for social, economic and political equality as well as the desire for a vision of liberation based on historical and ongoing struggles against race and gender oppression. We identify the central concerns of black feminist thought, salient theoretical models such as the intersection of race, gender, sexuality and class, and how the movement changed over time. 
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD

L90 AFAS 311 Modern Dance and the African-American Legacy
This course examines the works of several African-American choreographers and their contributions to the field of modern dance in America. These works, considered modern day classics, depict important historical events and reveal cultural influences that people of African descent have impressed upon our society. Through the medium of dance aided by discussions, video and class reading assignments, the choreographers' works are analyzed for form, content and social relevance. Studio work includes technique to support learning the repertory. Prerequisite: one to two years training in modern, jazz or ballet. 
Same as Dance 311
Credit 2 units.  A&S : LA  A&S : IQ, HUM  BU : HUM  FA : AH

L90 AFAS 3161 African-American Politics
This course examines the historical and contemporary efforts by African Americans to gain full inclusion as citizens in the U.S. political system. The course focuses on topics such as the politics of the civil rights movement; African-American political participation; and the tension between racial group politics and class politics. 
Credit 3 units.  A&S : SS  A&S : IQ, SSC

L90 AFAS 319C The Pre-History of Africa
Same as Anthro 318C
Credit 3 units.  A&S : SS, CD  A&S : IQ, SSC, LCD  BU : BA, HUM, IS  FA : SSP

L90 AFAS 321 Topics in Theater
Same as Drama 321
Credit 3 units.  A&S : LA  A&S : IQ, HUM

L90 AFAS 321C African Civilization to 1800
Beginning with social and economic changes in 19th-century Africa, this course is an in-depth investigation of the intellectual and material culture of colonialism. It is also concerned with the survival of precolonial values and institutions, and examines the process of African resistance and adaptation to social change. The survey concludes with the consequences of decolonization and an exploration of the roots of the major problems facing modern Africa. 
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD  BU : HUM, IS  FA : SSP

L90 AFAS 322C African Civilization: 1800 to the Present
Beginning with an introduction to the methodological and theoretical approaches to African history, this course surveys African civilization and culture from the Neolithic age until 1800 AD. Topics include African geography and environmental history; migration and cross-cultural exchange; the development of Swahili culture; the Western Sudanese states; the trans-Atlantic slave trade; and the historical roots of Apartheid. 
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD  BU : HUM, IS  FA : SSP

L90 AFAS 3231 Black Power Across Africa and the Diaspora: International Dimensions of the Black Power Movement
This seminar explores the Black Power Movement as an international phenomenon. By situating Black Power within an African World context, this course examines the advent and intersections of Black Power politics in the United States, parts of Africa (including Ghana, Algeria, Nigeria and Tanzania), the Caribbean (Jamaica, Bermuda, the Bahamas and Cuba), South
America (Brazil) and Canada. Particular emphasis is placed upon unique and contested definitions of “Black Power” as it was articulated, constructed and enacted in each region. 
Credit 3 units. A&S : TH A&S : IQ, HUM

L90 AFAS 3242 Introduction to African-American Psychology
This course provides an introduction to the experiences of African Americans from a psychological perspective. Throughout the course, we consider a range of theoretical and methodological approaches that scholars have developed to conceptualize the thoughts, styles and behaviors of African Americans. The course begins with an overview of these theories, methodologies and frameworks. The second part of the course is devoted to exploring psychological research around pertinent topics in the field such as racism and discrimination, gender, achievement and schooling, kinship and family, racial identity, religion and spirituality, and mental health. Finally, we conclude the course with discussions of current topics, controversies and recent advances in African-American psychology. Prerequisite: Psych 100B or permission of instructor. Credit 3 units. A&S : SS A&S : IQ, SSC

L90 AFAS 3255 Deconstructing Black Manhood: The Gay Experience in the Black Community
In recent years, the American public has become more familiar with the phenomenon of black men “on the down low,” black men who have sex with men but who project a heterosexual persona. The controversy about this behavior has revealed the extent to which our society lacks an adequate vocabulary to deconstruct monolithic notions of black masculinity, a conceptual inadequacy that must be understood in light of the historical suppression of African-American self-expression. In this course, we investigate the monoliths of black manhood and explore writers who offer cultural and theoretical frameworks to challenge our ideas of what black manhood is and should be, particularly those writers who are bold enough to represent same-sex desire among black men. Authors include James Baldwin, Richard Bruce Nugent and Samuel Delaney. Satisfies American requirement. Credit 3 units. A&S : TH A&S : IQ, HUM

L90 AFAS 326 Literature of the Color Line
In 1903’s The Souls of Black Folk, W.E.B. Dubois wrote “for the problem of the 20th century is the problem of the color-line.” This literature course includes texts written by African-American authors to examine the ways African Americans came to be portrayed in American literature and culture by writers of color, paying special attention to the changing concept of race and African-American citizenship as influenced by American political thought at a time when many of the gains made by African Americans during the period of Reconstruction were repealed. We read fiction, poetry, essays and pamphlets by African-American writers writing through the late 19th and early 20th century, including but not limited to Charles Chesnutt, W.E.B Dubois, Booker T. Washington, Ida B. Wells-Barnett, Pauline Hopkins, Frances E.W. Harper, Paul Laurence Dunbar. In addition to the texts, students are asked to briefly examine portrayals of African Americans in other forms of media, such as visual culture and film. Credit 3 units. A&S : LA A&S : IQ, HUM

L90 AFAS 327B African Politics
Same as Pol Sci 327B
Credit 3 units. A&S : SS A&S : IQ, SSC BU : IS FA : SSP

L90 AFAS 3282 Sexuality in Africa
An examination of various themes of African sexuality, including courtship, marriage, circumcision, STDs and AIDS, polygamy, homosexuality, child marriages, and the status of women. Course materials include ethnographic and historical material, African novels and films, and U.S. mass media productions. Using sexuality as a window of analysis, students are exposed to a broad range of social science perspectives such as functionalist, historical, feminist, social constructionist, Marxist and postmodern. Credit 3 units. A&S : SS, CD BU : BA FA : SSP

L90 AFAS 330 Topics in Linguistics: The American Languages
Our perceptions about language are shaped by our linguistic backgrounds and practices as well as our social and political ideologies. This course examines the history of American languages in the United States and explores the social, educational and political issues that surround them. Four types of languages are studied: Native American, colonial, immigrant and new languages (e.g., Hawaiian Pidgin and American Sign Language). We also take a special look at the history and structure of African-American language, which challenges linguistic categorizations as well as language policy and education. Among the major questions discussed in this course are: what makes American languages distinct in terms of their history and social status; and what do they all have in common beyond the simple geographic classification of being “American.” In addressing these questions, we also study the politics of language, the history of language policy and education in the U.S. as well as issues of current debate, such as indigenous language reclamation, the “Ebonics controversy,” bilingual education and the official English movement. Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD

L90 AFAS 3340 Gender, Health and Resistance: Comparative Slavery in the African Diaspora
Same as L22 3340.
Same as History 3340
L90 AFAS 3405 For Freedom's Sake: The Civil Rights Movement in America
This course provides an introduction to the period of struggle in African American history known as the Civil Rights Movement. Our primary task is to survey the major historical figures, organizations, locations, strategies and ideas that coalesce to make the history of the movement. The course broadly covers the years of the Black Freedom Struggle between 1945 and 1971, with a sharper focus on the pivotal years of 1954–1965. By placing the movement within a broader context, the course seeks to identify the historical developments and social realities that made the movement necessary and possible. The class also looks at the years following the movement, and the general transition from Civil Rights to Black Power.
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L90 AFAS 343 Capitalism, Exchange and Inequality in Africa
This course explores issues of power and inequality related to exchange and the emergence of market economies in Africa. Case studies include examinations of cattle and bride wealth among pastoralists in Sudan, welfare policies in contemporary South Africa, and sex work in West Africa. In each of these cases there is a complex balance between the value placed on maintaining social relationships and accumulating private property. We investigate the implications of this balance for the production of local and international forms of inequality. The course also introduces students to key ideas in economic anthropology such as the formalist-substantivist debate, rational choice theory and neo-Marxist approaches to power and stratification. By the end of the course, students should be able to critically assess the value of these theories in understanding day-to-day economic activities in Africa. This class is a discussion-based seminar and in-class participation is highly encouraged. Students are graded on a series of analytical essays, a final paper and in-class participation.
Credit 3 units. A&S : SS, CD, SD A&S : IQ, SSC, LCD

L90 AFAS 3430 West African Music and Dance in Context
Same as Dance 343
Credit 2 units. A&S : LA A&S : IQ, HUM

L90 AFAS 3531 Selected English and American Writers
Same as E Lit 3531
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L90 AFAS 3542 The Quest for Racial Reconciliation
This course is based within African and African-American studies, and it explores the quest for racial reconciliation, with emphasis equally divided between the United States and racial strife in other parts of the world. Although racial considerations are inherent to central themes within this course, we explore various sources of linguistic, cultural, social, political, racial and ethnic foundations of strife at different points in history, and in different regions of the world. Particular attention is devoted to nonpartisan strategies to advance racial harmony within the United States, and other regions of the world that are of personal interest to students.
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : BA FA : SSP

L90 AFAS 3582 Race, Class and Writing in the United States and the Caribbean, 1900–1950
This is a comparative course that focuses on African-American literature and Anglophone Caribbean literature during the period from 1900 to 1950. The cultures of the United States and the Caribbean both have been profoundly shaped by the relationship between race and power, yet the intersection of these forces has affected the societies and their writers in distinct ways. Studying fictional texts from the first half of the 20th century, we discuss the differences in literary tradition that arose from the divergent social, racial and educational milieus of the United States and the West Indies. For example, we compare the racial and class concerns of the Beacon Group in Trinidad with those of the Harlem Renaissance. We also study writers, such as Claude McKay and C.L.R. James, whose consciousness of the African diaspora problematized the national and regional identities to which literature contributed.
Same as E Lit 3582
Credit 3 units. A&S : TH, SD BU : BA, HUM

L90 AFAS 361 Culture and Environment
Same as Anthro 361
Credit 3 units. A&S : SS A&S : IQ, SSC BU : ETH FA : SSP

L90 AFAS 363 Mapping the World of “Black Criminality”
Ideas concerning the evolution of violence, crime and criminal behavior have been framed around many different groups. Yet, what does a typical criminal look like? How does race — more specifically blackness — alter these conversations, inscribing greater fears about criminal behaviors? This course taps into this reality, examining the varied ways people of African descent have been and continue to be particularly imagined as a distinctly criminal population. Taking a dual approach, students consider the historical roots of the policing of black bodies alongside the social history of black crime while also foregrounding where and how black females fit into these critical conversations of crime and vice. Employing a panoramic approach, students examine historical narratives, movies and documentaries, literature, popular culture through poetry and contemporary music, as well as the prison industrial complex system. Prerequisite: AFAS 3880 (Terror and Violence in the
Black Atlantic) and/or permission from the instructor, which is determined based on a student's past experience in courses that explore factors of race and identity. Enrollment limit: 20. Credit 3 units. A&S: TH, SD A&S: IQ, HUM, SD EN: H

L90 AFAS 3651 Black Women Writers
When someone says “black woman writer,” you may well think of Nobel Prize winner Toni Morrison. But not long ago, to be a black woman writer meant to be considered an aberration. When Thomas Jefferson wrote that Phillis Wheatley’s poems were “beneath the dignity of criticism,” he could hardly have imagined entire Modern Language Association sessions built around her verse, but such is now the case. In this class we survey the range of Anglophone African-American women authors. Writers covered may include Phillis Wheatley, Harriet Wilson, Nella Larsen, Lorraine Hansberry, Octavia Butler and Rita Dove, among others. Be prepared to read, explore, discuss and debate the specific impact of race and gender on American literature. Credit 3 units. A&S: TH, SD A&S: IQ, HUM, SD BU: HUM

L90 AFAS 3652 The New Republic: The United States, 1776–1850
See L22 365. Same as History 365
Credit 3 units. A&S: TH A&S: IQ, HUM BU: HUM, IS FA: SSP

L90 AFAS 3670 The Civil Rights Movement
See L22 3670. Same as History 3670
Credit 3 units. A&S: TH, SD A&S: IQ, HUM, SD

L90 AFAS 3672 Medicine, Healing and Experimentation in the Contours of Black History
Same as History 3672
Credit 3 units. A&S: TH, CD, SD A&S: IQ, HUM, LCD

L90 AFAS 370 Youth, Generation and Age in Africa
It is estimated that children and youth constitute more than 60 percent of the population in Africa. In a context of economic decline associated with neoliberal policies of structural adjustment, many of these young people will face extreme difficulty in finding work, supporting families and taking on the social responsibilities of adults. In recent years, disaffected African youth have been increasingly blamed for political and social instability. This course examines the condition of youth in contemporary Africa. The course begins with classic anthropological texts on generation, youth and the life cycle in Africa. Readings address the implications of colonialism, education, wage labor and urbanization for relations between generations. The second half of the course examines recent research concerning the position of African youth in a context of economic and cultural globalization.
Credit 3 units. A&S: TH, CD A&S: IQ, HUM, LCD BU: IS

L90 AFAS 372C Law in American Life: 1776 to Present
A history of the role (and rule) of law in American life since the founding of the republic on principles of equal justice under law. The course examines “law in action” as well as of “law on the books” through the following questions: How was the English legal heritage adopted, rejected or Americanized? What were the legal terms and realities of labor — free, unfree and slave? How did law support or attack racialized slavery and inequality? How did the revolution in law affect the family, sexuality and gender roles? How have popular and vigilante notions of “justice” clashed with formal legal institutions? How has law affected economic growth and the operation of the marketplace? How have legal institutions responded to modern medicine, urbanization, industrialization, professional sports and organized crime? What remedies has law provided for those suffering personal injury or property loss? What has been the impact of popular culture on the American understanding of law and legal institutions?.
Same as History 372C
Credit 3 units. A&S: TH, SD A&S: IQ, HUM, SD BU: ETH, IS FA: SSP

L90 AFAS 3752 Topics in Women's History: African-American Women
An analysis of how African-American women have defined their roles in American life and within the black community: attaining literacy, the push for suffrage, anti-slavery and colonization efforts, class stratification and the Cult of Domesticity, the Civil War and reconstruction, migration and the impact of urbanization, religious attitudes, political activism and elective office, sexuality and the myth of the Black Matriarch. Prerequisites: at least one course in American history, women's history or African-American history and permission of the instructor.
Same as WGSS 3754
Credit 3 units. A&S: TH, SD A&S: IQ, HUM, SD BU: BA

L90 AFAS 3766 Women, Men and Gender in African Societies Since 1800
This course explores the ways in which gender has been produced, reproduced and transformed through the everyday actions and activities of African women and men. The focus of the course is both on agency and on structures of power, as we move from a consideration of gender relations after the 19th-century jihad of Uthman dan Fodio to the problems of love and marriage in the late 20th-century Ghana.
Same as History 38A8
L90 AFAS 382 Imagining the African Diaspora: Slavery, Black Radicalism and Globalization: Writing-Intensive Seminar
Same as History 38YM
Credit 3 units. A&S : TH, CD, WI A&S : IQ, HUM, LCD BU : BA

L90 AFAS 3838 African-American Poetry From 1950–Present
Beginning with the year in which Gwendolyn Brooks became the first African American to win the Pulitzer Prize, we examine the tradition of African-American poetry and the ways in which that tradition is constantly revising itself and being revised from the outside. We focus in particular on the pressures of expectation — in terms of such identity markers as race, gender and sexuality — and how those pressures uniquely and increasingly affect African-American poetry today.
Credit 3 units. A&S : TH, CD, SD, WI A&S : IQ, HUM, LCD

L90 AFAS 387C African-American Literature: Early Writers to the Harlem Renaissance
This course introduces you to major authors and themes in African-American literature from the late 18th century to the early 20th century. In spite of extraordinarily oppressive conditions, including slavery, bans against black literacy, Jim Crow segregation, and the threat of lynching, people of African descent expressed their unique experiences in whatever ways they could. The written word was one important mode through which African Americans voiced concerns about, and sought to change, the injustices of their world. Through slave narratives, novels and autobiographies, we study how African Americans created a liberational public presence and simultaneously laid the foundations for an important literary tradition.
Same as E Lit 387
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD

L90 AFAS 388 African-American Literature: African-American Writers Since the Harlem Renaissance
African-American literature in the 20th century moves from a renaissance into an institution. Guggenheim, Pulitzer and Nobel prize winners; Communist and Conservative Party sympathizers; Black Power advocates, inaugural poets, Broadway playwrights, Book-of-the-Month Club novelists, along with writers whose allusive and elliptical pages may never win them legions of fans, are among the many whose works we discover together. Written assignments may include two papers and two exams. Prerequisites: none, but related classes such as E Lit 215 and/or AFAS 208 are suggested. Satisfies the American literature requirement in English, and/or one 300-level elective requirement in AFAS.
Credit 3 units. A&S : TH, SD

L90 AFAS 400 Independent Study
Permission of the director of the African and African-American Studies Program and an African-American Studies instructor required prior to registering.
Credit -6 unit.

L90 AFAS 4001 Interrogating Health, Race and Inequalities: Public Health, Medical Anthropology and History
Same as I50 4001
Credit 3 units.

L90 AFAS 4002 Urban Education in Multiracial Societies
This course offers students an analysis of the historical development and contemporary contexts of urban education in English-speaking, multiracial societies. It examines legal decisions, relevant policy decisions and salient economic determinants that inform urban systems of education in Western societies including, but not limited to, the United States, Canada, Great Britain and South Africa. The course draws on quantitative, qualitative and comparative data as an empirical foundation to provide a basis for a cross-cultural understanding of the formalized and uniform system of public schooling characteristic of education in urban settings. Given the social and material exigencies that shape urban school systems in contemporary societies, special attention is given in Black Atlantic, students are encouraged to take a comparative view to better tease out the wider strands of violence operative in places like England, the Caribbean and Latin America. Within this course, we explore the varied ways in which music, films, newspapers and historical narratives shed light on these often life-altering stories of the past. Some of the themes touched upon include: the use of punishment/exploitation during the era of slavery, lynching, sexual violence, race riots, police brutality, motherhood, black power and community activism.

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this course to the roles of migration, immigration, urbanization, criminal justice, industrialism, de-industrialism and globalization in shaping educational outcomes for diverse students in the aforementioned settings. Prerequisite: junior standing or permission of instructor.

Same as URST 400

Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI

L90 AFAS 4005 Video Microanalysis: Methods and Tools
See description under L12 4033.
Same as Educ 4033

Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD

L90 AFAS 4006 Internship in Interrogating Health, Race and Inequalities
Same as IS5 4002

Credit 1 unit.

L90 AFAS 401 Senior Seminar
This capstone seminar is required for students who are majoring in African and African-American Studies.
Credit 3 units. A&S : TH A&S : IQ, HUM

L90 AFAS 403 Advanced Swahili
This course aims to help students gain skills in reading and appreciating selected readings in Swahili literature. Although the course primarily focuses on plays, novels and poetry, students also are introduced to Swahili songs, comic books and other forms of popular literature in an attempt to understand the growth and development of contemporary Swahili literature. Prerequisites: permission of instructor and successful completion of AFAS 103D, 104D, 203D and 204D or equivalent experience.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, LS BS : HUM

L90 AFAS 4031 Advanced Readings in Swahili Literature
Course designed with instructor. Permission of instructor required.
Credit 3 units. A&S : TH A&S : IQ, LS

L90 AFAS 4041 Beginning Graduate-Level Swahili
A beginning language course for graduate students emphasizing acquisition of reading, writing and conversational skills in Swahili language. Through video and other multimedia presentations, students also are introduced to the culture of Swahili-speaking communities living in more than a dozen African countries.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS

L90 AFAS 4042 Beginning Graduate-Level Swahili II
Second-semester graduate-level Swahili language course emphasizing conversational competence and knowledge of Swahili-speaking cultures of East Africa. Introduction to elementary-level Kenyan and Tanzanian Swahili texts, grade school readers, newspapers and government educational material. Prerequisite: AFAS 4041.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS

L90 AFAS 4043 Intermediate Graduate-Level Swahili III
Enhanced acquisition of language fundamentals acquired in first-year graduate-level Swahili through performance, reading and writing. Students gain skills performing role-plays such as asking for directions, booking a bus ticket, ordering food in a restaurant, etc. Students read more authentic Swahili texts including plays, short stories, newspapers and poems. Prerequisite: AFAS 4041, 4042 or permission of instructor.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS

L90 AFAS 406 Sexual Health and the City: A Community-Based Learning Course
In this community-based learning course students partner with a St. Louis AIDS service organization (ASO) or sexual health agency to explore how the interrelationships among gender, class, race/ethnicity and sexual identity shape sexual health decisions, outcomes and access to services. Students also examine the complex relationship between men’s and women’s life goals and constraints, on the one hand, and the public health management of sexual health, on the other. In collaboration with their community partner and its clients, students develop a project that addresses an identified need of the organization and the community it serves. Course readings draw from the fields of anthropology, public health, feminist studies and policy making. The prerequisite for the course is PHealth 4134 The AIDS Epidemic: Inequalities, Ethnography and Ethics or permission from the instructor, which is determined based on past student’s experience in the fields of medical anthropology or sexual/reproductive health. CBTL course.
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD

L90 AFAS 409 Gender, Sexuality and Change in Africa
This course considers histories and social constructions of gender and sexuality in sub-Saharan Africa during the colonial and contemporary periods. We examine gender and sexuality both as sets of identities and practices and as part of wider questions of work, domesticity, social control, resistance and meaning. Course materials include ethnographic and historical materials and African novels and films. Prerequisite: graduate students or undergraduates with previous AFAS or upper-level anthropology course.
Credit 3 units. A&S : SS, SD, WI A&S : IQ, SSC, SD, WI FA : SSP
L90 AFAS 4121 Rainbow Radicalisms!: Ethnic Nationalism(s), the 1960s and the Politics of the New Left
The Black Panther Party remains one of the most iconic groups of the 1960s and 1970s. Perhaps one of the most understudied aspects of the Panthers' legacy is their radical influence upon other American racial and ethnic groups, including Asian Americans, Mexican Americans, Puerto Ricans and American Indians, among others. This seminar considers the emergence of ethnic and racial nationalism among these various groups, as a result of their contact and relationship(s) with the Black Panther Party. Considering the politics of groups like the Red Guard, the Brown Berets, the Young Lords and the American Indian Movement, this course charts the rise and fall of rainbow radicalism as a general offspring of the Black Power Movement and part and parcel of what is commonly referred to as "the New Left." It also considers these groups in relation to the state by probing the dynamic push and pull between repression and democracy. Ultimately, this course grants insight into the contemporary racial domain and current political landscape of America as we discuss how these groups helped to shape modern identity formations, discourses on multiculturalism and definitions of "minority," "diversity" and "equality.". Credit 3 units. A&S : TH A&S : IQ, HUM

L90 AFAS 4134 The AIDS Epidemic: Inequalities, Ethnography and Ethics
Same as Anthro 4134
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD

L90 AFAS 417 Topics in African History: Middle Passages: African Americans and South Africa
This upper-division seminar explores the fascinating transnational relationship between African Americans and black South Africans during the 20th century. These two populations became intimately familiar with each other as African-American missionaries, sailors, musicians, educators and adventurers regularly entered South Africa while black South African students, religious personnel, political figures, writers and entertainers found their way to America. This course details why these two populations gravitated toward each other, how they assisted each other in their respective struggles against racial segregation and apartheid, and how these shared histories influence their relationship today. Readings for this course draw from key books, articles and primary documents within this exciting new field of intellectual inquiry. Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : BA

L90 AFAS 4262 Politics of the Civil Rights Movement
The Civil Rights Movement resulted in possible the most significant events in American politics in the 20th century — the passage of the Civil Rights Act of 1964 and the Voting Rights Act of 1965. Understanding the Civil Rights Movement requires close opinion and the media, interest groups and insurgency, and the party system. In turn, this landmark legislation helped to shape American politics as we experience it today. Prerequisite: Pol Sci 101B American Politics. Same as Pol Sci 426 Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD FA : SSP

L90 AFAS 429 Texts and Contexts of the Harlem Renaissance
Same as E Lit 4244
Credit 3 units. A&S : TH A&S : IQ, HUM FA : Lit

L90 AFAS 433 Culture, Language and the Education of Black Students
Same as Educ 4315
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD BU : BA FA : SSP

L90 AFAS 434B Seminar in Black Social Sciences
This seminar applies a deep reading to social science texts that examine the construction and experiences of black people in the United States from the point of view of black scholars. Readings include theoretical and empirical work. The seminar focuses on the influence of the disciplines of psychology, sociology and anthropology on the policy and social practices that characterize dominant North American institutions. Advanced class level strongly advised. Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD BU : BA FA : SSP

L90 AFAS 448 Race Politics in 19th- and 20th-Century America
This course explores the efforts of black Americans to use the political processes to claim civil rights and economic improvements in the 19th and 20th centuries. It tracks the aims, ideals and organizing strategies of African-American leaders and of grass-roots organizers. Readings and research highlight the ways African Americans debated agendas, fought over strategies and worked to mobilize voters. We study the ways various groups of people — in rural and urban America — argued over priorities, set agendas for their communities, produced a political language, came together with neighbors to fight for civil rights and economic necessities, and, in short, established a dynamic and conflicted political culture. Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L90 AFAS 4483 Race and Politics
L90 AFAS 4511 Race, Ethnicity and Culture: Qualitative Inquiries into Urban Education I
Drawing on traditional and recent advances in the field of qualitative studies, this course is the first in a series to examine ethnographic research at the interlocking domains of race, ethnicity, class, gender and culture. The emphasis in this course is on how these concepts are constructed in urban educational institutions. The course includes a field component that involves local elementary and/or middle schools.
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD BU : BA

L90 AFAS 4512 Race, Ethnicity and Culture: Qualitative Inquiries into Urban Education II
Same as Educ 4512
Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI FA : SSP

L90 AFAS 4608 Education of Black Children and Youth in the United States
This course provides an overview of the education of Black children and youth in the United States. Covering both pre- and post-Brown eras, this course applies a deep reading to the classic works of DuBois and Anderson as well as the more recent works of Kozol, Delpit and Foster. The social, political and historical contexts of education, as essential aspects of American and African-American culture and life, are placed in the foreground of course inquiries.
Same as Educ 4608
Credit 3 units. A&S : TH, SD, WI A&S : IQ, HUM, SD, WI FA : SSP

L90 AFAS 461B Construction and Experience of Black Adolescence
This course examines the construct of black adolescence from the general perspectives of anthropology, sociology and psychology. It begins by studying the construct of black adolescence as an “invention” of the social and behavioral sciences. The course then draws upon narrative data, autobiography, literature and multimedia sources authored by black youth to recast black adolescence as a complex social, psychological, cultural and political phenomenon. This course focuses on the meaning-making experiences of urban-dwelling black adolescents and highlights these relations within the contexts of class, gender, sexuality and education.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L90 AFAS 477 African Prehistory
Same as Anthro 477

L90 AFAS 484 Anti-Slavery in the Courtroom
Same as AMCS 484
Credit 4 units. A&S : TH A&S : IQ, HUM

L90 AFAS 4893 Advanced Seminar: Antislavery: The Legal Assault on Slavery in St. Louis
This seminar begins with a survey of the legal and constitutional arguments made against slavery in English and American courts since the 1600s, and examines the culture and tactics of antislavery as it emerged in Antebellum America, as well as the meaning of the Dred Scott decision. On that basis, students research a particular freedom suit from the online manuscript court records of the St. Louis Circuit Court.
Same as History 4987
Credit 4 units. A&S : TH, SD A&S : IQ, HUM, SD

L90 AFAS 4930 Advanced Seminar: Slavery in America: The Politics of Knowledge Production
See L22 49SA.
Same as History 49SA
Credit 4 units. A&S : TH, SD A&S : IQ, HUM, SD

L90 AFAS 4973 Advanced Seminar: Gender, Race and Class in South Africa, 1880–present
By focusing on the complex historical dynamics of race, gender and class in South Africa over the past 120 years, this course is aimed at understanding the development of segregation, apartheid and racial capitalism, as well as the emergence of multiple forms of resistance to counter white minority rule.
Same as History 4979
Credit 4 units. A&S : TH, SD A&S : IQ, HUM, SD

L90 AFAS 4977 Advanced Seminar: A Long Road to Uhuru and Nation: The Social History of Modern Kenya
Same as L22 4977.
Same as History 4977
Credit 4 units. A&S : TH, CD A&S : IQ, HUM, LCD

L90 AFAS 498 Fieldwork in African-American Studies
A fieldwork project carried out under the direction of an instructor in the African and African-American Studies program. Prerequisites: permission of instructor and the director of African and African-American Studies prior to enrollment. See program office for forms.
Credit -6 unit. A&S : SS
L90 AFAS 4984 The Problem of Freedom: The Age of Democratic Revolutions in the Americas, 1760–1888
See L22 4984.
Same as History 4984
Credit 4 units. A&S : TH, SD A&S : IQ, HUM, SD

L90 AFAS 499 Independent Work for Senior Honors: Research
Prerequisite: permission of director and appropriate grade point average. Application forms available in program office.
Credit 3 units.

L90 AFAS 4991 Independent Work for Senior Honors: Thesis
Prerequisite: satisfactory standing as a candidate for senior honors and permission of the director of the African and African-American Studies program.
Credit 3 units.

American Culture Studies
American Culture Studies (AMCS) is a multidisciplinary program that provides both a broader context for study in different fields and a deeper understanding of American culture in all of its complexities. AMCS students explore culture-related topics and issues that demand multiple perspectives and methodologies. They also consider the mutual relevance of various disciplines to any single object of study in American culture — a place, an event, a work of art, a political institution and so on — while developing the knowledge and skills necessary to study a wide array of cultural objects.

The program offers a major and a minor, coordinating offerings across the disciplines so that students from any field or school can explore an array of ideas and approaches as they complete their course work. Pairing the major with a second major in a complementary discipline is an enriching model of cultural study, and AMCS will work closely with students to ensure that double-majoring works well.

The program offers especially attentive advising, helping students to have a cohesive experience and to pursue their specific interests within a diverse curriculum.

Contact Person: Jennifer Gallinat, Administrative Assistant
Phone: (314) 935-5216
E-mail: amcs@artscl.wustl.edu
Departmental website: http://amcs.wustl.edu

For a list of affiliated faculty, please see the faculty page on the American Culture Studies website.

The Major in American Culture Studies

Total units required: 30-39 credits, 24 of which must be 300-level or above (and 9 of which may be fulfilled by a second major — see note about Disciplinary Foundations course work below).

NOTE: For those who matriculated prior to fall 2011, see the old requirements by clicking Prior Bulletins in the left-hand menu, or visit the AMCS website.

Requirements:

• A 200-level introductory course (3 credits) from a list of approved options. Recent course offerings have included AMCS 220 Topics in American Culture Studies, AMCS 206 “Reading” Culture: The Cultural Lives of Things, AMCS 202 The Immigrant Experience and AMCS 120 Social Problems and Social Issues.

• AMCS 375A (formerly 475) American Culture Methods and Visions (3 credits)

• Multidisciplinary fieldwork (3 credits), which can be fulfilled either through a field-based directed research project (credit applied through enrollment in AMCS 298 Directed Fieldwork in American Culture Studies) or through a fieldwork-focused course such as AMCS 479 On Location: Exploring America; AMCS 316F Rediscovering the Child: Interdisciplinary Workshops in an Urban Middle School; AMCS 3143 Literacy, Schools and Communities; or ARCH 121 Community Building, Building Community (Hewlett Program). Please see our Course Listings for a complete list of general and fieldwork (formerly ES) courses by semester.

• Concentration area course work (9 credits) taken on American subjects in a single concentration area, two of which must be at the upper level (see below for a list of established concentrations, or propose your own area).

• Distribution course work (9 credits), composed of at least three courses on American subjects in three different disciplines/fields or in a second concentration area; at least two of these courses must be at the upper level.

• Disciplinary Foundations course work (9 credits): three courses reflecting the disciplinary methods or approaches suited to the concentration area, two of which must be in a single field or discipline. These will be chosen from a predefined list and in consultation with an adviser. A suitable second major — and in some cases, a minor — may replace this requirement.

• A Capstone Project (3 credits), Students work on and present this project in their senior year, enrolling in AMCS 4011 Independent Study for a total of 3 credits over two semesters. Typically the fall is spent preparing in a workshop-style setting, with final presentations occurring at the end of spring semester. Majors who opt to pursue a senior honors thesis for their Capstone Project will earn an additional 3 credits.
for their research, enrolling in AMCS 4004 Senior Honors Seminar in American Culture Studies in the fall and AMCS 4005 Senior Honors Seminar in American Culture Studies in the spring of their senior year. For more information, see http://amcs.wustl.edu/undergraduate/capstone.

• At least two multidisciplinary (MD) courses, taken to fulfill the above requirements and designated by AMCS (this does not usually require additional course work). Students are encouraged to take MD courses that connect to the subjects or issues in their concentration area. See our Course Listings website for a complete list of general and MD courses that count toward the AMCS major.

Additional Information

Established Concentration Areas

These areas reflect areas of longstanding student interest. Majors are welcome to propose new concentrations or to tailor an established one to suit their interests. The pre-approved areas are as follows:

• Ethnic America
• Popular Culture
• Social Thought and Social Problems
• 20th-Century America
• Policy-Making in American Society
• War and Peace
• A Sense of Place

AMCS gives majors considerable freedom in defining their course of study, allowing them to learn how cultural study is done in multiple fields and periods even as they define concentration areas in ways that suit their specific interests. Pairing the AMCS major with a second major in a complementary discipline is an especially enriching model of cultural study, and AMCS will work closely with students to ensure that double-majoring works well. Visit our online undergraduate portal for more information about the major requirements and concentration areas, as well as other resources and announcements for AMCS students.

Study Abroad: Majors intending to study abroad should consult with the Academic Coordinator in advance to plan a course of study and to discuss the impact that going abroad will have on their work in the major (including their fieldwork and capstone project). For further information, please check out the Study Abroad website and search for American Culture Studies as the approved department under the Search for a Program link.

Senior Honors: Writing an AMCS honors thesis is one way to fulfill the Capstone Project requirement. It allows students to complete an extended study of a cultural topic with the input of faculty from more than one discipline, and it provides both a support system and an audience of peers for that study. To qualify for honors thesis work, AMCS majors must have met the following eligibility criteria by the time they propose their thesis topic:

• Earned an overall GPA of 3.65;
• Taken at least one multidisciplinary (MD) course and completed at least half of their general course work for the AMCS major;
• Completed, or at least mapped out, a plan for their fieldwork, ideally with the thesis topic in mind;
• Completed AMCS 375A American Culture: Methods and Visions (formerly 475) American Culture: Methods and Visions. This course serves to solidify students’ understanding of what it means to study culture and prepares them to design a multidisciplinary framework for their project.
• Proposed a viable thesis topic by April of the junior year.

For complete details, see our honors thesis web page.

The Minor in American Culture Studies

Units required: 15 credits, at least 9 of which must be at the 300 level or above

NOTE: For those who matriculated prior to Fall 2011, please see the previous Bulletin requirements.

Requirements:

• A 200-level introductory course (3 credits) from a rotating list of approved options. Recent course offerings have included AMCS 220 Topics in American Culture Studies, AMCS 202 The Immigrant Experience and AMCS 120 Social Problems and Social Issues.
• Distribution course work (9 credits): at least three courses on American subjects (two of which must be upper-level) either in a single established concentration area (see below for a list of established concentrations, or propose your own) — or — in three distinct disciplines/fields outside the student’s major.
• One additional AMCS course (3 credits).
• At least two multidisciplinary (MD) courses, taken as part of the above minor courses and designated by AMCS. Minors who opt to do a concentration are encouraged to take at least one MD course that connects to the subjects or issues in the chosen concentration area. AMCS 375A American Culture: Methods and Visions (a junior-level methods seminar) also is encouraged and may count as an MD course. See our Course Listings website for a complete list of general and MD courses that count toward the AMCS major.

Additional Information

Established Concentration Areas

These reflect areas of longstanding student interest. Minors are welcome to propose new concentrations or to tailor an...
established one to suit their interests. The pre-approved areas are as follows:

- Ethnic America
- Popular Culture
- Social Thought and Social Problems
- 20th-Century America
- Policy-Making in American Society
- War and Peace
- A Sense of Place

Visit our online undergraduate portal for more information about the minor requirements and concentration areas, as well as other resources and announcements for AMCS students.

### American Culture Studies

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Pre-requisites</th>
<th>Credits</th>
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<tr>
<td>L98 AMCS 101B</td>
<td>American Politics</td>
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<td>L98 AMCS 1022</td>
<td>Popular Music in American Culture</td>
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<td>L98 AMCS 105</td>
<td>History of Jazz</td>
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<td>L98 AMCS 106</td>
<td>St. Louis 101: Life in a Global City</td>
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<td>L98 AMCS 109</td>
<td>Ragtime</td>
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<td>L98 AMCS 111</td>
<td>Freshman Seminar: Race and Ethnicity on American Television</td>
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<td>L98 AMCS 112</td>
<td>Freshman Seminar: Race and Ethnicity in American Cinema</td>
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### L98 AMCS 114 Studying the City: The Scholar and Community Engagement

Early urban theorists argued the city is a refuge for lonely, individualistic people and that city life is chaotic, as everyone pursues their narrow self-interests. Others have suggested city residents form meaningful friendships and continuously engage with neighbors and strangers on the streets. Thus, city life is patterned and supports a strong sense of community. How we move along this continuum is an important issue that not only relates to our urban areas but also to the quality of our democracy as we carry out the social project of defining the good life. Why is this issue of concern? As scholars and citizens in a democracy, what should we do to address this issue? What can we do? What is the role of universities in addressing urban life? What are some of the tensions that arise when we try to take action either through policy or other direct efforts, such as engaged scholarship? How should we negotiate around these tensions, if at all? In this class, we explore these questions and call on students to think about their dual role as scholars and citizens.

Credit 3 units.   A&S : SS    A&S : IQ , SSC    BU : BA

## Additional Courses

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<tr>
<td>L98 AMCS 116</td>
<td>Freshman Seminar: Cult TV: Critical Approaches to Fans and Fictions</td>
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<td>L98 AMCS 118A</td>
<td>Geology of National Parks</td>
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<td>L98 AMCS 118B</td>
<td>Social Problems and Social Issues</td>
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<td>L98 AMCS 120</td>
<td>Freshman Seminar: Youth Culture and Visual Media</td>
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L98 AMCS 1211 Freshmen Seminar: Blood, God and Country: American Soldiers as Writers
Same as CFH 121
Credit 3 units. A&S : TH A&S : IQ, HUM

L98 AMCS 130 Freshman Seminar: Cahokia: Perspectives on a Mississippian Ritual Center
Same as Anthro 130
Credit 3 units. A&S : SS A&S : IQ, SSC BU : HUM FA : SSP

L98 AMCS 150 Rattle and Hum: Reading Music in Literature
Same as CFH 150
Credit 3 units. A&S : LA A&S : IQ, HUM

L98 AMCS 152 Literature Seminars for Freshman: The Voices of Our American Traditions
Same as E Lit 152
Credit 3 units. A&S : TH A&S : IQ, HUM

L98 AMCS 163 Freedom, Citizenship and the Making of American Culture from the Colonial Era to the Present
Same as History 163
Credit 3 units. A&S : TH, CD, SD A&S : IQ, HUM, LCD BU : HUM FA : SSP

L98 AMCS 165 Survey of Latin-American Culture
Same as IAS 165C
Credit 3 units. A&S : TH, CD A&S : IQ, LCD BU : IS FA : SSP

L98 AMCS 1680 Hurricane Katrina: A Case Study in Disaster and American Society
Same as Anthro 168
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L98 AMCS 188 Self and Identity in African-American Literature
Same as AFAS 188
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : BA, ETH FA : Lit

L98 AMCS 202 The Immigrant Experience
This course explores the history and politics of immigrant groups in the 19th- and 20th-century United States. Topics include legislation, patterns of migration, comparisons of different waves of immigration, and changing social attitudes. This course is a core requirement for the ethnic studies concentration in American Culture Studies.
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD BU : ETH, HUM FA : SSP

L98 AMCS 2032 Freshman Seminar: The Enigma of Thomas Jefferson
Same as History 2030
Credit 3 units. A&S : TH A&S : IQ, HUM

L98 AMCS 2050 Napster, AIDS and Intellectual Property
Same as Econ 205
Credit 1 unit. A&S : SS A&S : IQ, SSC

L98 AMCS 206 “Reading” Culture: The Cultural Lives of Things
It has been said that ours is a culture defined by material things — the everyday stuff such as iPhones and disposable coffee cups as well as the Harley Davidson bikes, antiques and national monuments we particularly revere. In this multidisciplinary course we study objects of many kinds — from the utilitarian and mostly disregarded to the strange, rare and long-celebrated — asking how they have come to be imbued with cultural meaning. What economic, social and psychological purposes do they serve? How do they give expression to individual experience, collective identity and cultural memory? How have momentous shifts, events and issues (world’s fairs, economic depressions, environmental degradation, September 11) altered our relationship to them? In short, why do things have such a hold on us? We explore different strategies for reading objects as answers to such questions and as cultural evidence more generally. Our work is informed by various models of material-culture study from anthropology, history, sociology, literature and museum studies, and we read the work of theorists and others who have influenced modern views of material culture (among them Freud, Marx, Bourdieu, Clifford, Henry James and Walter Benjamin). And we do some in-the-field analysis of different historic, museum and personal objects as well as monuments around St. Louis (field trips!). The final assignment is a multimedia project in which students document the complex cultural lives of especially compelling objects.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : BA

L98 AMCS 207 Freshman Seminar: The Chinese-American Experience
Same as ANELL 208
Credit 3 units. A&S : TH A&S : IQ, HUM BU : BA

L98 AMCS 208B African-American Studies: An Introduction
Same as AFAS 208B
L98 AMCS 210 Freshman Seminar: Gender and Citizenship
Same as WGSS 210
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD  BU : HUM  FA : SSP

L98 AMCS 2101 The Linguistic Legacy of the African Slave Trade in Interdisciplinary Perspective
Same as AFAS 210
Credit 3 units.  A&S : SS, SD  A&S : IQ, SSC, SD  BU : BA

L98 AMCS 2120 Archaeological Fantasies and Hoaxes
Same as Anthro 212
Credit 3 units.  A&S : SS  A&S : IQ, SSC, LCD  FA : SSP

L98 AMCS 2152 The Theory and Practice of Justice: The American Historical Experience
Same as History 2152
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD  BU : BA, ETH, HUM  FA : SSP

L98 AMCS 2156 The Thrilling Story: Constructing the Civil Rights Movement
Same as AFAS 215C
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD

L98 AMCS 220 Topics in American Culture Studies
The topic of this course varies from semester to semester.  Please see Course Listings for a description of the current offering.
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM

L98 AMCS 220S Social Inquiry: An Introduction to Sociology
Sociologists possess a secret knowledge that allows them to dissect subjects ranging from how class, race, gender and sexual orientation affect educational outcomes, family life and crime to apparently trivial issues such as why people cross-dress, are attracted to cults, or become pot smokers. Sociology illuminates the connection between private concerns and public issues. Inspired by this approach, the mission of this course is to first understand what is sociology — its methods and its theories, and then use this foundation to explore issues of class, inequality, race, gender, culture, power, social engagement and activism. Required readings consist of three(ish) articles or chapters per class. Grades are based on three in-class short-answer exams, three workshop and applied assignments, and enthusiastic participation.
Credit 3 units.  A&S : SS, SD  A&S : IQ, SSC, SD

L98 AMCS 222 Sophomore Research Project in American Culture Studies
This course provides sophomores with an introductory experience in primary research.
Credit -3 unit.  A&S : TH

L98 AMCS 225 Topics in American Culture Studies
Topics courses in American Culture Studies are offered routinely and examine aspects of our culture from various disciplines and often through multidisciplinary approaches. Courses previously offered include: 19th-Century American Indian Literature; Hurricane Katrina: A Case Study in Disaster and Relief; The History of Popular Culture in the United States; Mark Twain: Humor and Politics in 19th Century; and American Presidential Rhetoric. Courses are sometimes team-taught or combine service with learning. Faculty includes WU professors, visiting scholars, community leaders or advanced graduate fellows in American Culture Studies.
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : BA  FA : SSP

L98 AMCS 226 Sociological Approaches to American Health
The major objective of the course is to provide beginning students with the theoretical (conceptual) and empirical tools necessary to understand how health and illness and health care delivery in the United States are significantly influenced by the social structure in which they are embedded. Students demonstrate this understanding through designing and implementing a research project grounded in sociological theory and sound methodological strategies for collecting and analyzing data. Working in teams, students produce a research report suitable for a poster presentation or newsletter to a variety of audiences.
Credit 3 units.  A&S : SS  A&S : IQ, SSC  BU : BA

L98 AMCS 227 Topics in Native American Culture
The topic of this course varies from semester to semester.  Please see Course Listings for a description of the current offering.
Credit 3 units.  A&S : SS  A&S : IQ, SSC

L98 AMCS 2280 Introduction to Aural Culture: Silence, Noise, Music
Same as Music 228
Credit 3 units.  A&S : LA  A&S : IQ, HUM
L98 AMCS 229 Topics in American Culture Studies
The topic of this course varies from semester to semester. Please see Course Listings for a description of the current offering.
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L98 AMCS 234 Popular Crime and Early American Anxieties
This course examines the phenomenon of popular crime between the American Revolution and the Civil War. These criminal acts reflected changing attitudes toward a variety of themes vital to comprehending antebellum American culture including, but not limited to, race, gender, ethnicity, class and nationalism. By utilizing a set of interdisciplinary perspectives and approaches, students analyze the anxieties that led Americans of the early republic to rebel, steal, defraud, riot and murder. Readings consist of secondary materials from a range of disciplines and primary texts including novels, short stories, illustrations, graphic novels, sermons and journals.
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD

L98 AMCS 239 Performance and Culture
Same as Drama 239
Credit 3 units.  A&S : LA  A&S : IQ, HUM  BU : BA

L98 AMCS 244 War, Rebellion and the Formation of American Identity, 1754–1865
This course surveys the United States' experiences with rebellion and organized armed conflict from the origins of the American Revolution until the Civil War. Though the class deals with war, its focus is not on military tactics or the outcome of battles — indeed several of the conflicts it considers were entirely bloodless. Rather, the course utilizes war and rebellion as a prism through which to view the ways in which Americans conceived of themselves. Students address a number of questions: How and why did people in North America conceive of themselves as distinct from Europeans? Did war lead to more inclusive or exclusive views of who was considered “American?” How did people of different backgrounds view violent conflict? Why did some wars become central to American myth and others largely forgotten? Did war and rebellion promote a newly formed nationalism or did they help lead to sectionalism and the Civil War? Readings consist of secondary materials from a range of disciplines and primary documents that include novels, speeches, newspaper articles, letters, memoirs, editorial cartoons and paintings.
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L98 AMCS 245 Images of Disability: Portrayal in Film and Literature
Same as GeSt 249

L98 AMCS 246 Introduction to Film Studies
Same as Film 220
Credit 3 units.  A&S : LA  A&S : IQ, HUM  BU : HUM

L98 AMCS 248 Latino/a Experiences in the United States
Identity is a term that begins to give humans a sense of understanding who we are. In terms of the Latino/a diaspora in the United States, issues of ethnicity, gender, nation, class, sexuality and race are key theoretical categories that aid us in theoretical and practical understandings of identity. In this course we analyze and discuss the concept of order to understand the constructions and varied meanings of the term. A special emphasis is placed on anthropological, historical and social science literatures of the Caribbean, Latin America and the United States as they pertain to deeper understandings of identity. Prerequisite: membership in the Annika Rodriguez Program.
Credit 2 units.  A&S : SS  A&S : IQ, SSC  BU : BA

L98 AMCS 251 Topics in AFAS: The Ebonics Controversy
Same as AFAS 251
Credit 3 units.  A&S : SS, SD  A&S : IQ, SSC, SD

L98 AMCS 256 Workshop in American Culture Studies
Why study American culture? In this workshop we explore some of the many answers to this provocative question, as well as some of the objects of study available to us as students of American culture. Intended as a foundation for the American Culture Studies (AMCS) major and minor, the course is practical, exploratory and discussion-oriented. It helps students to get acquainted with AMCS as a community while imagining the types of projects that get done there. Sessions feature guest speakers, field trips to sites of cultural interest, and short readings that introduce different approaches to American culture studies. Students also examine the methods and questions that define their other field(s), and identity topics and fieldwork projects that especially engage them. Along the way, they are mentored by one of the program’s Undergraduate Scholars and are helped to locate themselves in an interdepartmental program that supports a wide range of intellectual pursuits. The final assignment is a contribution to the “anthology project,” a student-generated compilation of resources and readings that is shared with future AMCS students.
Credit 1 unit.  A&S : TH  A&S : IQ, HUM

L98 AMCS 258 Law, Politics and Society
Same as Pol Sci 258
Credit 3 units.  A&S : SS  A&S : IQ, SSC
L98 AMCS 2590 Freshmen Seminar: From the “City on a Hill” to 9/11: Religion and Social Justice in America
Same as History 2590
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD

L98 AMCS 260 Topics in Health and Community
Same as Anthro 260
Credit 1 unit.  A&S : SS  A&S : IQ, SSC

L98 AMCS 2601 Game Theory in Science and Culture
Same as Pol Sci 260
Credit 3 units.  A&S : SS  A&S : IQ, SSC

L98 AMCS 2674 Sophomore Seminar: Slavery and Memory in American Popular Culture
Same as History 2674
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD

L98 AMCS 2801 Ben Franklin’s America
In this course, we explore Ben Franklin’s America, from the earliest stirrings of political and religious dissent in the first decades of the 18th century to the post-Revolutionary debates over the meaning of republican virtue, American character and representative government. We read primary sources from a variety of figures who contributed to the century-long debate over these subjects, and then we hear from Franklin himself, as he offers his own insight into these issues, observing the changes taking place around him.
Same as History 2801
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L98 AMCS 298 Directed Fieldwork in American Culture Studies
Fieldwork under the direction of an AMCS-affiliated faculty. All proposals for study must be submitted for review and approved by the AMCS adviser. See the AMCS website for the appropriate form. By permission of instructor.
Credit -3 unit.

L98 AMCS 299 The Study of Cities and Metropolitan America
Same as URST 299
Credit 3 units.  A&S : SS  A&S : IQ, SSC  BU : BA

L98 AMCS 3000 Overseas Research in American Culture Studies
Overseas research under the direction of an AMCS-affiliated faculty. All proposals for study must be submitted for review and approved by the AMCS adviser. See the AMCS website for the appropriate form. By permission of instructor.
Credit -3 unit.

L98 AMCS 3002 Directed Study in Legal Culture
Directed study with an AMCS-affiliated faculty. All proposals for study must be submitted for review and approved by the AMCS adviser. See the AMCS website for the appropriate form. By permission of instructor.
Credit -3 unit.

L98 AMCS 3005 Research in Washington, D.C.: Directed Study in Politics and Political Culture
Directed study under the direction of an AMCS-affiliated faculty. All proposals for study must be submitted for review and approved by the AMCS adviser. See the AMCS website for the appropriate form. By permission of instructor.
Credit -3 unit.

L98 AMCS 3006 Local Archives: Directed Study in St. Louis
Directed study with an AMCS-affiliated faculty. All proposals for study must be submitted for review and approved by the AMCS adviser. See the AMCS website for the appropriate form. By permission of instructor.
Credit -3 unit.

L98 AMCS 301C The American School
Same as Educ 301C
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD  BU : BA, ETH, HUM  FA : SSP

L98 AMCS 301U Historical Methods — United States History
Same as History 301U
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L98 AMCS 3020 Native American Musical Traditions of the Western United States
Same as Music 3022
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD  BU : HUM FA : SSP

L98 AMCS 3023 Jazz in American Culture
Same as Music 3023
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD  BU : HUM FA : AH

L98 AMCS 3028 Music of the 1960s
Same as Music 3028
Credit 3 units. A&S : TH A&S : IQ, HUM

L98 AMCS 3031 Gender and Education
Same as Educ 303
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD BU : BA
   FA : SSP

L98 AMCS 3034 Race and Ethnicity in American Politics
Same as Pol Sci 3031
Credit 3 units. A&S : SS A&S : IQ, SSC

L98 AMCS 3041 Sex, Gender and Popular Culture
Same as WGSS 3041
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : BA

L98 AMCS 3042 Making Sex and Gender: Understanding the History of the Body
Same as WGSS 3041
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD

L98 AMCS 3061 Literacy Education in the Context of Human Rights and Global Justice
Same as Educ 306
Credit 3 units. A&S : SS BU : BA

L98 AMCS 3066 American City in the 19th and 20th Centuries
Same as History 3066
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : HUM
   FA : SSP

L98 AMCS 3070 Politics and Policymaking in the American States
Same as Pol Sci 3070
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA

L98 AMCS 3073 The Global War on Terrorism
Same as History 3073
Credit 3 units. A&S : TH A&S : IQ, HUM

L98 AMCS 308 Cracks in the Republic: Discontent, Dissent and Protest in America During the 1960s and 1970s
Same as History 3072
Credit 4 units. A&S : TH, SD A&S : IQ, HUM, SD BU : BA
   FA : SSP

L98 AMCS 308C History of Law in American Life I: English and Colonial Foundations to 1776
Same as History 307C
Credit 3 units. A&S : TH BU : HUM FA : SSP

L98 AMCS 3091 Poverty and Social Reform in American History
Same as History 3091
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : BA
   FA : SSP

L98 AMCS 309W Microeconomics of Public Policy
Same as Econ 309W
Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI

L98 AMCS 310 Topics in Asian-American Literature: Identity and Self-Image
Same as E Lit 308
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : HUM
   FA : Lit

L98 AMCS 3105 American Holidays, Rituals and Celebrations
This seminar examines a variety of holidays, festivals and rituals in American history and culture. Topics include: conflicts over Christmas, the sentiments of greeting cards, African-American emancipation celebrations, Roman Catholic festivals dedicated to the Virgin Mary, modern renderings of Jewish ritual (including Hanukkah), the masculinity embodied in fraternal lodge ceremonies, Neopagan festivals and Halloween Hell Houses. Various interpretive approaches are explored, and the intent is to broach a wide range of questions about history and tradition, gender and race, public memory and civic ceremony, moral order and carnival, through this topical focus on ritual and performance. A major emphasis also is placed on original research and writing, evident in the weight given the concluding seminar report and the final paper.
Credit 3 units. A&S : IQ, HUM EN : H

L98 AMCS 311 Women's Health in America
Same as WGSS 310
Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI BU : BA FA : SSP

L98 AMCS 3121 Topics in American Literature
Same as E Lit 316W
Credit 3 units. A&S : TH, WI A&S : IQ, HUM, WI
L98 AMCS 3132 Topics in Composition: Exploring Cultural Identity in Writing
Same as E Comp 314
Credit 3 units. A&S : LA, WI A&S : IQ, HUM, WI

L98 AMCS 314 First Americans: Prehistory of North America
Same as Anthro 314B
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD BU : BA FA : SSP

L98 AMCS 3142 Native Americans at Westward Expansion
Same as Anthro 3461
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD FA : SSP

L98 AMCS 3151 Selected Areas for Special Study I
IDENTICAL WITH MUS L27 315.
Same as Music 315
Credit 3 units. A&S : TH A&S : IQ, HUM

L98 AMCS 3162 Topics in American Literature: Contemporary American Fiction
Same as E Lit 316
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L98 AMCS 316F Rediscovering the Child: Interdisciplinary Workshops in an Urban Middle School
It is said that at this time in history the entire country must make a commitment to improve the positive possibilities of education. We must work to lift people who are underserved; we must expand the range of abilities for those who are caught in only one kind of training; and we must each learn to be creative thinkers contributing our abilities to many sectors of our society. In this course, we expand our views about learning by experimenting with the creative process of lateral thinking. In the first six weeks of the semester, we learn about learning by meeting with exceptional people with many scholarly, professional and civic engagement accomplishments. We also learn by working in teams to develop an exciting set of 2D/3D, hands-on, problem-solving workshops for middle-schoolers from economically disadvantaged urban families; the workshop curriculum is based upon your knowledge and passion as well as your interests. During the last eight weeks, we deliver these workshops once a week to students at Compton-Drew Middle School (adjacent to the Science Center in the city of St. Louis). In this course we celebrate the choices of studies we each pursue, and expand our experience by learning from each other’s knowledge bases and creativity. The course is open to students from all disciplines and schools, freshmen through seniors, and meets the Multidisciplinary Fieldwork requirement for AMCS majors.
Credit 3 units. A&S : SS A&S : IQ, SSC

L98 AMCS 3173 Queer Histories
Same as WGSS 3172
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD

L98 AMCS 3190 Engaging the City: The St. Louis Violence and Literacy Project
In 2010, a national study ranked St. Louis as the “Most Dangerous City in America,” while a separate study named it one of the most literate in the nation. Such a juxtaposition contradicts our most basic intuition about the connection between literacy and violence in the same urban space. This course confronts two issues: how are urban violence and literacy related, in St. Louis and more generally; and how can we fully understand the nature of urban spaces and their impact on society and culture? Using techniques of cultural mapping, we examine, first, how people construct urban space materially, that is, how their actions and understandings produce the built environment, infrastructure, immigration, finance and transportation and communication networks. Second, we consider how people imagine and represent their urban space, in terms of symbolic representations, social and psychological distance, and other factors studied through a range academic disciplines from architecture to anthropology. Finally, we study how urban spaces address culture in return, through the nature of domestic and public areas, monuments, symbolic barriers, and mythologies. Students develop interdisciplinary tools, including a variety of social scientific, humanistic and field-based methods, and contribute to the St. Louis Violence and Literacy Project, a collaborative community mapping project.
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD

L98 AMCS 3191 Contemporary American Women Poets
Same as E Lit 3191
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L98 AMCS 3202 Civic Scholars Program Semester One: Self Awareness, Civic Life and Citizenship
This is the first-semester, foundation course for students in the Civic Scholars Program of the Gephardt Institute for Public Service. This course provides students with a context for examining civic engagement and developing civic leadership skills. Through lectures, guest speakers, readings, excursions and class discussion, students (1) explore the history and current status of civic engagement and (2) prepare for the implementation of a civic project the summer between their junior and senior years. Students meet in a structured class to discuss concepts, engage in critical reflection, and develop leadership skills. In addition, students critically reflect on course content to enrich their learning. Prerequisite: acceptance into the Civic Scholars Program.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit
Arts & Sciences

L98 AMCS 3203 Civic Scholars Program Semester Two: Civic Engagement in Action
This is the second-semester, foundation course for students in the Civic Scholars Program of the Gephardt Institute for Public Service. This course provides students with a context for developing their civic projects. Students engage in a semester-long research and project planning process tied to their civic projects. Through research, lectures, workshops and presentations, students develop a project proposal for their civic projects. Students meet in class to discuss concepts, engage in critical reflection, and develop skills. Prerequisite: AMCS 3202. Credit 2 units. A&S : SS A&S : IQ, SSC

L98 AMCS 3212 Reading Narrative
Same as E Lit 3211
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L98 AMCS 3214 Topics in Theater
Same as Drama 321
Credit 3 units. A&S : LA A&S : IQ, HUM

L98 AMCS 3222 Major American Writers: The Contemporary American Novel
Same as E Lit 3222
Credit 3 units. A&S : TH FA : Lit

L98 AMCS 3223 American Literature to 1865
Same as E Lit 321
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L98 AMCS 3255 Development of the American Constitution
Same as Pol Sci 3255
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA

L98 AMCS 326 American Economic History
Same as Econ 326
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L98 AMCS 3262 Literature of the Color Line
Same as AFAS 326
Credit 3 units. A&S : LA A&S : IQ, HUM

L98 AMCS 3263 Introduction to Research Design
The purpose of this course is to introduce students to a range of research designs found in the social sciences. We work on ways to ask and operationalize research questions as well as examine appropriate research designs and strategies. We begin the course with the problem of developing informed research questions, the accompanying hypotheses and developing them around a so-called scientific method. We concern ourselves with understanding the role and importance of literature reviews and then examine sources of data and four types of research strategy through cases that use them: ethnmethodology, an historical methodology, a quantitative approach, and a hybrid of quantitative and qualitative approaches. Credit 3 units. A&S : SS A&S : IQ, SSC

L98 AMCS 327 Public Opinion and American Democracy
Same as Pol Sci 3211
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L98 AMCS 3270 Comics, Graphic Novels and Sequential Art
This course traces the evolution of comics in the America from the “comic cuts” of the newspapers, through the development of the daily and Sunday strips, into the comic book format, and the emergence of literary graphic novels. While not a uniquely American medium, comics have a specifically American context that intersects with issues of race, class, gender, nationalism, popular culture, consumerism and American identity. Comics have repeatedly been a site of struggle in American culture; examining these struggles illuminates the way Americans have constructed and expressed their view of themselves. The way comics have developed as a medium and art form in this country has specific characteristics that can be studied profitably through the lens of American Culture Studies. Credit 3 units. A&S : LA A&S : IQ, HUM

L98 AMCS 3283 Introduction to Public Health
Same as Anthro 3283
Credit 3 units. A&S : SS A&S : IQ, SSC BU : SCI FA : SSP

L98 AMCS 329 War and Militarism in Post-Vietnam U.S. Culture
The United States’ nearly two-decade-long involvement in Vietnam has been widely understood as challenging orthodox notions of the nation, its global interests and obligations, and the wisdom of using military force to achieve those interests and meet those obligations as well as previously dominant ideas about patriotism and citizenship. This course examines how representations of the historical and contemporary U.S. military and its interventions in a range of cultural texts — including literature, film, media and political rhetoric — that have been produced since the mid-1970s have participated in cultural and political debates regarding the United States’ global interests and obligations and the role that the use of military force should play in meeting them. Two key premises guide our inquiry. First, we acknowledge that cultural products do not simply reflect cultural
attitudes but rather contribute to their production, circulation and contestation. Second, we understand that discourses of foreign policy and militarism and discourses of race, class, gender, sexuality and citizenship intersect with and mutually inform one another. We discuss topics including the competing legacies of the Vietnam War, the role of the U.S. military in the post-Cold War world, the 1991 Persian Gulf War, the contemporary legacies of the Civil War and World War II, the United States’ obligations with regard to human rights issues including famine and genocide, and the prosecution of the Post-9/11 “War on Terror.”

Credit 3 units.  A&S : TH  A&S : IQ, HUM

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<th>Course Title</th>
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<tr>
<td>L98 AMCS 3292</td>
<td>Modern South Asian Politics</td>
<td>This course focuses on the recent political history and development of South Asia. It begins with a review of the British colonial period and the Independence movement. The remainder of the course examines different political issues in India, Pakistan, Bangladesh and Sri Lanka. Topics include political mobilization, land reform, law and politics, social movements, religious and caste politics, the rise of religious nationalism, and political control of the economy. Course website: <a href="http://artsci.wustl.edu/~polisci/parikh/asian/">http://artsci.wustl.edu/~polisci/parikh/asian/</a>.</td>
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<td>L98 AMCS 3302</td>
<td>Politics and Policies of Immigration in the United States</td>
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Credit 3 units.  A&S : SS, WI  A&S : IQ, SSC  BU : BA  FA : AH

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<td>History of American Cinema</td>
<td>Same as Film 330</td>
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Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM  FA : AH

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<td>L98 AMCS 3303</td>
<td>Culture and Identity</td>
<td>Topics course focusing on instances of identity and culture within the American scope. Varies by semester, see Course Listings for description of current semester’s offering.</td>
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Credit 3 units.  A&S : TH  A&S : IQ, HUM, SD

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<td>L98 AMCS 3312</td>
<td>Gender and American Politics</td>
<td>Same as L32 331B. Same as Pol Sci 331B</td>
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Credit 3 units.  A&S : SS  BU : ETH  FA : SSP

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<td>Topics in Politics: Constitutionalism and Democracy</td>
<td>Same as Pol Sci 3321</td>
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<td>L98 AMCS 3322</td>
<td>Brave New Crops</td>
<td>Same as Anthro 3322</td>
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Credit 3 units.  A&S : SS  A&S : IQ, SSC  BU : IS  FA : NSM

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<td>L98 AMCS 3325</td>
<td>Topics in Politics: Constitutional Politics in the United States</td>
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Credit 3 units.  A&S : SS  A&S : IQ, SSC  BU : BA  FA : SSP

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<td>Topics in Linguistics: The American Languages</td>
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Credit 3 units.  A&S : SS, SD  A&S : IQ, SSC

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Credit 3 units.  A&S : SS  A&S : IQ, SSC  BU : BA  FA : SSP

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<tr>
<td>L98 AMCS 336</td>
<td>Topics in American Culture Studies</td>
<td>Topics courses in American Culture Studies are offered routinely and examine aspects of our culture from various disciplines and often through multidisciplinary approaches. Courses previously offered include: 19th-Century American Indian Literature; Hurricane Katrina: A Case Study in Disaster and Relief; The History of Popular Culture in the United States; Mark Twain: Humor and Politics in 19th Century; and American Presidential Rhetoric. Courses are sometimes team-taught or combine community service with learning. Faculty includes WU</td>
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Credit 3 units.  A&S : SS  A&S : IQ, SSC  BU : BA  FA : SSP
professors, visiting scholars, community leaders or advanced graduate fellows in American Culture Studies.
Credit 3 units. A&S: TH A&S: IQ, HUM BU: HUM

L98 AMCS 336H The Cultural History of the American Teenager
This course explores the recent history of the teenager in the United States, from the rise of teen culture in the 1950s to the current state of adolescence in the new century. Why have so many novels and films memorialized adolescence? How has the period of development been portrayed in books and film? How have depictions and attitudes toward teen culture changed over the past 50 years? We begin with J.D. Salinger’s classic novel of adolescence alienation, *The Catcher in the Rye*, a book that in many ways helped initiate the rise of the youth movement in the 1950s and ’60s. From there, we read a series of novels and historical studies that trace the changes in teen culture that have occurred over the past half century. Our class also considers a few films, such as *Rebel Without a Cause* and *Dazed and Confused*, which have helped shape our conception of the American teenager. Ultimately, we question what these depictions of teen culture can tell us about larger trends and concerns in American life. Readings include Judy Blume’s *Forever*, Stephanie Meyer’s *Twilight* and Colson Whitehead’s *Sag Harbor.
Same as CFH 336
Credit 3 units. A&S: TH A&S: IQ, HUM

L98 AMCS 338 Citizenship and Public Service
This course provides an in-depth exploration of citizenship and public service. What does it mean to be a citizen in a democratic country? What are the expectations of democracy, our rights and responsibilities? Do we have obligations to our society in terms of public service? We begin the semester with an examination of various theoretical perspectives on citizenship: Should citizens be expected to participate in civic life? Should participation be encouraged among some people and not others? What does it mean when we engage in civic life, and when we don’t? We then explore and discuss historic and contemporary views on various ways that citizens can and do engage in public service, broadly defined, to address societal problems and bring change to their local, national and global communities. We examine whether public service and citizenship are inclusive across class, race, gender and immigrant status. Students draw on their own experiences in individual service-learning placements and apply them to an examination of how we can increase the likelihood of citizen involvement in American civic life. Note: Students are expected to participate in three hours of community service per week.
Credit 3 units. A&S: SS A&S: IQ, SSC

L98 AMCS 3381 Topics in Politics: National Security, Civil Liberties and the Law
Same as Pol Sci 3381
Credit 3 units. A&S: SS A&S: IQ, SSC BU: BA FA: SSP

L98 AMCS 3391 Topics in 19th- and 20th-Century American Writing: American Short Fiction
Same as E Lit 3391
Credit 3 units. A&S: TH A&S: IQ, HUM BU: HUM

L98 AMCS 3400 Topics in 20th-Century American Writing: American Literature 1914–1945
Same as E Lit 340
Credit 3 units. A&S: TH A&S: IQ, HUM BU: HUM FA: Lit

L98 AMCS 3402 The American Novel: Split and Hybrid American Identities
Same as E Lit 340W
Credit 3 units. A&S: TH, WI A&S: IQ, HUM, WI BU: BA, HUM

L98 AMCS 3431 Understanding the Evidence: Provocative Topics of Contemporary Women’s Health and Reproduction
Same as WGSS 343
Credit 3 units. A&S: SS A&S: IQ, SSC BU: ETH

L98 AMCS 3440 Performing Gender
This course investigates an array of contemporary performances to explore manifestations of and challenges to gender norms in American culture. An initial reading of crucial performance theories by Judith Butler, Jill Dolan and others helps set the stage for our examination of a diverse collection of contemporary texts, including plays, solo performances, stand-up and pop culture phenomenon. We raise questions about feminist performance strategies, butch/femme performance, camp, cross-dressing, feminist spectatorship, multimedia performances and the representation of lesbian desire. Prerequisite: any 100-level Women, Gender and Sexuality Studies course.
Same as WGSS 3401
Credit 3 units. A&S: LA, SD A&S: IQ, HUM, SD BU: BA

L98 AMCS 3441 Understanding the Evidence: Provocative Topics of Contemporary Women’s Health and Reproduction
Same as WGSS 343
Credit 3 units. A&S: SS A&S: IQ, SSC BU: ETH

L98 AMCS 3440 The Jewish People in America
Same as JNE 341
Credit 3 units. A&S: TH A&S: IQ, HUM BU: HUM

L98 AMCS 3445 Jewish-Gentile Relations in the United States, 1830–1970
Same as JNE 3415
Credit 3 units. A&S: TH A&S: IQ, HUM BU: BA
<table>
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<th>Course Code</th>
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<td>L98 AMCS 342</td>
<td>The American Presidency</td>
<td>3</td>
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<td>IDENTICAL WITH POL SCI L32 342.</td>
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<tr>
<td>L98 AMCS 3422</td>
<td>Americans and Their Presidents</td>
<td>3</td>
<td>A&amp;S : TH, A&amp;S : IQ, HUM</td>
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<td>How have Americans understood what it means to be President of the United States? This seminar uses that question as a point of departure for a multidisciplinary cultural approach to the presidency in the United States, examining the shifting roles of the chief executive from George Washington through Barack Obama. In addition to a consideration of the President’s political and policy-making roles, this course examines how the lived experiences of presidents have informed the ways Americans have conceived of public and private life within a broader political culture. In the process, this course uses the presidency as a means to explore topics ranging from electioneering to gender, foreign policy to popular media. Readings are drawn from a broad range of fields.</td>
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<td>L98 AMCS 344</td>
<td>Courts and Civil Liberties</td>
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<td>L98 AMCS 3441</td>
<td>Defendant’s Rights</td>
<td>3</td>
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<td>L98 AMCS 3450</td>
<td>Sexual Politics in Film Noir and Hardboiled Literature</td>
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<td>Same as Film 345.</td>
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<td>L98 AMCS 3470</td>
<td>Gender and Citizenship</td>
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<td>Same as WGSS 347.</td>
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<td>L98 AMCS 3475</td>
<td>Fantastic Archaeology</td>
<td>3</td>
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<td>L98 AMCS 3480</td>
<td>Economic Realities of the American Dream</td>
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<td>L98 AMCS 3490</td>
<td>Media Cultures</td>
<td>3</td>
<td>A&amp;S : TH, A&amp;S : IQ, HUM</td>
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<td>Same as Film 349.</td>
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<td>BU : BA</td>
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<td>What makes jazz critics, historians and fans laud Billie Holiday as one of the greatest jazz vocalists of all time? How is it that she continues to inspire a wide range of creative artists — poets, novelists, visual artists and choreographers — 50 years after her death from chronic alcoholism and narcotics abuse? This class juxtaposes the historical realization of Holiday’s hard life with her iconic status as a jazz genius. Biographies and critical studies of Holiday typically situate her along two oppositional tracks: either as a tragic victim or as a triumphant heroine. Which Holiday is truer and why? We consider the importance of veracity (or lack thereof) in Holiday’s autobiography, <em>Lady Sings the Blues</em> (1956), trace the history of her critical reception and recent reconfigurations by jazz studies critics, and chart her rise and fall in the general media, all the while examining the broad range and significance of her musical legacy to the jazz canon.</td>
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<td>Same as Film 350.</td>
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<td>L98 AMCS 3510</td>
<td>Topics in American Politics: The Supreme Court</td>
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<td>L98 AMCS 3520</td>
<td>Topics in American Culture Studies</td>
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<td>The topic of this course varies from semester to semester. Please see Course Listings for a description of the current offering. Credit 3 units. A&amp;S : TH, A&amp;S : IQ, HUM</td>
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<td>L98 AMCS 3561</td>
<td>Women and the Law</td>
<td>WGSS 3561</td>
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<td>L98 AMCS 3563</td>
<td>Television Culture and Cult TV: Critical Approaches to Fandom</td>
<td>Film 356</td>
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<td>L98 AMCS 3570</td>
<td>Quality Television and the “Primetime Novel”</td>
<td>Film 357</td>
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<td>L98 AMCS 3581</td>
<td>Scribbling Women: 19th-Century American Women Writers</td>
<td>WGSS 358</td>
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<td>L98 AMCS 359</td>
<td>Topics in American Culture Studies</td>
<td>Pol Sc 358</td>
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<td>L98 AMCS 3590</td>
<td>The American Musical Film</td>
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<td>L98 AMCS 3611</td>
<td>Legislative Politics</td>
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<td>L98 AMCS 3612</td>
<td>Culture and Environment</td>
<td>Anthro 361</td>
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<td>L98 AMCS 3631</td>
<td>The American Frontier: 1776–1848</td>
<td>History 3632</td>
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<td>L98 AMCS 3632</td>
<td>Mapping the World of “Black Criminality”</td>
<td>AFAS 363</td>
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<td>L98 AMCS 3651</td>
<td>Black Women Writers</td>
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<td>The Civil War and Reconstruction: 1848–1877</td>
<td>History 366</td>
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<td>L98 AMCS 3660</td>
<td>Women and Film</td>
<td>Film 366</td>
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<td>L98 AMCS 367</td>
<td>Modern America, 1877–1929</td>
<td>History 367</td>
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<td>L98 AMCS 3671</td>
<td>The Long Civil Rights Movement</td>
<td>History 3670</td>
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<td>L98 AMCS 367H</td>
<td>Medicine, Healing and Experimentation in the Contours of Black History</td>
<td>History 3672</td>
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<td>L98 AMCS 368</td>
<td>Modern America Since 1929</td>
<td>History 368</td>
<td>3</td>
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<tr>
<td>L98 AMCS 3680</td>
<td>The Cold War, 1945–1991</td>
<td>History 3680</td>
<td>3</td>
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<td>L98 AMCS 369</td>
<td>American Horrors</td>
<td>Film 370</td>
<td>3</td>
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L98 AMCS 370 The American West: The Image in History
Same as Art-Arch 370
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD  BU : HUM  FA : AH

L98 AMCS 3711 The History of Popular Culture in the United States
This course surveys major developments in the history of popular culture in America, stretching from the mid-19th century to the present. It explores topics such as literature, drama/theater, dance halls, movies, radio, advertising, television, music and the internet; it covers different types of popular culture such as printing, performance, image and audio; it looks at how popular culture has been depicted in terms of icons, myths, stereotypes, heroes, celebrities and rituals; it addresses the rise of mass production and consumption; it examines the ways in which race, class, gender, ethnicity and sexuality have been perceived and are portrayed in popular culture; and it illustrates how the content of popular culture shapes and reflects our personal, social, political and intellectual beliefs and values. Same as History 3711
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : BA

L98 AMCS 3712 Art and Culture in America’s Gilded Age
Same as Art-Arch 3712
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : BA  FA : AH

L98 AMCS 3713 Values and the Art-Culture Machine
This course introduces students to a range of contexts and problems that contemporary art and culture face with respect to how to account for and value human, communal and diverse experiences. We begin with a comparison of dominant aesthetic, spiritual and representational practices in Modernism and Postmodernism by looking closely at science, feminism and commodity art and culture. We consider the ethics of silence in contemporary art in relation to human suffering and the place of humanness in relation to machines and reproductive technologies and products, including the printed picture and kitsch. We then consider the relevance of a computational understanding of human cognition and how information and experience relate. We address the role of art and artists in times of crisis and war, as well as the modes of mobilization, production and distribution characteristic of art worlds. We question the authenticity of African tourist art and Aboriginal paintings. We highlight experiments in the representation of values and difference in contemporary art and anthropology. We conclude with a discussion of the relevance of time, fantasy and imagination in cultural production.
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L98 AMCS 372C History of Law in American Life II: 1776 to the Present
Same as History 372C
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD  BU : ETH, IS  FA : SSP

L98 AMCS 373 Making War
Same as Film 371
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : BA

L98 AMCS 3730 History of the United States: Foreign Relations to 1914
Same as History 373
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM, IS  FA : SSP

L98 AMCS 3731 Introduction to GIS for Anthropologists
Same as Anthro 373
Credit 3 units.  A&S : SS  A&S : IQ, SSC

Same as History 3741
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM, IS  FA : SSP

L98 AMCS 3742 Social Landscapes in a Global View
Same as Anthro 374
Credit 3 units.  A&S : SS  A&S : IQ, SSC

L98 AMCS 3754 Women in American History
Same as History 3752
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD  BU : BA  FA : SSP

L98 AMCS 3755 Disability, Quality of Life and Community Responsibility
Same as GeSt 375
Credit 3 units.  BU : BA

L98 AMCS 375A American Culture: Methods and Visions
What does it mean to study American culture? How should we go about doing this work? In this methods seminar, students explore different approaches to American culture, focusing on a specific topic and a corresponding set of cultural objects especially suited to multidisciplinary investigation. (The particular topic, and associated cultural objects, may vary from semester to
Arts & Sciences

semester, and are specified by the instructor in advance; see the AMCS program website.) Drawing upon their training in different fields, students engage with the many questions, materials and strategies of cultural study, and find new perspectives on work in their “home” discipline. Much of this work focuses on primary sources and ways of interpreting them. The course is shaped by discussions about research methodologies and preparatory work for a final project (which, if appropriate, may become part of an AMCS web-project). As a Writing-Intensive course, AMCS 375A also serves as an occasion for students to think about matters of argument and presentation, and to develop ideas and models for future research. This course is intended for students at the Junior Level or Higher. Preference given to AMCS majors and minors.

Credit 3 units. A&S : TH, WI A&S : IQ, HUM EN : H

L98 AMCS 376 American Modernism, 1900–1940
Same as Art-Arch 376
Credit 3 units. A&S : TH, WI A&S : IQ, HUM, WI BU : ETH FA : AH

L98 AMCS 3776 Sexuality, Courtship and Marriage in U.S. History
Same as WGSS 3776
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD

L98 AMCS 378 Topics in American Culture Studies
Credit 3 units. A&S : TH A&S : IQ, HUM BU : BA FA : SSP

L98 AMCS 3785 Photography in America
Course considers the practice and use of photography in America from its invention to the present day, providing various ways of thinking about the medium and its relation to society and culture. Students come to understand the contested status of photography in relation to American history — specifically the ways photographic practices can simultaneously report and distort reality. We discuss famous practitioners such as Matthew Brady, Jacob Riis, Walker Evans and Robert Frank, as well as social uses of the medium — whether through examining mass media magazines or the changing “everyday” practice of the snapshot. Same as Art-Arch 3785
Credit 3 units. A&S : TH A&S : IQ, HUM

L98 AMCS 3789 Building St. Louis Oral History: 1945–Present
Same as History 3789
Credit 4 units. A&S : TH, SD A&S : IQ, HUM, SD

L98 AMCS 379 Banned Books
Same as E Lit 381
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH FA : Lit

L98 AMCS 3820 Latin-American DissemiNations: Identities in the 20th and 21st Centuries
Same as IAS 382
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : IS

L98 AMCS 3840 Gender and Consumer Culture in U.S. Fiction of the Late 19th and Early 20th Century
Same as WGSS 384
Credit 3 units. A&S : TH, SD, WI A&S : IQ, HUM, SD, WI

L98 AMCS 3871 African-American Literature: Early Writers to the Harlem Renaissance
Same as E Lit 387
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD

L98 AMCS 3875 Pharmaceutical Personhood
Same as Anthro 3875
Credit 3 units. A&S : SS A&S : IQ, SSC

L98 AMCS 3876 Dada and Surrealism in Europe and the United States
Same as Art-Arch 3875
Credit 3 units. A&S : TH A&S : IQ, HUM

L98 AMCS 3880 Terror and Violence in the Black Atlantic
Same as AFAS 3880
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD

L98 AMCS 3882 Psychological Anthropology
Same as Anthro 3882
Credit 3 units. A&S : SS A&S : IQ, SSC

L98 AMCS 3889 Understanding Lincoln: Writing-Intensive Seminar
Same as History 3889
Credit 3 units. A&S : TH, WI A&S : IQ, HUM, WI

L98 AMCS 3901 Taboo: Boundary and Transgression in American Cinema
Same as L53 Film 390.
Same as Film 390
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH
L98 AMCS 391 Topics in Women's Studies: Violence Against Women
Same as WGSS 393
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD BU : BA FA : SSP

L98 AMCS 394 Urban Development and the Global Economy
This course is designed to familiarize students with the urban effects of economic globalization and to provide students with tools that enable them to engage in scholarly and practical debates on economic growth and the city. Students are exposed to a variety of theoretical statements comparative studies, and case-specific research focusing on cities and the global economy. Topics include: industrial reorganization and its connection to the urban form; the ability of “dead” cities to adapt to economic change; how economic innovation is encouraged or suppressed within cities; growth coalitions and urban politics, networks and culture in relation to capitalist commitment to urban space; and the role of the arts and entertainment in new development versus production-based paradigms.
Credit 3 units. A&S : SS A&S : IQ, SSC

L98 AMCS 395 American Indians and American Empire
Through readings of historical and contemporary texts drawn from American Indian testimonial, scholarship and literature; anthropology; and history, we explore past struggles for cultural and political survival and contemporary politics of self-determination of indigenous peoples. We consider these issues alongside American “Empire”: the past and present politics of nation-building, expansion and rule that characterize the United States. Topics include race, anthropology and 19th-century imperialism; education, the Indian and American democracy; sovereignty and tribal self-determination; Indian political movements; and the contemporary politics of energy, resources and Indian lands.
Credit 3 units. A&S : SS, CD, SD A&S : IQ, SSC, LCD

L98 AMCS 3962 Religion and American Society — 1890 to the Present
Same as Re St 3962
Credit 3 units. A&S : TH A&S : IQ, HUM EN : H

L98 AMCS 397 Gender and Sexuality in 1950s America: Writing-Intensive Seminar
Same as History 39F8
Credit 3 units. A&S : TH, SD, WI A&S : IQ, HUM, SD, WI BU : BA

L98 AMCS 39SL Blacks, Latinos and Afro-Latinos: Constructing Difference and Identity: Writing-Intensive Seminar
Same as History 39SL
Credit 3 units. A&S : TH, CD, SD, WI A&S : IQ, HUM, LCD

L98 AMCS 4000 Urban Education in Multiracial Societies
Same as URST 400
Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI

L98 AMCS 4001 Directed Study in American Culture Studies
Directed study with an AMCS-affiliated faculty. All proposals for study must be submitted for review and approved by the AMCS adviser. See the AMCS website for the appropriate form. By permission of instructor.
Credit -3 unit.

L98 AMCS 4002 Directed Study in Legal Culture
Directed study with an AMCS-affiliated faculty. All proposals for study must be submitted for review and approved by the AMCS adviser. See the AMCS website for the appropriate form. By permission of instructor.
Credit -3 unit.

L98 AMCS 4003 Advanced Research in American Culture Studies
Directed study with an AMCS-affiliated faculty. All proposals for study must be submitted for review and approved by the AMCS adviser. See the AMCS website for the appropriate form. By permission of instructor.
Credit -3 unit.

L98 AMCS 4004 Senior Honors Seminar in American Culture Studies
This course is required for students seeking college honors through American Culture Studies. Students discuss research methods and make regular research reports both to the instructor and other students. Prerequisite: satisfactory standing as a candidate for senior honors (3.5 cumulative GPA) and permission of thesis director.
Credit 3 units.

L98 AMCS 4005 Senior Honors Seminar in American Culture Studies
This course is required for students seeking college honors through American Culture Studies. Students discuss research methods and make regular research reports both to the instructor and other students. Prerequisite: satisfactory standing as a candidate for senior honors (3.5 cumulative GPA) and permission of thesis director.
L98 AMCS 4008 Senior Seminar on the Presidency
This is a research seminar that begins with a series of common readings, after which students constitute themselves into research teams that explore the current state of the Presidency in broad cultural perspective. Research topics may include: a survey of the books on the Presidential family; media interpretations of the administration and the political process; the political uses of information technology, specifically the Web and social media; continuities and changes in voter behavior; the shifting powers of the Presidency. This course is designed as a complement to Focus on the Presidency, and Focus 200 is a prerequisite for this course.
Credit 3 units. A&S : TH A&S : IQ, HUM

L98 AMCS 401 Race, Sex and Sexuality: Concepts of Identity
Same as WGSS 403
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD BU : BA FA : SSP

L98 AMCS 4010 Pluralism, Liberalism and Education
Same as Pol Sci 4010
Credit 3 units. A&S : SS A&S : IQ, SSC

L98 AMCS 4011 Independent Study
Independent study with an AMCS-affiliated faculty. All proposals for study must be submitted for review and approved by the AMCS adviser. See the AMCS website for the appropriate form. By permission of instructor.
Credit -3 unit.

L98 AMCS 4020 The Legal Landscape in a Changing American Society
This course is designed to examine the qualitative relationship between transformations in law and the structure of American values and behavioral patterns and in the institutions and culture of American law. The materials cover the structural aspects of the legal system and its place in American society and not the law's doctrinal features (i.e., the specific substantive areas of the law). Rather the course examines how the organization and functioning of the law incorporates the values and changes in the American society. To achieve this, the course topics include: (a) Americans' perceptions of their legal institutions and agents; (b) changing links between law and the mass media; (c) concerns about the jury system; (d) the use (and abuse?) of litigation and its alternatives (ADR); (e) inequalities in access to the legal system; and (f) the transformations within the legal profession, both in law firms and in the careers of attorneys.
Credit 3 units. A&S : SS A&S : IQ, SSC

L98 AMCS 4023 Models of Social Science
What distinguishes the social sciences from the natural sciences? What goals and assumptions do they share? Does studying “humans” with free will pose any problems for applying the methods of the natural sciences to the study of society? How do various social sciences — in particular anthropology, economics and political science — differ from one another? And where did the social sciences (both the disciplines and the conceptual issues) come from historically? These are the animating questions of this course. This class explores these questions in historical and contemporary perspective, as they relate to the rise of the social sciences as a set of academic disciplines. We set out the theoretical structure of the scientific method, paying particularly close attention to the relationships between theory and evidence, inference and hypotheses. Next we consider four problems and methods of the social sciences. These include questions of (1) treating human beings as a rational actors; (2) attributing causal forces other than a person’s own will to human behavior; (3) empirical observations and inference; and (4) the role of interpretation. In all four cases, we are interested in asking: Toward what solutions have these problems lead social scientists, and what other sets of difficulties do their solutions raise? We also pay particularly close attention to the role that concepts play in social analysis.
Credit 3 units. A&S : SS A&S : IQ, SSC

L98 AMCS 403 Culture and History of the Southwestern United States
Same as Anthro 403
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD FA : SSP

L98 AMCS 4030 Political Theory of Education
Same as Pol Sci 4030
Credit 3 units. A&S : SS A&S : IQ, SSC BU : ETH

L98 AMCS 4051 Political Representation
Same as Pol Sci 4050
Credit 3 units. A&S : SS A&S : IQ, SSC BU : ETH

L98 AMCS 4060 Sexual Health and the City: A Community-based Learning Course
Same as AFAS 406
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD

L98 AMCS 407 Democracy and the Rhetorical Society
The growth of democracy around the world has placed renewed focus on the practice of democracy and the conditions under which democracy can work effectively as a method of
cooperation and decision-making. In this seminar we step back and reflect on what it means to communicate, interact and govern together in a democratic society. With special emphasis on the role of rhetoric in democratic practice, we study a variety of classic and contemporary texts to see what is at stake in making democracy work in the 20th century.

Credit 3 units. A&S : TH A&S : IQ, HUM

L98 AMCS 4090 The Modernist Revolution in the Arts
Same as Drama 409
Credit 3 units. A&S : LA A&S : IQ, HUM

L98 AMCS 4101 Metropolitan Finance
Same as URST 4101
Credit 3 units. A&S : SS A&S : IQ, SSC

L98 AMCS 4120 Rainbow Radicalisms!: Ethnic Nationalism(s), the 1960s and the Politics of the New Left
Same as AFAS 4121
Credit 3 units. A&S : TH A&S : IQ, HUM

L98 AMCS 4121 American Religion, Politics and Culture: Historical Foundations
Same as Re St 4121
Credit 3 units. A&S : TH A&S : IQ, HUM

L98 AMCS 4134 The AIDS Epidemic: Inequalities, Ethnography and Ethics
Same as Anthro 4134
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD

L98 AMCS 4135 Tobacco: History, Culture, Science and Policy
Same as Anthro 4135
Credit 3 units. A&S : SS A&S : IQ, SSC

L98 AMCS 4181 Studying the City: Approaches to Social Research
Same as URST 418
Credit 3 units. A&S : SS A&S : IQ, SSC

L98 AMCS 4201 Topics in English and American Literature
Same as E Lit 420
Credit 3 units. A&S : TH A&S : IQ, HUM FA : Lit

L98 AMCS 4210 A Tale of Two Cities: Urban Form and Society in Chicago and St. Louis
This interdisciplinary course explores the changing forms of urban life in Chicago and St. Louis from the early 19th century through the present. Drawing on methods and sources employed by historians, geographers, planners and designers, we trace the ways urban spaces were produced, used, adapted, destroyed, replaced and invested with multiple meanings. We map the dynamic relationship between social life and the built environment, considering thematic links between topics including labor and housing, manufacturing and gender, public space and ethnic identity.
Credit 3 units. A&S : TH BU : HUM

L98 AMCS 422 Plants and American People: Past and Present
Same as Anthro 4213
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L98 AMCS 4231 Topics in American Literature I
Same as E Lit 4231
Credit 3 units. A&S : TH A&S : IQ, HUM FA : Lit

L98 AMCS 4232 Slavery and the American Imagination
Same as E Lit 4232
Credit 3 units.  A&S : TH  A&S : IQ, HUM  FA : Lit

L98 AMCS 4241 Topics in American Literature II
Same as E Lit 424
Credit 3 units.  A&S : TH  A&S : IQ, HUM  FA : Lit

L98 AMCS 4242 Social Movements
Same as L48 4242.
Same as Anthro 4242
Credit 3 units.  A&S : SS, CD, SD  A&S : IQ, SSC, LCD  FA : SSP

L98 AMCS 4243 The Plundered Past: Archaeology’s Challenges in the Modern World
Same as Anthro 4240
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD

L98 AMCS 4244 Topics in African-American Literature: Texts and Contexts of the Harlem Renaissance
Same as E Lit 4244
Credit 3 units.  A&S : TH  A&S : IQ, HUM  FA : Lit

L98 AMCS 4261 Politics of the Civil Rights Movement
Same as Pol Sci 426
Credit 3 units.  A&S : SS, SD  A&S : IQ, SSC, SD  FA : SSP

L98 AMCS 4262 Racialization, Engendering and Articulation: Theories of Identity Formation
Same as Anthro 4262
Credit 3 units.  A&S : SS  A&S : IQ, SSC

L98 AMCS 4280 History of Urban Schooling in the United States
Same as Educ 4280
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L98 AMCS 4288 Higher Education in American Culture
Same as Educ 4288
Credit 3 units.  A&S : TH  BU : HUM  FA : SSP

L98 AMCS 4289 Neighborhoods, Schools and Social Inequality
Same as Educ 4289
Credit 3 units.  A&S : SS  A&S : IQ, SSC

L98 AMCS 428A The “Crossover” Tradition in Anglo-American Music Theater
Same as Music 4282
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L98 AMCS 4291 The American Renaissance
Same as E Lit 426
Credit 3 units.  A&S : TH  A&S : IQ, HUM  FA : Lit

L98 AMCS 4301 American Literature from 1855–1921
Same as E Lit 429
Credit 3 units.  A&S : TH  A&S : IQ, HUM  FA : Lit

L98 AMCS 431 Modernism and Postmodernism in American Literature
Same as E Lit 428
Credit 3 units.  A&S : TH  FA : Lit

L98 AMCS 4315 Culture, Language and the Education of Black Students
Same as Educ 4315
Credit 3 units.  A&S : SS, CD  A&S : IQ, SSC, LCD  FA : SSP

L98 AMCS 4340 Topics in Drama: 19th-Century American Drama
Same as E Lit 434
Credit 3 units.  A&S : TH  A&S : IQ, HUM  FA : Lit

L98 AMCS 4390 Literary Theory
Same as E Lit 439
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L98 AMCS 4392 Capitalism and Culture: New Perspectives in Economic Anthropology
Same as Anthro 4392
Credit 3 units.  A&S : SS, SD  A&S : IQ, SSC, SD

L98 AMCS 441 In the Field: Ethnographic and Qualitative Methods
This course provides an introduction to ethnographic and qualitative research. Ethnography is the study of culture and social organization primarily through participant observation and interviewing. Ethnographic research provides descriptive and interpretative analyses of the routine practices of everyday life. Ethnographic accounts represent different ways people live and make sense of their experiences and describe the types of social
organization (for example, gender relations, class systems, racial divisions or cultural contexts) that, in part, serve to structure or pattern social behavior. Students conduct a small-scale qualitative research project, and in the process they gain skills in various qualitative research methods. This course is suitable for both undergraduate and graduate students. One purpose of the course is to help students plan for subsequent thesis research, independent study projects or dissertation research.

Credit 3 units. A&S : SS A&S : IQ, SSC

L98 AMCS 442 Oil Wars: America and the Cultural Politics of Global Energy
This seminar explores the historical, cultural and political relationship between America and global energy, focusing specifically on oil and natural gas. Our central objective is to examine how oil and natural gas shape our own lives and entangle us in the cultural, political and economic lives of the rest of the world. We ask what anthropological and social science approaches might contribute to our understanding of a situation that has become, in most popular terms, a national “crisis” of global dimensions.

Credit 3 units. A&S : SS A&S : IQ, SSC

L98 AMCS 444 Seminar
Rotating upper-level seminar.
Same as Drama 445
Credit 3 units. A&S : LA A&S : IQ, HUM

L98 AMCS 4455 Ethnographic Fieldwork
Same as Anthro 4455
Credit 3 units. A&S : SS A&S : IQ, SSC

L98 AMCS 4491 American Unbelief from the Enlightenment to the New Atheism
This seminar examines American freethinkers, secularists, humanists and atheists from Tom Paine and Ernestine Rose through Madalyn Murray O’Hair and Sam Harris. Topics emphasized include: church-state relations, social radicalism and women’s rights, secular versus Christian imaginings of the nation, and the recent flourishing of the new atheists and religious “Nones.”.

Same as Re St 4491
Credit 3 units. A&S : TH A&S : IQ, HUM

L98 AMCS 450 9/11 and the War on Terror in U.S. Culture
The terrorist attacks of September 11, 2001 stand as the defining moment for United States foreign policy and, perhaps more generally, United States culture in the first decade of the 21st century. This upper-level, discussion-focused seminar examines how these attacks, the domestic political and cultural response, and the subsequent wars in Iraq and Afghanistan have been represented in recent U.S. culture. Our discussions take seriously the premise that cultural texts do not simply reflect already-extant cultural ideas but rather play a critical role in the discursive production of competing ideas about events, their cultural significance and their political import. We interrogate how a range of texts that includes memoir, film, fiction, memorial practices, government documents, music and media accounts have participated in shaping cultural ideas regarding not only the events of September 11 and the United States’ political, military and cultural response to them but also debates over larger questions of race, gender, citizenship, patriotism and the United States’ role in global affairs. We also ask what other histories are important to understanding these events and what is at stake in these representations or cultural memories in terms of concepts of the United States’ relationship to the rest of the world. This course is open to juniors and seniors and to sophomores by permission of the instructor. Recommended prerequisites: a course in 20th-century U.S. history, 20th-century American literature or American politics.

Credit 3 units. A&S : TH A&S : IQ, HUM

L98 AMCS 4501 American Drama
Same as Drama 453
Credit 3 units. A&S : TH A&S : IQ, HUM FA : Lit

L98 AMCS 4510 American Television Genres
Same as Film 451
Credit 3 units. A&S : TH A&S : IQ, HUM BU : BA

L98 AMCS 452 Race, Ethnicity and Culture: Qualitative Inquiry in Urban Education
Same as AFAS 4511
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD BU : BA

L98 AMCS 4520 Industrial Organization
Same as Econ 452
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L98 AMCS 4521 Immigration, Identity and New Technology
Same as IAS 452
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD

L98 AMCS 4522 Topics in American Politics: The Voting, Campaigns and Elections
Same as Pol Sci 4522
Credit 3 units. A&S : SS FA : SSP

L98 AMCS 4523 Teaching Adults in Community Settings
L98 AMCS 453 Sociology of Education
Same as Educ 453B
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD BU : BA, ETH, HUM, IS FA : SSP

L98 AMCS 454 Environmental Policy
Same as Econ 451
Credit 3 units. A&S : SS, A&S : IQ, SSC BU : BA, ETH FA : SSP

L98 AMCS 4540 American Film Melodrama and the Gothic
Same as Film 454
Credit 3 units. A&S : TH A&S : IQ, HUM

L98 AMCS 4551 Seminar in Political Economy
Same as Pol Sci 4551
Credit 3 units. A&S : SS A&S : IQ, SSC

L98 AMCS 456 Topics in American Politics: Supreme Court
This seminar has two purposes: to introduce students to the state of the art in studies of the Supreme Court and to cover a series of particular topics with emphasis on the major controversies within the field of law and the courts. Same as Pol Sci 451
Credit 3 units. A&S : SS FA : SSP

L98 AMCS 4563 Business, Government and the Public
Same as Econ 456
Credit 3 units. A&S : SS, QA A&S : IQ, SSC, AN FA : SSP

L98 AMCS 457 American Film Genres
Same as Film 450
Credit 3 units. A&S : TH A&S : IQ, HUM FA : Lit

L98 AMCS 4584 Contemporary American Fiction
Same as E Lit 4584
Credit 3 units. A&S : TH A&S : IQ, HUM

L98 AMCS 4591 Philosophies of Education
Same as Educ 459F
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH FA : SSP

L98 AMCS 460 Urban Economics
Same as Econ 460
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L98 AMCS 4608 The Education of Black Children and Youth in the United States
Same as Educ 4608
Credit 3 units. A&S : TH, SD, WI A&S : IQ, HUM, SD, WI FA : SSP

L98 AMCS 461B The Construction and Experience of Black Adolescence
Same as AFAS 461B
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L98 AMCS 462 Politics of Education
Same as Educ 462
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L98 AMCS 4620 Topics in English Literature II: Travel and Colonization in the Early Modern Period
Same as E Lit 462
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD FA : Lit

L98 AMCS 4621 The Political Economy of Urban Education
Same as Educ 4621
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD

L98 AMCS 470 American Intellectual History Since 1865
Same as History 469
Credit 3 units. A&S : TH A&S : IQ, HUM

L98 AMCS 472 American Art and Culture, 1945–1960
Same as Art-Arch 4721
Credit 3 units. A&S : TH A&S : IQ, HUM

L98 AMCS 4735 Modeling the Second World War
Same as History 4735
Credit 3 units. A&S : TH A&S : IQ, HUM

L98 AMCS 474 Americans and Their Presidents
How have Americans understood what it means to be President of the United States? This seminar uses that question as a point of departure for a multidisciplinary cultural approach to the presidency in the United States, examining the shifting roles of the chief executive from George Washington through Barack...
Obama. In addition to a consideration of the president’s political and policy-making roles, this course examines how the lived experiences of presidents have informed the ways Americans have conceived of public and private life within a broader political culture. In the process, this course uses the presidency as a means to explore topics ranging from electioneering to gender, foreign policy to popular media. Readings are drawn from a broad range of fields.

Credit 3 units.  A&S : TH  A&S : IQ , HUM

<table>
<thead>
<tr>
<th>Course Code</th>
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<tr>
<td>L98 AMCS 476</td>
<td>The City in American Arts and Popular Culture</td>
<td>Same as Art-Arch 475</td>
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<tr>
<td>L98 AMCS 4785</td>
<td>Art and Culture in 1920s America</td>
<td>Same as Art-Arch 4785</td>
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<tr>
<td>L98 AMCS 4792</td>
<td>Globalization and National Politics</td>
<td>Same as Pol Sci 4792</td>
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<td>L98 AMCS 4803</td>
<td>Geographic Information Systems (GIS), Landscape and Spatial Analysis in Archaeology</td>
<td>Same as Anthro 4803</td>
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<tr>
<td>L98 AMCS 481</td>
<td>History of Education in the United States</td>
<td>Same as Educ 481</td>
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<tr>
<td>L98 AMCS 482</td>
<td>Reading America: Henry Adams and the Study of American Culture</td>
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<td>3</td>
<td>A&amp;S : TH</td>
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</tbody>
</table>

No other American has had opportunity to observe the United States from the vantage point enjoyed by Henry Adams, and few have taken up the challenge of understanding and explaining their country with more diligence. From the winter of secession preceding Lincoln’s inauguration to the height of the progressive era, Adams was both an amused observer and a disciplined historian. In political essays, lengthy histories, novels and an extraordinary autobiography, this great-grandson and grandson of presidents explored the tension between the one in the many in America’s political and cultural life as well as in the character of Americans. In this course we examine, in addition to Adams’ portrayal of America, his methodological experimentation both as an historian and as a student of culture.

Credit 3 units.  A&S : TH  A&S : IQ , HUM

L98 AMCS 4834 Health, Healing and Ethics: Comparative Perspectives on Sickness and Society
Same as Anthro 4834
Credit 3 units.  A&S : SS  A&S : IQ , SSC

L98 AMCS 484 Anti-Slavery in the Courtroom
The famous Dred Scott Case was the most famous of a series of “freedom suits” that provide unique insight into America’s first civil rights movement: hundreds of enslaved African Americans seeking their freedom through the courts, a project that often required considerable courage. Many were successful, but too often powerful men, motivated by material interest and fierce proslavery belief, opposed their quest for freedom. The archive of the St. Louis courts provide the nation’s single largest repository for archival materials relating to slave freedom suits. The vast majority of cases in this collection were unknown to history until the early part of this century and have only recently received the archival conservation and organization to make them available for systematic scholarly study. Students engaged in this combined seminar and laboratory explore this valuable archive to gain an understanding of not only legal resistance to slavery, but also of such topics as slavery’s urban structure, its western migration from Eastern states, the hidden reality of institutionalized slavery of the Old Northwest, and the kinship networks that structured power in the antebellum west. Laboratory work takes advantage of, and contributes to, the structured presentation of these archival materials in digital form.

Credit 4 units.  A&S : TH  A&S : IQ , HUM

L98 AMCS 4851 Topics in American Jewish Studies
Same as JNE 4851
Credit 3 units.  A&S : TH  A&S : IQ , HUM

L98 AMCS 4878 Cold War Cultures, U.S. and Europe, ca. 1945–1955
Same as Art-Arch 4878
Credit 3 units.  A&S : TH  A&S : IQ , HUM

L98 AMCS 4908 Advanced Seminar: Women in the History of Higher Education and Professions
Same as Educ 440
Credit 3 units.  A&S : TH , SD  FA : SSP

L98 AMCS 494G Advanced Seminar: The Making of the American Dream: A History of Work and Housing in America
This course traces the intersecting histories of labor and housing markets in 19th- and 20th-century America. Students look at rural and urban real estate, free and unfree labor, factory towns, sweat labor and the crop lien system, and service and
office workers. Students investigate the ways changes in labor markets transformed the structure and meaning of the American family home. We also look at how racial and gender hierarchies were made and remade through labor systems, explore the role of the state in defining work, trace political struggles over government regulation of housing and labor markets, and investigate changing representations of work and housing in popular culture.

Same as History 49HG
Credit 4 units. A&S : TH

L98 AMCS 4982 Public Art: History, Practice, Theory
Same as Art-Arch 4982
Credit 3 units. A&S : TH A&S : IQ, HUM

L98 AMCS 4984 The Problem of New World Freedom: The Age of Democratic Revolution in the United States and the Americas
Same as History 4984
Credit 4 units. A&S : TH, SD A&S : IQ, HUM, SD

L98 AMCS 4987 Advanced Seminar: Antislavery — The Legal Assault on Slavery in St. Louis
Same as History 4987
Credit 4 units. A&S : TH, SD A&S : IQ, HUM, SD

L98 AMCS 4995 The Dred Scott Case and Its Legacy after 150 Years
Same as History 4995
Credit 4 units. A&S : TH A&S : IQ, HUM

L98 AMCS 49SA Advanced Seminar: Slavery in America: The Politics of Knowledge Production
Same as History 49SA
Credit 4 units. A&S : TH, SD A&S : IQ, HUM, SD

Anthropology

Anthropology offers the opportunity to study human existence in the present and the past and to explore how and why humans vary in their behaviors, cultures and biology. Students choose to study anthropology because they want to understand some of the most intriguing and troubling issues faced by modern society: the origin and meaning of ethnic and gender differences; the role of institutions in social, political and economic life; learned vs. innate behavior; the similarities and differences among human societies; and the meaning of religion, community and family.

The Anthropology Department offers courses in the four subfields of anthropology: archaeology, biological anthropology, sociocultural anthropology and linguistics.

The faculty in the Anthropology Department are active in research around the world and bring a diversity of experiences to their teaching.

- Faculty research expertise in archaeology includes the origins of food production; the cultures of prehistoric North, Central and South America; African and Central Asian prehistory; environmental archaeology; geographic information systems (GIS).
- Biological anthropology faculty focus on the evolution of humans and on the ecology, behavior and evolution of nonhuman primates.
- Sociocultural faculty conduct research on a wide range of topics, including states, societies, and beliefs; political ecology, demography, fertility and population; sociolinguistics; medical anthropology and public health; bodies, gender and sexuality; science and technology, mind and cognition; and religion and politics.

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Departmental website: http://anthropology.artsci.wustl.edu

Chair
T. R. Kidder
Professor
PhD, Harvard University

Endowed Professors
John Baugh
Margaret Bush Wilson Professor in Arts & Sciences
PhD, University of Pennsylvania
(African and African-American Studies)

John R. Bowen
Dunbar–Van Cleve Professor in Arts & Sciences
PhD, University of Chicago

Pascal R. Boyer
Henry Luce Professor of Collective and Individual Memory
PhD, University of Paris–Nanterre

Richard J. Smith
Ralph E. Morrow Distinguished University Professor
PhD, Yale University

Erik Trinkaus
Mary Tileston Hemenway Professor in Arts & Sciences
PhD, University of Pennsylvania

James V. Wertsch
Marshall S. Snow Professor in Arts & Sciences  
PhD, University of Chicago

**Professors**

Lois Beck  
PhD, University of Chicago

David L. Browman  
PhD, Harvard University

Robert L. Canfield  
PhD, University of Michigan

James M. Cheverud  
PhD, University of Wisconsin–Madison

Glenn C. Conroy  
PhD, Yale University

David Freidel  
PhD, Harvard University

Gayle J. Fritz  
PhD, University of North Carolina–Chapel Hill

Fiona Marshall  
PhD, University of California–Berkeley

Jane Phillips-Conroy  
PhD, New York University

D. Tab Rasmussen  
PhD, Duke University

Carolyn Sargent  
PhD, Michigan State University

Glenn D. Stone  
PhD, University of Arizona

Robert W. Sussman  
PhD, Duke University

L. Lewis Wall  
MD, University of Kansas

**Assistant Professors**

Bradley P. Stoner  
MD, PhD, Indiana University

**Associate Professors**

Peter Benson  
PhD, Harvard University

Geoff Childs  
PhD, Indiana University

Michael Frachetti  
PhD, University of Pennsylvania

Bret D. Gustafson  
PhD, Harvard University

Rebecca J. Lester  
PhD, University of California–San Diego

Shanti A. Parikh  
PhD, Yale University

**Assistant Professors**

Derek Pardue  
PhD, University of Illinois at Urbana–Champaign

Elizabeth A. Quinn  
PhD, Northwestern University

Crickette Sanz  
PhD, Washington University

Priscilla Song  
PhD, Harvard University

Kedron Thomas  
PhD, Harvard University

**Adjunct Associate Professors**

Carolyn Lesorogol  
PhD, Washington University

M. Priscilla Stone  
PhD, University of Arizona

**Senior Lecturer**

John Kelly  
PhD, University of Wisconsin–Madison

**Lecturers**

Darla Dale  
PhD, Washington University

Anne Sebert-Kuhlmann  
PhD, University of Colorado–Denver

**Professors Emeriti**

Pedro C. Cavalcanti  
PhD, University of Warsaw

G. Edward Montgomery  
PhD, Columbia University

Patty Jo Watson  
Edward Mallinckrodt Distinguished University Professor Emerita  
PhD, University of Chicago

Murray Wax  
PhD, University of Chicago

**The Major in Anthropology**

Total units required: 34 units

- **Required courses:** 10 units

  Anthro 150A Introduction to Human Evolution
  Anthro 160B Introduction to Cultural Anthropology
Anthro 190B Introduction to Archaeology
Anthro 397 Proseminar: Issues and Research in Anthropology

**Elective courses:** 24 advanced units (300 level or higher) of which 9 units must be at the 400 level.

### Optional Anthropology Major Track: Global Health and Environment

Anthropology majors may choose an optional track within the major called Global Health and Environment if the students' interests lie primarily within this area of Anthropology. The Global Health and Environment major track provides strong training for professional and graduate study. *Students enrolled in the Global Health and Environment track must complete the Anthropology major required courses and the Global Health and Environment required and elective courses as outlined below.*

**Total units required:** 34

- **Required courses:** 16
  - **Departmental requirements:** 10 units
    - Anthro 150A Introduction to Human Evolution
    - Anthro 160B Introduction to Cultural Anthropology
    - Anthro 190B Introduction to Archaeology
    - Anthro 397 Proseminar: Issues and Research in Anthropology
  - **Global Health and Environment Track requirements:** 6 units
    - Anthro 3283 Introduction to Public Health
    - Anthro 361 Culture and Environment
  - **Elective courses:** 18 advanced units (300 level or higher) of which 9 units must be at the 400 level — taken from the two lists below:

- **Global Health:** choose four electives (12 units)
  - Anthro 3059 New Departures in the Study of Culture, Health and Medical Practices in Contemporary China
  - Anthro 3284 Public Health Research and Practice
  - Anthro 3310 Health, Healing and Ethics: Introduction to Medical Anthropology
  - Anthro 3612 Population and Society
  - Anthro 3620 Anthropological Perspectives on the Fetus
  - Anthro 3621 Anthropology of Human Birth
  - Anthro 3625 The Female Life Cycle in Cross-Cultural Perspective
  - Anthro 3626 Adventures in Nosology: The Nature and Meaning of Disease
  - Anthro 3874 International Public Health
  - Anthro 3875 Pharmaceutical Personhood
  - Anthro 3876 Darwin and Doctors: Evolutionary Medicine and Health
  - Anthro 3876 Darwin and Doctors: Evolutionary Medicine and Health

- **Environment:** choose two electives (6 units)
  - Anthro 3053 Nomadic Strategies and Extreme Ecologies
  - Anthro 3182 Ancient Africa: Social Mosaics and Environmental Challenges
  - Anthro 3322 Brave New Crops
  - Anthro 3472 Global Energy and the American Dream
  - Anthro 3616 From Deep Ecology to Indigenous Ecological Identity: Environmental Social Movements and Anthropology
  - Anthro 3656 Behavioral Ecology of the Great Apes
  - Anthro 3662 Primate Conservation Biology
  - Anthro 379 Meltdown: The Archaeology of Climate Change
  - Anthro 406 Primate Ecology and Social Structure
  - Anthro 4202 Evolutionary Genetics
  - Anthro 4211 Paleoethnobotany and Ethnobotany
  - Anthro 4213 Plants and American People: Past and Present
  - Anthro 4214 The Archaeology of Food and Drink
  - Anthro 4215 Anthropology of Food
  - Anthro 4244 Oil Wars: America and the Cultural Politics of Global Energy
  - Anthro 4282 Political Ecology
  - Anthro 4517 Anthropology and Development
  - Anthro 4771 Out of the Wild: Domestication and Socioeconomic Diversity in Africa
  - Anthro 479 Climate, Culture and Human History
  - Anthro 489 Seminar: Pathways to Domestication

**Anthro 4022 Transnational Reproductive Health Issues: Meanings, Technologies, Practices**

**Anthro 4033 Culture, Illness and Healing in Asia**

**Anthro 4112 Body and Flesh: Theorizing Embodiment**

**Anthro 4134 The AIDS Epidemic: Inequalities, Ethnography and Ethics**

**Anthro 4135 Tobacco: History, Culture, Science and Policy**

**Anthro 4136 Sexual Health and the City: A Community-Based Learning Course**

**Anthro 4253 Researching Fertility, Mortality and Migration**

**Anthro 4254 The Anthropology of Maternal Death**

**Anthro 4595 Developmental Plasticity and Human Health**

**Anthro 4881 Medicine and Anthropology**

**Anthro 4882 Anthropology and Public Health**

**Anthro 4883 The Political Economy of Health**

**Anthro 4884 Anthropology of Sexually Transmitted Infections**

**Anthro 4951 Senior Honors Research or Anthro 4961 Senior Honors Thesis — only 3 units of Honors Research may be applied toward the major**

**Environment:** choose two electives (6 units)

**Anthro 3053 Nomadic Strategies and Extreme Ecologies**

**Anthro 3182 Ancient Africa: Social Mosaics and Environmental Challenges**

**Anthro 3616 From Deep Ecology to Indigenous Ecological Identity: Environmental Social Movements and Anthropology**

**Anthro 3656 Behavioral Ecology of the Great Apes**

**Anthro 3662 Primate Conservation Biology**

**Anthro 379 Meltdown: The Archaeology of Climate Change**

**Anthro 406 Primate Ecology and Social Structure**

**Anthro 4202 Evolutionary Genetics**

**Anthro 4211 Paleoethnobotany and Ethnobotany**

**Anthro 4213 Plants and American People: Past and Present**

**Anthro 4214 The Archaeology of Food and Drink**

**Anthro 4215 Anthropology of Food**

**Anthro 4244 Oil Wars: America and the Cultural Politics of Global Energy**

**Anthro 4282 Political Ecology**

**Anthro 4517 Anthropology and Development**

**Anthro 4771 Out of the Wild: Domestication and Socioeconomic Diversity in Africa**

**Anthro 479 Climate, Culture and Human History**

**Anthro 489 Seminar: Pathways to Domestication**

**Anthro 4951 Senior Honors Research or Anthro 4961 Senior Honors Thesis — only 3 units of Honors Research may be applied toward the major**
Additional Information

Internships: Anthropology majors can gain preprofessional experience and earn up to 3 units of credit by taking part in supervised internships in businesses, cultural institutions and community agencies. Students must have department approval for an internship and must work with an anthropology faculty sponsor during the fall or spring semesters.

Research: Many anthropology courses include research components and final projects. Majors also can take part in research and gain credit through approved independent study with faculty who have ongoing research projects. Research opportunities in anthropology labs include projects in archaeology, paleoethnobotany, geoarchaeology, zooarchaeology, genetic studies, GIS, human osteology, human ecology and primate studies.

Senior Honors: Students who wish to conduct a research project for Latin Honors and who have the minimum GPA of 3.65 and the approval of a faculty adviser may be enrolled in the honors program. Latin Honors involves both demonstration of acquired knowledge (based in part on GPA) and a report on an original research project. Two courses, Anthro 4951 Senior Honors Research and Anthro 4961 Senior Honors Thesis, are available to allow students to receive credit for the extra research involved in the honors thesis. Students may count one of these courses toward their 400-level course requirement for the major.

Study Abroad: The department recognizes and accepts courses from a number of semester or year abroad programs. Specific information on study abroad policies is available on the Anthropology Department website at http://anthropology.artsci.wustl.edu/ or by consultation with the Study Abroad Coordinator.

Transfer Credit: Students who wish to transfer credits from other institutions, including those abroad, must have approval from the Curriculum Coordinator.

The Minor in Anthropology

Units required: 18

• Required courses: 6 units
  
  Minimally, two of the following three courses; recommended that all three be taken:
  
  Anthro 150A Introduction to Human Evolution
  Anthro 160B Introduction to Cultural Anthropology
  Anthro 190B Introduction to Archaeology

  • Elective courses: 12 additional units, at least 9 of which must be at the 300 level or higher.

Optional Anthropology Minor Track: Global Health and Environment

Anthropology minors may choose an optional track called Global Health and Environment if the student’s interests lie primarily within this area of Anthropology. The Global Health and Environment minor track provides a solid foundation for those who might be interested in professional and graduate study but who do not choose to major in Anthropology. Students enrolled in the Global Health and Environment minor track must complete the Anthropology minor requirements listed below as well as elective courses as outlined.

Units required: 18

• Required courses: 9 units

  Departmental requirement: 3 units
  
  Any 100-level Introductory Anthropology course from the following list:
  
  Anthro 150A Introduction to Human Evolution
  Anthro 160B Introduction to Cultural Anthropology
  Anthro 190B Introduction to Archaeology

  Global Health and Environment Track requirement: 6 units
  
  Anthro 3283 Introduction to Public Health
  Anthro 361 Culture and Environment

  • Elective courses: 9 units selected from the lists below:

  Global Health: choose four electives (12 units)
  
  Anthro 3059 New Departures in the Study of Culture, Health and Medical Practices in Contemporary China
  Anthro 3284 Public Health Research and Practice
  Anthro 3310 Health, Healing and Ethics: Introduction to Medical Anthropology
  Anthro 3612 Population and Society
  Anthro 3620 Anthropological Perspectives on the Fetus
  Anthro 3621 Anthropology of Human Birth
  Anthro 3625 The Female Life Cycle in Cross-Cultural Perspective
  Anthro 3626 Adventures in Nosology: The Nature and Meaning of Disease
  Anthro 3874 International Public Health
  Anthro 3875 Pharmaceutical Personhood
  Anthro 3876 Darwin and Doctors: Evolutionary Medicine and Health
  Anthro 4022 Transnational Reproductive Health Issues: Meanings, Technologies, Practices
  Anthro 4033 Culture, Illness and Healing in Asia
  Anthro 4112 Body and Flesh: Theorizing Embodiment
  Anthro 4134 The AIDS Epidemic: Inequalities, Ethnography and Ethics
  Anthro 4135 Tobacco: History, Culture, Science and Policy
Anthro 4136 Sexual Health and the City: A Community-Based Learning Course
Anthro 4253 Researching Fertility, Mortality and Migration
Anthro 4254 The Anthropology of Maternal Death
Anthro 4595 Developmental Plasticity and Human Health
Anthro 4881 Medicine and Anthropology
Anthro 4882 Anthropology and Public Health
Anthro 4883 The Political Economy of Health
Anthro 4884 Anthropology of Sexually Transmitted Infections
Anthro 4951 Senior Honors Research or Anthro 4961 Senior Honors Thesis — only 3 units of Honors Research may be applied toward the major

Environment: choose two electives (6 units)
Anthro 3053 Nomadic Strategies and Extreme Ecologies
Anthro 3182 Ancient Africa: Social Mosaics and Environmental Challenges
Anthro 3322 Brave New Crops
Anthro 3472 Global Energy and the American Dream
Anthro 3616 From Deep Ecology to Indigenous Ecological Identity: Environmental Social Movements and Anthropology
Anthro 3656 Behavioral Ecology of the Great Apes
Anthro 3662 Primate Conservation Biology
Anthro 379 Meltdown: The Archaeology of Climate Change
Anthro 4061 Primate Community Ecology
Anthro 4202 Evolutionary Genetics
Anthro 4211 Paleoethnobotany and Ethnobotany
Anthro 4213 Plants and American People: Past and Present
Anthro 4214 The Archaeology of Food and Drink
Anthro 4215 Anthropology of Food
Anthro 4244 Oil Wars: America and the Cultural Politics of Global Energy
Anthro 4282 Political Ecology
Anthro 4517 Anthropology and Development
Anthro 4771 Out of the Wild: Domestication and Socioeconomic Diversity in Africa
Anthro 479 Climate, Culture and Human History
Anthro 489 Seminar: Pathways to Domestication
Anthro 4951 Senior Honors Research or Anthro 4961 Senior Honors Thesis — only 3 units of Honors Research may be applied toward the major

Anthropology
L48 Anthro 101 St. Louis 101: Life in a Global City
This course is for incoming freshmen in the January Program only. This seminar introduces students to St. Louis through exploration of various facets of city life. The course also introduces different ways of asking questions about and interpreting urban issues (from history, anthropology, architecture, political science and economics). We consider how we might “engage” the city as students, researchers and citizens. The course includes lectures, discussion, readings, field trips and visits with public figures and local experts. Topics include history, identity, education, popular culture, religion, immigration, sports, urban and regional development, and city-region politics. Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD BU : BA FA : SSP

L48 Anthro 111 In the Amazon: Indigenous Peoples and the Politics of Nature
As it turns out, James Cameron’s Avatar is not so far from the truth. The Amazon region of South America has long been home to indigenous peoples and civilizations, but has been radically transformed by several hundred years of European colonization, the rise of nation-states and armies, and the ongoing extraction of natural resources for the global market. The battle over the meaning and use of “nature” and peoples’ relations to it have been central throughout this history and are so today. Now environmentalists, national governments, global corporations and indigenous social movements are engaged in a struggle over the future of the Amazon. We explore these relationships between indigenous peoples and others in light of this history. We study and compare indigenous and Euro-American views of nature. We consider how indigenous peoples, environmentalists and other peoples confront global efforts to gain access to natural resources. We ask how global flows such as oil, cocaine, guns and carbon credits connect our lives to theirs. We explore how “modern” ideas about race and nature have linked indigenous peoples to processes as varied as the enslavement of African peoples and modern plans for development. What might the Amazon and its peoples and politics teach us about ourselves and the future of our shared global environment? Open to January Program students only. Credit 3 units. A&S : SS, CD A&S : IQ, SSC, SD BU : BA FA : SSP

L48 Anthro 130 Freshman Seminar: The Ritual Landscape of Cahokia: Perspectives on the Politics of Religion and Chiefly Power
The purpose of this class is to engage and challenge freshman students in an open discussion about the prehistoric Mississippian community of Cahokia. The focus of this course is two-fold. The first is to study the way in which the archaeological evidence has been interpreted. The second is to examine other perspectives on Cahokia, especially from the Native American descendants who consecrated this landscape nearly a millennium ago. An underlying tenet of this seminar in understanding Cahokia also can be achieved through the traditions and literature of Native Americans. In the end we want to understand the basis for Cahokia’s organization as a prehistoric Native American community, and the role that ritual and religion played in the rather dramatic and dynamic history of this community and the surrounding region. Credit 3 units. A&S : SS A&S : IQ, SSC BU : HUM FA : SSP
L48 Anthro 132 Past Tense, Future Imperfect: The Rise and Fall of Societies and Global Civilization
The past history of humanity is littered with the stories of societies whose peoples experienced prosperity and fluorescence followed by decline and catastrophe. In the present, an age of information and rapid change, public intellectuals offer broad and detailed visions of what took place in the past, what is happening now, and what the trends suggest for the future. This course looks at the efforts of two prominent public intellectuals, economist Lester Brown and geographer Jared Diamond. In this course we look at Brown’s work in its latest incarnation, Plan B 4.0. We discuss this in light of current events. We then look at Jared Diamond’s book Collapse, How Societies Choose to Fail or Succeed and critical response to that book by experts. The professor includes a personal perspective as an archaeologist working with the ancient Maya civilization. The Maya are famous for the 9th century ad collapse of their Classic civilization. The readings provide the basis for discussion of the challenges we face in understanding the life histories of societies and discerning what we can conclude about the future from their experiences.
Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 141 Medicine and Society
This course provides the basic foundation in medical anthropology and cultural anthropology for students enrolled in the Medicine and Society Program. The purpose of the course is to introduce students to the central themes and theoretical approaches employed by medical anthropologists to study health and illness in cross-cultural perspective. Topical areas include analyses of disease, illness and sickness at micro and macro levels; impact of personal and interpersonal factors on health; health effects of social, political and economic factors; relationship of anthropology to biological and social sciences approaches; ecology of health and development; and cross-cultural health studies by examining the health care systems of the United States and China. Using the tools and interpretive frameworks of the field of medical anthropology, students in this course will be exposed to a broad range of topics dealing with health and healthcare in Eastern and Western contexts. These include analyses of disease, illness and sickness at micro and macro levels; impact of personal and interpersonal factors on health; health effects of social, political and economic factors; relationship to biological and social sciences approaches; ecology of health and development; and cross-cultural health studies of language, gender and race/ethnicity. CBTL course.
Credit 3 units. A&S : SS, CD, SD A&S : IQ, SSC, LCD BU : BA FA : SSP

L48 Anthro 142 Medicine and Society
This course is the required second-semester sequence of the introduction to medical anthropology and cultural anthropology for students enrolled in the Medicine and Society Program. The course builds upon material introduced in Anthro 141 and provides greater ethnographic context for the cross-cultural study of health and illness. Topical areas include analyses of disease, illness and sickness at micro and macro levels; impact of personal and interpersonal factors on health; health effects of social, political and economic factors; relationship to biological and social sciences approaches; ecology of health and development; and cross-cultural health studies of language, gender and race/ethnicity. CBTL course.
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD BU : BA FA : SSP

L48 Anthro 150A Introduction to Human Evolution
A survey of the fossil evidence for human evolution. The course includes discussion of the genetics of human variation and evolution, the study of living non-human primates, and the fossil record and its interpretation. An evolutionary perspective is used in an attempt to understand modern humans from the naturalistic point of view.
Credit 3 units. A&S : NS A&S : IQ, NSM BU : SCI FA : NSM

L48 Anthro 160B Introduction to Cultural Anthropology
This course provides the basic foundation in comparative and critical introduction.
Credit 3 units. A&S : SS, CD, SD A&S : IQ, SSC, LCD, SD BU : BA, HUM FA : SSP

L48 Anthro 167 Global Population Issues
The objective of this course is to provide students with a broad overview of global population growth and its sociocultural, political and economic ramifications. Prerequisite: This course is open to January Scholars Program students only.
Credit 3 units. A&S : SS BU : IS

L48 Anthro 168 Hurricane Katrina: A Case Study in Disaster and American Society
This course examines the historical, societal, cultural, environmental and political issues raised by the Hurricane Katrina disaster. Through exploration of scholarship from multiple disciplines, the course seeks to understand the complex issues of the disaster itself, as well as ongoing relief and rebuilding in the affected area.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA, HUM FA : SSP

L48 Anthro 170D Introduction to Linguistics
Same as Ling 170D
Credit 3 units. A&S : LA A&S : IQ, SSC BU : BA, HUM

L48 Anthro 174 Medicine East and West: Comparing Healthcare in the U.S. and China
This course provides a foundational introduction to comparative health studies by examining the health care systems of the United States and China. Using the tools and interpretive frameworks of the field of medical anthropology, students in this course will be exposed to a broad range of topics dealing with health and healthcare in Eastern and Western contexts. These include the study of medical pluralism, meaning of illness, health care financing, preventive care, political-economic perspectives,
and sociobehavioral perspectives on health and wellness. Students taking this class will be better prepared to understand and address on-going health care concerns affecting U.S. and Chinese society.
Credit 3 units. A&S : SS  A&S : IQ, SSC

L48 Anthro 190B Introduction to Archaeology
A survey of the history, theory and methods of archaeology. An emphasis on important problems and discoveries in world prehistory.
Credit 3 units. A&S : SS  A&S : IQ, SSC  BU : BA  FA : AH

L48 Anthro 204B Anthropology and the Modern World
What cultural anthropologists are learning about major issues of our time: cultures facing destruction, communal societies, sex roles, poverty, political repression in the Third World — sharpening the study of our own culture.
Credit 3 units. A&S : SS, CD, SD  A&S : IQ, SSC, LCD, SD  BU : BA, ETH  FA : SSP

L48 Anthro 209C World Archaeology
Same as Archaeology 200C. Same as ARC 200C
Credit 3 units. A&S : TH, CD  A&S : IQ, HUM, LCD  BU : IS  FA : SSP

L48 Anthro 212 Archaeological Fantasies and Hoaxes
American popular culture is saturated with pseudoscientific and fictionalized accounts of archaeological discoveries and interpretations. How can students of the past distinguish between fraud, fantasy, hype and valid archaeological research? What potential merit do films, TV-oriented documentaries and historical fiction offer? What role has racism played in attempts to deny indigenous peoples credit for their past achievements? This course looks at the popular culture of archaeology, providing tools for critical evaluation as well as lifetime enjoyment of the field as it is frequently sold to both the informed and the unwary public. Anthropology majors and nonmajors are all welcome, as are sophomores and motivated first-year students who have not yet declared majors.
Credit 3 units. A&S : SS  A&S : IQ, SSC, LCD  FA : SSP

L48 Anthro 2151 Language, Culture and Society
This course explores the relationships between linguistic practice and other social and cultural processes. Among the topics to be discussed are language and social identity, language and thought, language and gender, multilingualism and language shift as well as the connections between language and the identity of ethnically or nationally defined communities. The course format alternates between “classic” theoretical readings and ethnographic case studies on the interplay between linguistic practice and ideology as well as cultural and social processes.
Credit 3 units. A&S : SS  A&S : IQ, SSC  BU : BA  FA : SSP

L48 Anthro 2188 African Urban History
Same as History 2188
Credit 3 units. A&S : TH  A&S : IQ, HUM  EN : H

L48 Anthro 227 Topics in Native-American Culture: The Native-American Experience
Same as AMCS 227
Credit 3 units. A&S : SS  A&S : IQ, SSC

L48 Anthro 260 Topics in Health and Community
A survey of current topics in community health and medicine, with an emphasis upon social science approaches to issues affecting medicine and medical care in contemporary U.S. society. Issues include ethical debates in health care delivery, social stratification and health, access to health services, and factors affecting community wellness at local, national and global levels. Presented as a weekly series of topical presentations by community health experts from the St. Louis area. Required for students enrolled in the Medicine and Society Program, and also is open to other interested students.
Credit 1 unit. A&S : SS  A&S : IQ, SSC

L48 Anthro 261 Migrations in Past and Present: an Introduction to Migration Studies
Same as IAS 260
Credit 3 units. A&S : TH, CD  A&S : IQ, HUM, LCD

L48 Anthro 265 Internships in Anthropology
Anthropology majors may acquire professional experience outside the classroom by participating in a faculty-sponsored internship. Before work begins, the student and faculty sponsor must agree on a final written project, which is then approved by the Anthropology Academic Coordinator. Students are evaluated by the faculty sponsor on the basis of the written project and input from the internship supervisor. Course may be taken only one time. Prerequisites: consent of the faculty member under whom the research is done.
Credit -3 unit.

L48 Anthro 300 Internships in Anthropology
Anthropology majors may acquire professional experience outside the classroom by participating in a faculty-sponsored internship. Before work begins, the student and faculty sponsor must agree on a final written project, which is then approved by the Anthropology Academic Coordinator. Students are evaluated by the faculty sponsor on the basis of the written project and input from the internship supervisor. Course may be taken only one time. Prerequisites: 9 hours of anthropology and permission of department.
Credit 3 units.
L48 Anthro 302B Peoples and Cultures of the Middle East
This course introduces the cultural diversity and unity of the peoples of the Middle East. The emphasis is on historical and ethnological relationships, social and political structure, religious pluralism and contemporary youth issues. We explore the lived experiences of the peoples in the modern nation-states of Egypt, Lebanon, Syria, Jordan, Israel, the Palestinian Territories, Turkey, Saudi Arabia and the countries of the Arabian Peninsula, Iraq and Iran. We access this material through short stories, poetry, biographies, essays, videos, blogs and political and anthropological reports.
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD BU : IS FA : SSP

L48 Anthro 3036 Migration and Modernity: Human Mobility, Identity and State Formation — Russian/Soviet/post-Soviet Context
Same as IAS 384
Credit 3 units. A&S : TH, CD, SD A&S : IQ, HUM, LCD, SD EN : H

L48 Anthro 3051 Anthropology of Tibet and the Himalayas
This course is an anthropological and historical examination of Tibetan societies inhabiting the Tibetan Plateau and the highlands of Nepal. In addition to providing basic ethnographic descriptions of Tibetan societies, the course explores the changing nature of relations between Tibet and China, and between Tibet and the West. Guiding concepts include adaptation (both social and ecological), the politics of ethnicity and identity, and processes of culture change.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : IS

L48 Anthro 3053 Nomadic Strategies and Extreme Ecologies
This course explores the archaeology and anthropology of nomadic pastoral societies in light of their ecological, political and cultural strategies and adaptation to extreme environments (deserts, mountains, the arctic). The aim of the course is to understand both the early development of pastoral ways of life and how nomads have had an essential role in the formation and transfer of culture, language and power from prehistoric time to the current era.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA, IS FA : SSP

L48 Anthro 3055 Contemporary Chinese Culture and Society
This course provides an introduction to emerging trends in Chinese culture and society. We explore processes of change and continuity in the People’s Republic, examining the complexity of social issues and the dynamics of cultural unity and diversity. While we focus on the post-Mao reform era (1978 to the present), we consider how contemporary developments draw upon the legacies of the Maoist revolution as well as the pre-socialist past. The course provides an overview of anthropological approaches to the study of contemporary China, introducing students to key concepts, theories and frameworks integral to the analysis of Chinese culture and society. Readings, lectures and discussions highlight not only macro-level processes of social change and continuity but also the everyday experiences of individuals involved in these processes. We pay particular attention to issues of family life, institutional culture, migration, religion, ethnicity, gender, consumption and globalization.
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD FA : SSP

L48 Anthro 3056 Material Culture in Modern China
In this course, we explore change and continuity from late imperial to postsocialist China through an analysis of everyday material culture. Drawing upon material objects, historical texts, ethnographic studies and films, we investigate values, beliefs and attitudes toward the material world in modern Chinese life. Readings, lectures and discussions focus on how political, ethnic, regional, religious and gender identities have been constructed and shaped by the use and production of material artifacts ranging from household goods and tomb objects to built forms and bodily dispositions. Case studies include foot-binding, opium use, fashion, tea culture, fast food consumption, sports and nation building, contemporary art markets, the privatization of housing, and worker discipline in transnational factories.
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD FA : SSP

L48 Anthro 3059 New Departures in the Study of Culture, Health and Medical Practices in Contemporary China
Drawing upon an interdisciplinary approach, this course addresses several major themes with a focus on the dynamics of China’s unprecedented health care transformations. Topical issues covered include: Biocultural Contexts of Disease; the Challenge of Aging in a Gray China; Health Inequalities and Social Stratification; and Values and the Medical Humanities in Public Health. **Students are encouraged to conduct ethnographic field research in a variety of settings including: community health centers, drug stores, city and district hospitals, clinics, public parks, clubs, temples and shrines, tea houses, cafés, restaurants, and school playgrounds and other places of interest. Must be enrolled in the Study Abroad program at Fudan University in Shanghai, China.
Credit 3 units. A&S : NS A&S : IQ, NSM

L48 Anthro 305B Greater Central Asia in Crisis
This course focuses on contemporary issues in the ex-Soviet republics of Central Asia and Iran, Afghanistan and Pakistan, but it also includes extensive reading on the social history of the region, in order to enable understanding of the social dynamics at work.
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD BU : BA, IS FA : SSP
L48 Anthro 306B Africa: Peoples and Cultures
An anthropological survey of Africa from the classic ethnographies to contemporary studies of development. Emphasis on the numerous social and economic changes African peoples have experienced from precolonial times to the present.
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD BU : HUM, IS FA : SSP

L48 Anthro 307A Human Variation
A survey of human biological diversity, considering its adaptive and taxonomic significance from the perspective of origins and distribution of traits and adaptation. Prerequisite: Anthro 150A or introductory biology.
Credit 3 units. A&S : NS, SD, QA A&S : IQ, NSM, AN, SD BU : SCI FA : NSM

L48 Anthro 3092 Indigenous Peoples and Movements in Latin America
An overview of Amerindian peoples, cultures and contemporary sociopolitical movements in core indigenous regions of Latin America (the Maya highlands of Mexico and Guatemala, and the Andes, Chaco and Amazon of South America). Expressions of indigenous cultural, linguistic and social difference are considered in relation to histories of European colonialism and modern Latin-American nation-building. Emphasis is placed on current dimensions of indigenous demands for territorial, political and cultural rights in the context of global economic development, natural resource exploitation, military violence and legal recognition of ethnic pluralism in some Latin-American nation-states.
Credit 3 units. A&S : SS, CD, SD A&S : IQ, SSC, LCD BU : ETH FA : SSP

L48 Anthro 3093 Anthropology of Modern Latin America
A survey of current issues in the anthropological study of culture, politics and change across contemporary Latin American and the Caribbean. Topics include machismo and feminism, the drug war, race and mestizaje, yuppies and revolutionaries, ethnic movements, pop culture, violence, multinational business, and the cultural politics of U.S.—Latin American relations. Attention is given to the ways that anthropology is used to understand complex cultural and social processes in a region thoroughly shaped by globalization.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : IS FA : SSP

L48 Anthro 310C Ancient Civilizations of the New World
An examination of the Inca empire in Peru, and the Maya and Aztec empires in Mexico through the inquiry into the roots, development, form and evolutionary history of pre-Colombian civilization in each region from its earliest times to the rise of the classic kingdoms. Examples of respective artistic accomplishments are presented and discussed.
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : HUM FA : AH

L48 Anthro 3111 Family, Kinship and Marriage
This course explores the practice of marriage, family relations and kinship systems from a cross-cultural perspective. It introduces key concepts and theories in the anthropological study of marriage and kinship. It also examines topics such as romance and courtship, marital and intergenerational relations, divorce and singelhood, same-sex partnership, cross-border marriages, transnational adoption, and the new reproductive technologies and the redefinition of parenthood.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L48 Anthro 3122 From Country to Heavy Metal: Ancient Civilizations of the Old World
This course explores the archaeology of Europe, the Near East and Central Asia from approximately 10,000 years ago to classical times (ending before Ancient Greece). This prehistoric epoch saw major developments among various civilizations of the Old World, such as the introduction of agriculture, animal domestication, the growth of cities, and technological developments such as pottery, metallurgy and horse-riding. A major focus is the trajectory of cultural innovations of regional populations through time, and the complexity of their social, political and ritual practices. We also investigate the variation in human adaptive strategies to various environmental and social contexts, from hunter-gatherers to early Neolithic farmers, to the interactions between nomadic populations and larger scale, urban societies in the Bronze and Iron Ages.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L48 Anthro 314B First Americans: Prehistory of North America
The predecessors of the Eskimo, Northwest Coast Indians, Pueblo mound builders and other North American Indians. Concentrates on deductions from archaeological data for cultural development.
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD BU : BA FA : SSP

L48 Anthro 3154 Indian Barbie, Asian Tigers and IT Dreams: Politics of Globalization and Development in South Asia
Same as IAS 315
Credit 3 units. A&S : SS, CD, SD A&S : IQ, SSC, LCD BU : IS

L48 Anthro 3182 Ancient Africa: Social Mosaics and Environmental Challenges
This class introduces students to the basics of the archaeological record of humans in Africa from 3.6 million years ago to 1000 years ago. The first third of the course focuses on early humans, the origins of meat eating, expansion of diet and cuisine, technical and cultural responses to changing environments. The second section of the course emphasizes African rock art, socioeconomic variability among hunter-gatherers, the origins of African pastoralism, mobile responses to climate change and African contributions to world food supply including domestication of sorghum, also coffee. The last third of the course is devoted to the complex urban societies of ancient Africa, Egypt, Axum, Great Zimbabwe and Jenne Jeno. Course format is lecture and discussion. There are two mid-terms and students are expected to participate in interactive stone tool use, rock art creation and discussion of ethnographic and archaeological data on pastoral decision-making in times of drought and war and of issues surrounding the purchase of African antiquities and conservation of cultural heritage. Credit 3 units.   A&S : SS , CD    A&S : IQ , SSC , LCD    FA : SSP

L48 Anthro 318C The Prehistory of Africa
An overview of cultural development in Africa from approximately 2 million years ago until about 1000 AD; focus on research and interpretive problems in a case-study approach to periods ranging from the earliest archaeological traces to the spread of Bantu languages. Credit 3 units.   A&S : SS , CD    A&S : IQ , SSC , LCD    BU : BA    FA : SSP

L48 Anthro 3201 Gender, Culture and Madness
This course explores the relationships among gender constructs, cultural values and definitions of mental health and illness. Understandings of the proper roles, sensibilities, emotions and dispositions of women and men are often culturally and morally loaded as indicators of the “proper” selves permitted in a given context. Across cultures, then, gender often becomes an expressive idiom for the relative health of the self. Gender identities or presentations that run counter to these conventions are frequently identified as disordered and in need of fixing. In this course, we take up these issues through three fundamental themes: the social and cultural (re)production of gendered bodies and dispositions; the normalization of these productions and the subsequent location of “madness” in divergent or dissonant experiences of embodiment; and the situation of discourses of “madness” within debates of resistance and conformity, selfhood and agency. Credit 3 units.   A&S : SS , SD    A&S : IQ , SSC , SD    BU : BA , HUM , IS    FA : SSP

L48 Anthro 3206 Global Gender Issues
Same as WGSS 3206
Credit 3 units.   A&S : SS , CD    A&S : IQ , SSC , LCD

L48 Anthro 3254 Vote for Pedro: A Critical Look at Youth and Popular Cultures
In this course, we examine what the terms “youth” and “popular” actually mean as well as a range of associated social institutions and cultural expressions. These vibrant forms and practices are not homogenous; they vary across time and space. This course considers “the popular” in its broadest sense, giving us an opportunity to turn an anthropological lens onto the everyday life and the seemingly flavor-of-the-month styles of the popular, while simultaneously opening up the discipline of cultural anthropology to appreciate the fast-paced montages and purposefully distorted sounds of consumerism and youth energy. Credit 3 units.   A&S : SS    A&S : IQ , SSC    BU : BA    FA : SSP

L48 Anthro 3256 Religion and Politics in South Asia: Writing-Intensive Seminar
Same as History 38C8
Credit 3 units.   A&S : TH , CD , WI    A&S : IQ , HUM , LCD

L48 Anthro 3260 Race, Class and Gender: Cultural Readings of Brazil and its Cities
Same as IAS 3260
Credit 3 units.   A&S : SS , SD    A&S : IQ , SSC , SD    BU : IS

L48 Anthro 3262 Medicinal Botany
Same as Biol 3262
Credit 3 units.   A&S : NS    A&S : IQ , NSM

L48 Anthro 3271 Becoming Human: Archaeology of Human Origins
Humanity, before the advent of agriculture and cities, evolved a series of behaviors that enabled them to survive as hunter-gatherers in diverse environments with complex cultural systems. These behaviors included hunting, control of fire, shelters and clothing, elaborate tools of diverse materials, burials, jewelry and representational art. These characteristics emerged over more than 2 million years of the Pleistocene across several species of humans, to coalesce into what we would recognize as modern human foragers 30,000 years ago. This course traces that emergence of what it means to be human, through the Paleolithic archeological record in its context of past environments and past human forms. Credit 3 units.   A&S : SS    A&S : IQ , SSC

L48 Anthro 3283 Introduction to Public Health
This course provides a general introduction to the field of public health. It examines the philosophy, history, organization, functions, activities and results of public health research and practice. Case studies include infectious and chronic diseases, mental health, maternal and reproductive health, food safety...
and nutrition, environmental health, and global public health. Students are encouraged to look at health issues from a systemic and population level perspective, and to think critically about health systems and problems, especially health disparities and health care delivery to diverse populations. No background in anthropology or public health is required.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : SCI FA : SSP

L48 Anthro 3284 Public Health Research and Practice

In-depth exploration of current theory and methods involved in public health research and practical applications. Emphasis on fundamentals of epidemiology, which forms the scientific rationale for public health assessment, assurance and policy development. Survey of current public health practice and research areas including biological foundations of public health, social and behavioral interventions, maternal-child health and environmental health. Relationships among public health, medicine, nursing, social work and related disciplines.
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L48 Anthro 3293 Religion and Society

We take a broad and practice-oriented view of “religion,” including uttering spells, sacrificing to a god, healing through spirit possession, as well as praying and reciting scripture. We consider religious practices in small-scale societies as well as those characteristic of forms of Judaism, Islam, Christianity and other broadly-based religions. We give special attention to the ways religions shape politics, law, war, as well as everyday life in modern societies.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : ETH

L48 Anthro 329F Religion, Ritual and Worldview

A survey of ideas and practices in both tribal and world religions with emphasis on key rituals, symbols and the place of religion in the modern world.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA, ETH, HUM FA : SSP

L48 Anthro 330 Experimental Archaeology

Experiments are an extremely important part of the scientific process. Although archaeology is often treated as an historical science, the nature of the material record does provide an opportunity to use experimentation as an important way of interpreting what we excavate. The class works with the most tangible materials recovered from archaeological contexts, that is, stone and pottery. After reviewing the history of experimentation in archaeological investigations, we turn to the material record. This is followed in our initial weeks of setting up the experiments and how they are used to compare with available data sets derived from archaeological contexts. As part of the class we take several field trips to areas where materials exist in a natural setting. Each class member selects a specific material for the focus of their experiments. In the end students produce several experiments using different materials, document their experiments in written reports, and finally present their results to the class for discussion and evaluation.
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L48 Anthro 3304 Bones to Behavior: Undergraduate Research in the Lab and at the Zoo

We undertake zooarchaeological study of equid skeletons in the zooarchaeology laboratory at Washington University, and in collaboration with the St. Louis Zoo, participate in a behavioral study of the courtship and breeding behavior of the ancestor of the domestic donkey — the African wild ass. The research questions that we focus on are how the biology and behavior of the African wild ass influenced the domestication of the donkey by prehistoric African herders or ancient Egyptians and how the behavior of the African wild ass continues to affect prospects for conservation of this highly endangered animal. During the first half of the semester, we meet once a week for 2.5 hours in the zooarchaeology laboratory on Mondays from 9–11:30 a.m. After spring break, or earlier if weather is above 40ºF, we no longer meet in the lab, and each student spends 9–11 a.m. on two mornings of their choice per week at the St. Louis Zoo conducting observations of the wild ass. Students may choose two days that fit their schedule. Saturdays and Sundays are included as choices of days. Permission of instructor is required.
Credit 3 units. A&S : NS A&S : IQ, NSM BU : BA FA : SSP

L48 Anthro 3305 Bones to Behavior II

In this class, students undertake zooarchaeological research on skeletal material in the zooarchaeology laboratory at Washington University and/or preparation of animal skeletons for comparative study and, in collaboration with the St. Louis Zoo, participate in behavioral studies of the ancestor of the donkey — the African wild ass. Collections housed in the zooarchaeological laboratory for study include ancient food-remains from African sites. These collections bear on questions regarding cultural and climate change in the Horn of Africa 2,000 to 12,000 years ago and include animals ranging from African antelopes to domestic camels. During the first half of the semester, students meet once a week for 2.5 hours in the zooarchaeological laboratory. Once the weather is above 40ºF after spring break, we meet from 9–11 a.m. twice a week, Mondays and Wednesdays/Fridays in the laboratory or at the zoo. Location depends on projects selected for study. Permission of instructor is required. May be repeated for credit.
Credit 3 units. A&S : NS A&S : IQ, NSM BU : BA FA : SSP

L48 Anthro 3310 Health, Healing and Ethics: Introduction to Medical Anthropology

A cross-cultural exploration of cultures and social organizations of medical systems, the global exportation of biomedicine, and ethical dilemmas associated with medical technologies and global disparities in health.
L48 Anthro 3313 Women and Islam
An anthropological study of the position of women in the contemporary Muslim world, with examples drawn primarily from the Middle East but also from Asia, Africa, Europe and the United States. Students examine ethnographic, historical and literary works, including those written by Muslim women. Topics having a major impact on the construction of gender include Islamic belief and ritual, modest dress (veiling), notions of marriage and the family, modernization, nationalism and the nation-state, politics and protest, legal reform, formal education, work, and Westernization. The course includes a visit to a St. Louis mosque, discussions with Muslim women, and films.
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD FA : BA FA : SSP

L48 Anthro 3322 Brave New Crops
This course introduces students to the major issues surrounding the development and use in genetically modified (GM) crops. Its focus is international, but with particular focus on the developing world. A variety of experts, available locally or through the Internet, contribute perspectives. The course also includes field trips. For further information, see artsci.wustl.edu/~anthro/courses/3322.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : NSM

L48 Anthro 3326 Modern Third World
Most understandings of the Third World are embedded in a discourse that promotes development and/or tries to explain why the Third World is so poor. This seminar aims to circumvent this view. After an introduction to development and development theory, the course explores how landscapes and livelihoods interact with modernization, globalization and the agrarian transition. Case study examples and topics to be discussed include household livelihoods, income strategies, informal housing, off-farm labor, cultural landscapes and environmental transformations.
Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 333 Culture and Health
A survey of cultural dimension in health, disease, wellness, illness, healing, curing, as seen in selected alternative medical traditions. Shamanism, Ayurveda, traditional Chinese medicine, homeopathy, chiropractic and others are surveyed and compared with conventional biomedicine. Lectures, video case studies, approximately eight textbooks.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L48 Anthro 3331 Anthropology of Clothing and Fashion
This course takes clothing as a starting point for examining broad themes in anthropology, including gender and sexuality, race and the body, history and colonialism. We look at the ritual significance of clothing and other practices of bodily adornment in traditional societies and the role of style in constituting contemporary social movements and identity categories. We investigate the globalization of the apparel industry, from production and circulation to marketing and branding, in order to understand the relationship between citizenship and consumption, labor and power in the global economy. The course encourages students to reflect on their relationship to the wider society and economy as producers and consumers of material culture through the lens of clothing and fashion.
Credit 3 units. A&S : SS A&S : IQ, SSC EN : S

L48 Anthro 3351 The Ancient Maya: Archaeology and History
This course focuses on the ancient Maya civilization because there are many exciting new breakthroughs in the study of the Maya. The Olmec civilization and the civilization of Teotihuacan in the Valley of Mexico are considered as they related to the rise and development of the Maya civilization. The ancient Maya were the only Pre-Columbian civilization to leave us a written record that we can use to understand their politics, religion and history. This course is about Maya ancient history and Maya glyphic texts, combined with the images of Maya life from their many forms of art. The combination of glyphic texts, art and archaeology may provide a uniquely detailed reconstruction of ancient history in a New World civilization.
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD FA : SSP

L48 Anthro 3369 Underwater Archaeology
Same as ARC 3369
Credit 3 units. A&S : TH BU : HUM FA : SSP

L48 Anthro 3373 Law and Culture
We live in an age when social policy is increasingly displaced into the realm of law, when justice and equality are matters of courtroom debate rather than public discussion. Legal language has become a key resource in all kinds of struggles over livelihood and ways of life. In this course, we study the cultural dimensions of law and law’s changing relationship to state power, the global economy, social movements and everyday life. We approach law as a system of rules, obligations and procedures, but also a cultural practice, moral regime and disciplinary technique. How are relationships between legal, political and economic realms structured and with what consequences? How does law provide tools for both social struggle and social control? What does anthropology contribute to research on these issues? In exploring these questions, we combine readings from classical legal anthropology with recent ethnographic work from around the globe.
Credit 3 units. A&S : SS A&S : IQ, SSC, LCD
L48 Anthro 3383 Cognition and Culture
This course examines the influence of evolved cognitive dispositions (the way natural selection engineered the human mind) on the transmission of cultural knowledge. Dispositions present from early childhood make certain kinds of cultural knowledge particularly easy to acquire, and therefore, culturally stable. We also consider the evidence for differences in cognitive processes triggered by different social environments. Emphasis is on empirical studies and experimental methods in the study of cultural similarity and differences. Prerequisite: Psych 100B, Anthro 160B or permission of instructor. Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L48 Anthro 3385 Internet, Politics and Society
This course examines how the internet is transforming the way people around the world participate in politics. We look at specific controversies in online politics such as the Wikileaks scandal, Iran's "Twitter revolution," social media in the Arab uprisings, and the "Great Firewall of China," as well as investigate broader questions of how people obtain knowledge, communicate and mobilize in the digital age. Students think critically about the internet as a communicative medium and analyze how it is employed in different cultural contexts. Topics covered include: national and transnational political movements; state secrets and political transparency; dictatorship and revolution; media and censorship; activism and mobilization; memory and knowledge; and digital personhood. Students write brief responses to weekly readings and complete an original research project on digital politics. Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 3386 Language, Culture and Society
Although this is an introductory course, students who have taken Linguistics 170D Introduction to Linguistics benefit from knowledge of phonology, morphology, syntax and semantics. The primary content of this course explores the relationship between linguistic practice and other social and cultural processes. Anthropological linguistics, including alternative approaches to fieldwork and data collection are introduced, along with various studies of language usage in social and cultural contexts that consider language and thought, language and identity, language and gender, as well as multilingualism and other forms of language contact. The ethnography of speaking and communication are central to this course, as is conversation analyses, which introduces a combination of qualitative and quantitative linguistic research methods. Credit 3 units. A&S : SS CD A&S : IQ, SSC LCD EN : S

L48 Anthro 3391 Economies as Cultural Systems
Many contemporary approaches to economics downplay or bracket the importance of culture in the workings of economic systems. In this class we focus on approaches to distribution and exchange in which culture and social institutions figure prominently, if not pre-eminently. We sample a diverse array of economies, from gift exchange to the ceremonial destruction of wealth, from Melanesia to Wall Street, in order to evaluate some of the assumptions that undergird market capitalism. These assumptions include the perception of market actors exclusively as calculative, maximizing individuals. Topics covered include the Industrial Revolution; utilitarianism; economic anthropology; the formal vs. substantivist debates; ethnography of finance; and Marxist sociology. Credit 3 units. A&S : SS A&S : IQ, SSC EN : S

L48 Anthro 3432 Topics in Africa: Capitalism, Exchange and Inequality in Africa
Same as AFAS 343
Credit 3 units. A&S : SS, CD, SD A&S : IQ, SSC, LCD

L48 Anthro 3433 Conflict and Post-Conflict Societies in Africa
During the political elections in Kenya in 2007, massive civil unrest and violence erupted. It lasted for several months and was largely framed in terms of ethnic groups and borders. Indeed, many conflicts around the continent of Africa are regularly spoken of in terms of ethnicity and sometimes religion. While these issues are obviously part of contemporary conflicts, these situations are clearly more complex. It is the goal of this course to look at and unpack contemporary and recent conflicts around the continent to gain a more comprehensive understanding of the processes leading to large-scale conflict, to crisis management in these circumstances, and to the small- and large-scale processes of peace-building and community rebuilding efforts. In this course, we look at case studies around the continent (including Angola, Rwanda, Liberia, Mozambique, Sierra Leone, Somalia, Eritrea, South Africa and Sudan among others), using anthropological and social scientific tools of analysis. Credit 3 units. A&S : SS

L48 Anthro 3461 Native Americans at Westward Expansion
Issues precipitated by Euro-American contact, colonization and expansion between 1492 and 1810 across Eastern North America, the Plains and the Rocky Mountains. Impacts of exploration and settlement and responses by native peoples: epidemics; population loss; breakdown of Southeastern chieftdoms; resistance; relocation; and shifts in economic strategies. Perspectives and policies of Native Americans as well as Europeans and non-Indian Americans, including Lewis and Clark. Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD FA : SSP

L48 Anthro 3472 Global Energy and the American Dream
This lecture course explores the historical, cultural and political relationship between America and global energy, focusing on oil,
coal, natural gas, biofuels and alternatives. Through case studies at home and abroad, we examine how cultural, environmental, economic and geopolitical processes are entangled with changing patterns of energy-related resource extraction, production, distribution and use. America’s changing position as global consumer and dreamer is linked to increasingly violent contests over energy abroad while our fuel-dependent dreams of boundless (oil) power give way to uncertainties and new possibilities of nation, nature and the future. Assuming that technology and markets alone will not save us, what might a culturally, politically and socially minded inquiry contribute to understanding the past and future of global energy and the American dream?

Credit 3 units. A&S : SS

L48 Anthro 3475 Fantastic Archaeology
American popular culture is saturated with fictionalized and pseudoscientific accounts of archaeological discoveries and interpretations. Even respected newspapers and journals favor coverage of finds touted as “the earliest” of their kind, along with other studies bordering on the sensational. How can students of the past distinguish between fraud, fantasy, hype and valid archaeological research? What potential merit do films, TV-oriented documentaries and historical fiction offer? This course looks at the popular culture of archaeology, providing tools for critical evaluation as well as lifetime enjoyment of the field as it is frequently sold to both the informed and the unwary public.

Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L48 Anthro 347B Ancient Mound Builders of the Mississippi Valley
Study of the peoples in North America who built mounds and other earthen structures beginning more than 4000 years ago; why they erected earthworks; what the structures were used for; how they varied through time and across space; and what significance they had to members of society.

Credit 3 units. A&S : SS, CD BU : BA FA : SSP

L48 Anthro 361 Culture and Environment
An introduction to the ecology of human culture, especially how “traditional” cultural ecosystems are organized and how they change with population density. Topics include foragers, extensive and intensive farming, industrial agriculture, the ecology of conflict, and problems in sustainability.

Credit 3 units. A&S : SS A&S : IQ, SSC BU : ETH FA : SSP

L48 Anthro 362 Anthropological Perspectives on the Fetus
This review of population processes and their social ramifications begins with an introduction to the basic terminology, concepts and methods of population studies, followed by a survey of human population trends through history. The course then investigates biological and social dimensions of marriage and childbearing, critically examines family planning policies, deals with the social impacts of epidemics and population aging, and looks at connections between population movements and sociocultural changes. The overall objective of the course is to understand how population processes are not just biological in nature, but are closely related to social, cultural, political and economic factors.

Credit 3 units. A&S : SS A&S : IQ, SSC BU : IS

L48 Anthro 3616 From Deep Ecology to Indigenous Ecological Identity: Environmental Social Movements and Anthropology
This course provides a survey of environmental social movements around the world and over time, in the process challenging commonly held perceptions about environmentalism and environmental movements. Specifically, it demonstrates that environmental social movements are often as much or more about people, identity and human rights than they are about protecting the environment. In addition to juxtaposing dominant traditions of American environmentalism with environmental movements in other parts of the world, the course focuses in on new and emerging social movements that are often transnational in scope but local in scale. These new movements offer holistic reinterpretations of human-environment relationships, identities and political and economic organization in their attempts to transcend socioeconomic inequalities. Throughout, the course draws on social scientists’ (especially anthropologists’) descriptive interpretations and critical theoretical analyses of various environmental social movements and the differences that constitute them.

Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 362 The Biological Basis of Human Behavior
Infidelity, marriage customs, inner-city violence, infanticide, intelligence. Are the behavioral patterns we see genetically fixed and racially variable? What is the evolutionary and biological basis of human behavior? This course offers a critical evaluation of these from an anthropological perspective.

Credit 3 units. A&S : NS, CD, SD A&S : IQ, NSM, LCD, SD BU : BA EN : H FA : NSM

L48 Anthro 3620 Anthropological Perspectives on the Fetus
Where do we come from? How do we get here? When does “life” begin? Is the fetus a “person” or something else? How could we decide? This course integrates biological, medical, philosophical and cross-cultural perspectives to examine how various societies (including our own) understand the nature of the human fetus. The course examines basic human embryology, beliefs about conception and fetal development, ideas about the moral status of the fetus, controversies surrounding prenatal care and antenatal diagnostic testing (including sex selection and genetic screening tests), current controversies about fetal medicine and surgery, and the problem of abortion in cross-cultural perspective.
L48 Anthro 3621 Anthropology of Human Birth
This course examines the interaction between human biology and culture in relation to childbirth. Emphasis is placed on understanding the cultural challenges posed by the physiology of human reproduction, the ways various cultures have attempted to meet those challenges, and the resultant consequences that this has had for women’s lives. The course draws on material from human anatomy and embryology, paleoanthropology, clinical obstetrics, public health, social anthropology, the history of medicine and contemporary bioethics.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : ETH

L48 Anthro 3625 The Female Life Cycle in Cross-Cultural Perspective
This course examines the biology of the female reproductive cycle — menarche, menstruation and menopause — and its cultural interpretation around the world. Topics covered include the embryology of human sexual differentiation; and the biology of the menstrual cycle and how it influences or is influenced by various disease states, contraception, infertility, cultural taboos and beliefs about menstruation and menopause, etc. The course utilizes materials drawn from human biology, clinical gynecology, ethnography, social anthropology and the history of medicine and examines the interplay between female reproductive biology and culture around the world.
Credit 3 units. A&S : NS A&S : IQ, NSM BU : SCI

L48 Anthro 3626 Adventures in Nosology: The Nature and Meaning of Disease
What is a “disease” and how do you diagnose one? What are “medicines” and how, when, and for what purpose should they be used? These questions reflect universal human concerns, but the answers given to these questions have varied enormously in different times and places. The course considers the nature of health, illness, disease and its treatment, beginning with a detailed examination of the traditional ethnomedical system of the Hausa people of northern Nigeria. Using this West African medical system as a baseline for comparison, the course then explores the nature of “nosology” (the classification of diseases) and the underlying logic of different therapeutic systems in different times and cultures, including our own. The course draws on ethnography, the history of medicine, bioethics and human biology to understand how these questions are asked and answered in different societies, times and places.
Credit 3 units. A&S : SS A&S : IQ, SSC EN : S

L48 Anthro 3656 Behavioral Ecology of the Great Apes
This course introduces undergraduate students to the behavioral ecology of great apes. Lectures and readings provide an overview of the distribution, feeding ecology, social system and behavior of African and Asian apes. The main objective of this class is to examine variation in behavioral ecology with and between ape species. The comparative content within each lecture gradually increases throughout the course, and students are asked to synthesize this material in their final exam. Readings mainly consist of book chapter assignments from three recent texts on the ecology, behavior and geographic variation observed in great apes.
Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 3661 Primate Biology
This course takes a multifaceted introductory approach to the primates, the closest relatives of human beings, by investigating anatomy, growth and development, reproduction, behavioral adaptations, ecology, geographic distribution, taxonomy and evolution. Emphasis is placed not only on the apes and monkeys, but also on the lesser-known lemurs, lorises, bushbabies, tarsiers and many others. The importance of primate biology to the discipline of anthropology is discussed. Intended for students who have already taken Anthro 150A and recommended for students who wish to take the more advanced 400-level courses on primates. Prerequisite: Anthro 150A or permission of instructor.
Credit 3 units. A&S : NS A&S : IQ, NSM BU : SCI FA : NSM

L48 Anthro 3662 Primate Conservation Biology
This course focuses on the ecological diversity of primates and how these and other traits are related to their present day abundance and distribution. In addition, the biological, abiotic and anthropogenic factors related to extinction risk are examined. It also reviews the endangered species of primates; case histories of conservation programs; and management practices in Asia, Africa, South America and Madagascar. Prerequisite: Anthro 150 or Biol 2970, or permission of instructor.
Credit 3 units. A&S : NS A&S : IQ, NSM BU : SCI

L48 Anthro 367 Paleoanthropology
The prehistoric Pliocene and Pleistocene evidence for human emergence and evolution. The emphasis is on the human fossil record and its interpretation in functional and behavioral terms. This is placed in the context of the Paleolithic archaeological record and issues regarding the biological relationships between various human groups. Prerequisite: Anthro 150 or equivalent.
Credit 3 units. A&S : NS A&S : IQ, NSM BU : SCI

L48 Anthro 3691 Kill Assessment: An Investigation into Death, Genocide and Other Forms of Violence
Is violence best understood as a set of “random acts” marginal to society? Or, do societies need violence to make culture systematic and hierarchy functional? This course is not about the psychology of individual pathology; rather, we think about violence as a potential category of culture. We address two major issues throughout this course. First, we discuss different types of violence: physical/material violence and symbolic...
The basic theories and techniques of GIS. Topics include anthropological research. This course introduces students to the use of GIS, which is rapidly becoming standard practice in archaeological and sociocultural studies. Students will learn how to use GIS software such as ArcGIS for archaeological survey and ethnographic research, as well as marketing, transportation, demographics, and urban and regional planning. This course enables students to become familiar with the methodologies and tools used to collect and analyze spatial data. Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 3700 The Works and Ideas of Great Anthropologists
A survey of major theories and paradigms in anthropology; emphasis is on approaches taken by sociocultural anthropologists in analyzing and explaining features of societies and cultures, including evolutionary theories, comparative methods, interpretive approaches and ecological accounts. Required of all majors. Students considering a junior year abroad should enroll sophomore year. Credit 3 units. A&S : SS A&S : IQ, SSC, LCD BU : BA

L48 Anthro 3713 Values and the Art-Culture Machine
Same as AMCS 3713
Credit 3 units. A&S : TH A&S : IQ, HUM

L48 Anthro 372 Geoaarchaeology
Geoaarchaeology involves the application of analytical techniques, concepts and field methods from the earth sciences to help solve archaeological problems. Issues explored in this course include human and environmental processes involved in archaeological site formation; the sedimentary context of archaeological remains, soils and sediments relevant to archaeology; and the relationship between past settlement and landscape evolution, paleoclimatic reconstruction, human impacts on the environment, geological sourcing of artifact proveniences, and remote sensing of the physical environment. Several field trips to local archaeological/geological sites provide an opportunity to understand how geoaarchaeology is applied to specific research problems. Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 373 Introduction to GIS for Anthropologists
Use of GIS is rapidly becoming standard practice in anthropological research. This course introduces students to the basic theories and techniques of GIS. Topics include the application of GIS in archaeological survey and ethnographic research, as well as marketing, transportation, demographics, and urban and regional planning. This course enables students to become familiar with GIS software such as ArcGIS but also the methodologies and tools used to collect and analyze spatial data. Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 374 Social Landscapes in Global View
From the beginning of the human campaign, societies have socialized the spaces and places where they live. This socialization comes in many forms, including the generation of sacred natural places (e.g., Mt. Fuji) to the construction of planned urban settings where culture is writ large in overt and subtle contexts. Over the past two decades or so, anthropologists, archaeologists and geographers have developed a wide body of research concerning these socially constructed and perceived settings — commonly known as “landscapes.” This course takes a tour through time and across the globe to trace the formation of diverse social landscapes, starting in prehistoric times and ending in modern times. We cover various urban landscapes, rural landscapes, nomadic landscapes (and others), and the intersection of the natural environment, the built environments and the symbolism that weaves them together. Chronologically, we range from 3000 BCE to 2009 CE and we cover all the continents. This course also traces the intellectual history of the study of landscape as a social phenomenon, and investigates the current methods used to recover and describe social landscapes around the world and through time. Join in situating your own social map alongside the most famous and the most obscure landscapes of the world, and trace the global currents of your social landscape. Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 3773 Culture and Society in East Asia
This course presents an overview of cultures and contemporary social/political changes in East Asia. In Western society, East Asia often has been viewed as a place of enduring cultural identities, but it also has been a region of one of the world’s most dynamic and rapid transformations. In this course, we examine both the continuity and change of cultural and social patterns in this region. Students compare anthropological and ethnographic studies of the Peoples’ Republic of China, Taiwan, South Korea and Japan, supplemented by selected research from sociology, history and political science. The course focuses on specific areas of cultural and social change in each society, including kinship and family; gender; ethnicity; economic and political development; and health and social policy. Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 3775 Ancient Eurasia and the New Silk Roads
This course explores the rise of civilization in the broad region of Eurasia, spanning from the eastern edges of Europe to the
western edges of China. The focus of the course is the unique trajectory of civilization that is made evident in the region of Central Eurasia from roughly 6000 BC to the historical era (ca. AD 250). In addition to this ancient focus, the course aims to relate many of the most historically durable characteristics of the region to contemporary developments of the past two or three centuries. Fundamentally, this course asks us to reconceptualize the notion of “civilization” from the perspective of societies whose dominant forms of organization defied typical classifications such as “states” and “empires” and, instead, shaped a wholly different social order over the past 5,000 years or more. This class provides a well-rounded experience of the geography, social organization and social interconnections of one of the most essential and pivotal regions in world history and contemporary political discourse.

Credit 3 units. A&S : SS, CD, SD A&S : IQ, SSC, LCD, SD EN : S

L48 Anthro 3793 Mississippi River Basin: Past, Present and Future
Interdisciplinary study of the past, present and future of the Mississippi River Basin. Using lectures, guest presentations and field trips, the course provides a broad overview of the important natural, historical, social, cultural and environmental issues surrounding the Mississippi River and its tributaries. We encourage an understanding and appreciation of the river from a holistic perspective. An emphasis in the course is on experiential learning, or out-of-classroom field trips, where students have the opportunity to see firsthand important issues related to the Mississippi River, its environment, culture and the historic changes wrought upon the River and their effects. The class meets once a week; classes include some combination of lecture, presentations by guest speakers or field trips. During spring break we take a field trip down the Mississippi River to the Gulf of Mexico (students are charged an extra fee for this field trip).
Credit 4 units. A&S : SS
criticism about the pharmaceutical industry. No background in anthropology is required.
Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 3876 Darwin and Doctors: Evolutionary Medicine and Health
Back pain, diabetes, obesity, colds, even morning sickness. These are all common human health problems. But have you ever wondered why we have these and other health conditions? In this class, we investigate this question — and others — specifically using evolutionary theory to inform current understandings of contemporary health problems.
Credit 3 units. A&S : NS A&S : IQ, NSM

L48 Anthro 3882 Psychological Anthropology
The objective of this course is to introduce students to the central topics and methods of psychological anthropology. Psychological anthropology is concerned with the interplay of psychology and culture on both the individual and group levels. We look cross-culturally at such topics as child and adolescent development; religious experience; illness and healing; self and identity, gender and sexuality; reasoning and symbolism; and psychopathology. This class draws upon a range of sources, including ethnographies, psychoanalytic theory, contemporary critical theory and cross-cultural materials.
Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 393 Introduction to Archaeological Field Techniques
Introduction to archaeological fieldwork. Includes a variety of techniques employed by archaeologists, the underlying purpose of excavations, and the manner in which they are used to explore past societies. Field mapping and testing an archaeological site near Cahokia Mounds links this project to ongoing excavations with other institutions and relates it to the “Redefining Cahokia” project.
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L48 Anthro 3932 An Introduction to Archaeological Site Survey
The study and interpretation of the archaeological record begins in most instances with an archaeological survey. The purpose of this course is to provide students with an introductory level, hands-on experience to archaeological survey as practiced in eastern North America. This involves an introduction in the field to the various methods employed in the identification and mapping of archaeological sites. Students spend Saturdays in the field mapping and recording archaeological sites, including the mapping of monumental earthworks such as those at the prehistoric site of Cahokia or nearby mound centers.
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L48 Anthro 3942 American Indians and American Empire
Same as AMCS 395
Credit 3 units. A&S : SS, CD, SD A&S : IQ, SSC, LCD

L48 Anthro 397 Proseminar: Issues and Research in Anthropology
Designed to introduce the student to current issues in Anthropology and to research being carried out by faculty. Topics vary each year. Each departmental member addresses issues in his/her particular specialty. Required of all majors; may be taken before declaring major, and may be taken by nonmajors.
Credit 1 unit. A&S : SS A&S : IQ, SSC FA : SSP

L48 Anthro 399 Undergraduate Teaching Assistant
Open to advanced undergraduates only. Usual duties of teaching assistant in laboratory or other selected courses. Prerequisite: permission of instructor.
Credit 3 units.

L48 Anthro 3999 Class Mentor
Classroom instructional assistance through mentoring activities assigned by instructor. Limited to advanced undergraduates only. Permission of instructor required.
Credit -3 unit. FA : SSP

L48 Anthro 4002 Internship in Interrogating Health, Race and Inequalities
Same as I50 4002
Credit 1 unit.

L48 Anthro 4003 Interrogating Health, Race and Inequalities: Public Health, Medical Anthropology and History
Same as I50 4001
Credit 3 units.

L48 Anthro 401 Evolution of Non-Human Primates
Discussion and analysis of primate evolution with emphasis on comparative and functional anatomy and primate paleontology. Prerequisite: permission of instructor.
Credit 3 units. A&S : NS A&S : IQ, NSM FA : NSM

L48 Anthro 4011 Popular Culture and Consumption in Modern China
Credit 3 units. A&S : SS, CD, WI A&S : IQ, SSC, LCD

L48 Anthro 4021 The Meaning of National Security in the 21st Century
Same as IAS 402
L48 Anthro 4022 Transnational Reproductive Health Issues: Meanings, Technologies, Practices
This course covers recent scholarship on gender and reproductive health, including such issues as reproduction and the disciplinary power of the state, contested reproductive relations within families and communities, and the implications of global flows of biotechnology, population, and information for reproductive strategies at the local level. We will also explore how transnational migration and globalization have shaped reproductive health, the diverse meanings associated with reproductive processes, and decisions concerning reproduction. Reproduction will serve as a focus to illuminate the cultural politics of gender, power, and sexuality.
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD, SD BU : BA

L48 Anthro 403 Archaeology and Early Ethnography of the Southwest
This course integrates archaeological, historical and early ethnographic dimensions of American Indian societies in the southwestern United States and northwest Mexico, a region famous for its challenging environment, cultural diversity and the contributions made by its Native inhabitants. Emphasis is placed on the development of sophisticated desert agriculture and on the rise of regionally integrated cultures including Chaco Canyon and Mesa Verde. The impact of Spanish, Mexican and American colonization are explored. Ethnographies of Tohono O'odham (Papago), Hopi, Zuni, Rio Grande Pueblo and Navajo societies are discussed.
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD FA : SSP

L48 Anthro 4033 Culture, Illness and Healing in Asia
This course examines the place of health, illness and healing in Asian societies. We explore how people experience, narrate and respond to illness and other forms of suffering — including political violence, extreme poverty and health inequalities. In lectures and discussions we discuss major changes that medicine and public health are undergoing and how those changes affect the training of practitioners, health care policy, clinical practice and ethics. The course familiarizes students with key concepts and approaches in medical anthropology by considering case studies from a number of social settings including China, India, Indonesia, Japan, Korea, Taiwan, Tibet, Thailand, Vietnam and Asian immigrants in the United States. We also investigate the sociocultural dimensions of illness and the medicalization of social problems in Asia, examining how gender, ethnicity, socioeconomic status, disability and other forms of social difference affect medical knowledge and disease outcomes. This course is intended for anthropology majors, students considering careers in medicine and public health, and others interested in learning how anthropology can help us understand human suffering and formulate more effective interventions.
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD

L48 Anthro 4034 Family Change in East Asia
This course explores the process of family transformations in contemporary East Asia, focusing on China, Japan, Korea, Hong Kong and Taiwan, from an anthropological perspective. Topics covered in this course include traditional mainstream East Asian family systems, childbearing, the experience of coming of age, romance and courtship, marriage and family relations, the experience of aging and old-age support, divorce, singlehood and same-sex partnership, family separation and reunion, cross-borderer marriages, and transnational adoption. Alternative family systems among ethnic minorities in East Asia also are addressed.
Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 4041 Islam and Politics
Blending history and ethnography, this course covers politics in the Islamic world in historical and contemporary times. Topics include history of Islam; uniformity and diversity in belief and practice (global patterns, local realities); revolution and social change; women and veiling; and the international dimensions of resurgent Islam. Geographical focus extends from Morocco to Indonesia; discussion of other Muslim communities (Bosnia, Chechnya, sub-Saharan Africa, United States) is included.
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD BU : IS FA : SSP

L48 Anthro 4042 Islam Across Cultures
In this seminar, we examine the variety of historical and contemporary ways of interpreting and practicing Islam, with special attention to issues of ritual, law and the state, and gender. Cases are drawn from Asia, Europe, Africa and the Middle East, and students engage in fieldwork or library research projects.
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD FA : SSP

L48 Anthro 4043 Greater Central Asia in Crisis
This course focuses on contemporary issues in the ex-Soviet republics of Central Asia and Iran, Afghanistan and Pakistan, but it also includes extensive reading on the social history of the region, in order to enable understanding of the social dynamics at work. Besides the reading shared by the class, students read and write a report on additional monographs written about the region. Graduate students are required to make a presentation.
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD

L48 Anthro 4044 The Politics of Secularism
Secularism is broadly understood as the separation of religion and politics; the West is thought to be secular, the non-West
This course asks what exactly secularism is by examining it both as a political doctrine and a practice of government. Some questions we consider include: What are the conceptual origins of the doctrine of “separation of church and state” on which most Western liberal democracies are based? What notion of religion is necessary for secular governance? What is the relationship of the secular to particular discourses of citizenship and practices of political rule? What forms of moral and political inclusion and exclusion does secularism entail? To answer these questions, we consider a series of historical and contemporary case studies, including the effects of colonial rule on religious and political life in South Asia; Jewish emancipation in Germany and France; secularism in France and the United States; and the recent emergence of and responses to Islamic movements in the Middle East and Europe.

Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 4115 Anthropology of Deviance
This course provides an anthropological perspective on notions of “deviance” as social, psychological, moral and medical mechanisms of control and regulation. Students learn to critically engage and evaluate dominant etiological theories of deviance, local and global contexts of deviance, and social responses to deviance as cultural processes through which communities make (and unmake) meaningful human relationships. Through academic texts, ethnographic accounts, clinical case materials and firsthand accounts, students explore multiple dimensions of what it means to be “deviant” or “normal” in a given social or cultural context. Sample topics include: historical trajectories of deviance, deviance and criminology, social class and inequality, prison cultures, deviance and resistance, deviant personalities, forensic psychiatry, deviant vs. socially sanctioned violence, and stigma.

Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD

L48 Anthro 4116 Anthropology and Experiment
This seminar explores a wide range of readings on “the body” as a site of theoretical analysis in social scientific and humanistic inquiry. Issues include: How do we think about the body as simultaneously material (flesh and bone) and constructed in and through social and political discourse? How do we think about the relationship between these contingent bodies and subjective experiences of “self” in various contexts? The course focuses upon the different ways in which these questions have been posed and engaged, and the implications of these formulations for the theorizing of human experience. Prerequisite: Anthro 3201 or permission of instructor.

Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 4011 Advanced Psychological Anthropology
This seminar examines the intersection of psychological and anthropological theories and methods and their utility in the study of culture and human experience. This course is an in-depth exploration of some of the key theorists and theoretical domains that have defined the field of psychological anthropology and beyond, including Bakhtin, Bateson, Chodorow, D’Andrade, Ewing, Freud, Goffman, Hallowell, Holland, Irigaray, Kleinman, Kohut, Lacan, Lutz, Rosaldo, Strauss, Sapir, Schepers-Hughes and Vygotsky, among others. By the end of the course, students have a solid grounding in linguistic, psychoanalytic, cognitive, symbolic, developmental, interactionist and critical approaches within psychological anthropology. Prerequisites: at least one of the following: Anthro 3201, Anthro 3882, graduate standing or permission of instructor.

Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 4045 Modern Civil Conflicts and Conflict Solutions
This is an upper-level/graduate level version of Anthro 204B.

Credit 3 units. A&S : SS, CD, SD A&S : IQ, SSC, LCD, SD

L48 Anthro 406 Primate Ecology and Social Structure
Survey of the ecology and individual and social behavior, adaptations and interactions of the major groups of primates. Emphasis on studies designed to examine the relationships among ecology, morphophysiology and behavior. Methods used in collecting data on primates in the field. Prerequisite: Anthro 150A or one 100-level biology course.

Credit 3 units. A&S : NS A&S : IQ, NSM FA : NSM

L48 Anthro 4091 Sexuality, Gender and Change in Africa
Same as AFAS 409

Credit 3 units. A&S : SS, SD, WI A&S : IQ, SSC, SD, WI FA : SSP

L48 Anthro 4112 Body and Flesh: Theorizing Embodiment
This seminar explores a wide range of readings on “the body” as a site of theoretical analysis in social scientific and humanistic inquiry. Issues include: How do we think about the body as simultaneously material (flesh and bone) and constructed in and through social and political discourse? How do we think about the relationship between these contingent bodies and subjective experiences of “self” in various contexts? The course focuses upon the different ways in which these questions have been posed and engaged, and the implications of these formulations for the theorizing of human experience. Prerequisite: Anthro 3201 or permission of instructor.

Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 4116 Anthropology and Experiment
In recent years, many cultural anthropologists have described their work as “experimental.” On the surface, the notion of experimentation leads something of a double life. On the one hand, in its ideal form, it stands for rigidly held methodological tenets aimed at answering questions in rigorous ways. This kind of experimentations is the hallmark of “scientific” inquiry. On the other hand, experimentation implies something of open-endedness, of tentative and flexible exploration. Through an examination of works on experiments, as well as purportedly experimental ethnographies, we pursue the question: What is an experimental mode of inquiry in cultural anthropology, and how does it square with the two idealized meanings of experimentation? We examine the links and resonances between different notions of what experiments do, what they describe in terms of both form and method, how they begin
and end, how they are assessed as successes or failures, and what sort of knowledge they produce. This course involves reading across cultural anthropology, science studies and the philosophy of science to better understand different approaches to experiments across domains of research and writing. Can we learn something about what anthropologists do in experimental works from the wealth of thoughtful scholarship on experiments in other fields? Is there something common to experimentation in cultural anthropology and experimentation elsewhere in the social sciences and beyond?
Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 4127 Language and Medical Expertise
Language plays a constitutive role in the creation and communication of medical expertise in all cultures, as well as across cultures. The goal of this course is to introduce students to the discourse-centered approach to medicine found in sociolinguistics and linguistic anthropology. How is medical authority negotiated in interactions between doctors/healers and patients? How do authoritative narratives and discourses structure cultural understandings of disease, health, well-being and the body? What role does language and its use play in legitimizing certain forms of medicine while delegitimizing others, especially in “medically plural” societies? Does Western medicine differ from non-Western medicine with respect to the way it is created and communicated? How do ideologies of language and communication shape the way medical representations circulate in society, including across sociocultural boundaries, as in acts of translation? How are new institutional forms of communication, such as mass media and the internet, reshaping medical expertise around the world? We begin the course with the role of narrative in the construction of medical knowledge and perception, then move to the microanalyses of authoritative language in the patient-doctor “medical encounter,” and end the course by turning to the macroanalysis of medical institutions, exploring them in relation to the kinds of expert texts they produce and circulate. The course draws on theoretical readings and ethnographic research conducted in many places in order to develop a cross-cultural understanding of the issues.
Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 4134 The AIDS Epidemic: Inequalities, Ethnography and Ethics
In the year 2000, HIV became the world’s leading infectious cause of adult death, and in the next 10 years, AIDS was expected to kill more people than all wars of the 20th century combined. As the global epidemic rages on, our greatest enemy in combating HIV/AIDS is not lack of knowledge or resources, but global inequalities and the conceptual frameworks with which we understand health, human interaction and sexuality. This course emphasizes the ethnographic approach for cultural analysis of responses to HIV/AIDS. Students explore the relationship between local communities and wider historical and economic processes, and theoretical approaches to disease, the body, ethnicity/race, gender, sexuality, risk, addiction, power and culture. Other topics covered include the cultural construction of AIDS and risk, government responses to HIV/AIDS, origin and transmission debates; ethics and responsibilities; drug testing and marketing; the making of the AIDS industry and “risk” categories; prevention and education strategies; interaction
between biomedicine and alternative healing systems; and medical advances and hopes.  
Credit 3 units.  A&S : SS, SD  A&S : IQ, SSC, SD

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**L48 Anthro 4135 Tobacco: History, Culture, Science and Policy**  
This course examines tobacco’s important role in shaping the modern world over the course of the past five centuries, from indigenous uses of tobacco in the New World to the politics of smoking in the 20th century. Through in-depth historical and anthropological case studies, tobacco provides a window into broad trends in government, law, economy and society, including changing social meanings of gender, race, individualism, risk, responsibility and health in the United States and worldwide. This course also introduces students to public health approaches to noncommunicable disease prevention and healthy lifestyle promotion. No background in anthropology or public health is required.  
Credit 3 units.  A&S : SS  A&S : IQ, SSC

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**L48 Anthro 4136 Sexual Health and the City: A Community-Based Learning Course**  
Same as AFAS 406  
Credit 3 units.  A&S : SS, SD  A&S : IQ, SSC, SD

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**L48 Anthro 4181 Comparative Methods in Physical Anthropology**  
Intensive study of theoretical concepts and statistical methods in research using comparative methods. Major emphasis on scaling (allometry) and phylogenetically independent comparisons and their application to questions of mammalian variation in life history, metabolism, brain size and dentition. Prerequisite: one semester of statistics, 6 units of physical anthropology or biology, or permission of instructor.  
Credit 3 units.  A&S : NS  A&S : IQ, NSM  FA : NSM

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**L48 Anthro 4182 Field and Laboratory Methods in Primatology**  
This seminar focuses on ethological, ecological and biological data collected on wild primate populations, the questions they address and their methods of analysis. The focus is on primate behavioral and biological monitoring, emphasizing hands-on techniques and practical applications.  
Credit 3 units.  A&S : NS  FA : NSM

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**L48 Anthro 419 Primate Behavior**  
Discussion and analysis of recent research on the social behavior of nonhuman primates. Data from both field and laboratory study. Prerequisite: Anthro 406 or permission of instructor.  
Credit 3 units.  A&S : NS  A&S : IQ, NSM  FA : NSM

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**L48 Anthro 4191 Primate Cognition**  
This course investigates historical and current views regarding the cognitive capacities of non-human primates, and the extent to which these abilities are shared with humans. Topics for this class include: social cognition, problem-solving, tool use, culture, communication, theory of mind, deception, self-recognition, imitation and numerical cognition. The classes involve discussion and critical evaluation of theory and methods in this challenging and exciting area of primate cognitive research.  
Credit 3 units.  A&S : NS  A&S : IQ, NSM

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**L48 Anthro 4202 Evolutionary Genetics**  
This course examines the principles of evolutionary genetics as applied to complex characters such as morphology, behavior, life history and disease. Mathematical models of quantitative inheritance and evolution are discussed. Special topics include kin selection, sexual dimorphism and conservation genetics. Prerequisite: Anthro 150A or introductory biology.  
Credit 3 units.  A&S : NS  A&S : IQ, NSM  FA : NSM

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**L48 Anthro 4211 Paleoethnobotany and Ethnobotany**  
Interrelationships between plants and people, especially in past societies. Recovery and analysis of plant remains from archaeological sites; interpreting subsistence and vegetation changes; medicinal, ritual and technological uses of plants; plant domestication and agricultural intensification. Modern efforts to understand and preserve threatened traditional ethnobotanical practices. Prerequisite: Anthro 190BP or an introductory botany course, or permission of instructor.  
Credit 3 units.  A&S : SS, WI  A&S : IQ, SSC, WI  FA : SSP

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**L48 Anthro 4212 Advanced Methods in Paleoethnobotany**  
Advanced analytical techniques for the study of archaeological plant remains. Tools and methods for micromorphological recognition, including electron microscopy. Photomicroscopy at low magnification, management, tabulation and reporting of data. Prerequisite: Anthro 4211 or permission of instructor.  
Credit 3 units.  A&S : SS  A&S : IQ, SSC  FA : SSP

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**L48 Anthro 4213 Plants and American People: Past and Present**  
This interdisciplinary course examines the relationship between plants and the American people. Topics include the natural diversity of plants used by Native Americans for food, fiber and medicine; the significance of plants in the “Columbian Exchange” for the history of the United States and the economies of the Old World; Native-American and Euro-American farming practices; modern agribusiness including transgenic crops; and the modern conservation movement in the U.S. Several optional Saturday field trips are planned. Prerequisite: junior standing or above.  
Credit 3 units.  A&S : SS  A&S : IQ, SSC  FA : SSP
that are revered as vital heritage by the nations from which they are stolen. We display looted art alongside a much smaller number of legitimately excavated artifacts of masterpiece quality, so it is no surprise that our popular images of archaeologists as avid and undiscerning collectors raise little concern. But modern archaeologists are not extractors of art or even of scientific information, from places as passive and inert as the museums’ objects ultimately occupy. Archaeologists work with living people inhabiting societies and states that care deeply about their pasts and the relics of it. They are active agents engaged with many other people in the production of knowledge about the past. In our rapidly shrinking world, educated sensitivity to the many ancient cultural legacies that shape the values of modern global society is more than a moral imperative; it is a basic form of collaboration in the common project of survival. Archaeologists are ethically charged to advance that project through education about the complex contemporary arena of artifacts, sites and information they occupy.

Credit 3 units.  A&S : SS    A&S : IQ, SSC

L48 Anthro 4215 Anthropology of Food
The rising interest in food research crosses various academic disciplines. This seminar focuses on aspects of food of particular interest in anthropology. The first two-thirds of the course is reading-intensive and discussion-intensive. Each student writes short review/response papers for major readings. For the final third, we still are reading and discussing, but the reading load is lighter (and we have a field trip) as students devote more time to their research papers. The research paper is a major effort on a topic discussed with and approved by the professor. In most cases it has to deal with cultural and historical aspects of a food, set of foods, form of consumption or aspect of food production. Papers are critiqued, assigned a provisional grade, revised and resubmitted.

Credit 3 units.  A&S : SS    A&S : IQ, SSC

L48 Anthro 4222 Human Nature in Minds and Cultures
What is unique about humans? And what is universal among human beings? Is human nature the product of a specific genome or is it shaped by human cultures? Does it make sense to think of nature as the opposite of nurture? We consider aspects of human nature in domains such as family and gender, political coalitions, religious extremism, ethnic identity and morality from the viewpoints of cultural anthropology, philosophy, evolutionary biology and psychology.

Credit 3 units.  A&S : SS    A&S : IQ, SSC

L48 Anthro 4240 The Plundered Past: Archaeology’s Challenges in the Modern World
The public imagination thrills at the fantastic adventures of Indiana Jones and Laura Croft, Tomb Raider, but the reality of modern archaeology is more complex, ethically challenging and interesting than a simple treasure hunt. In the United States and Canada, our science museums and museums of anthropology still display artifacts that are regarded as sacred and culturally definitive by Indian nations, although such holdings are now subject to negotiation and repatriation. Art museums in Europe and the U.S. still are stocked with looted ancient masterpieces that are revered as vital heritage by the nations from which they were stolen. We display looted art alongside a much smaller number of legitimately excavated artifacts of masterpiece quality, so it is no surprise that our popular images of archaeologists as avid and undiscerning collectors raise little concern. But modern archaeologists are not extractors of art or even of scientific information, from places as passive and inert as the museums’ objects ultimately occupy. Archaeologists work with living people inhabiting societies and states that care deeply about their pasts and the relics of it. They are active agents engaged with many other people in the production of knowledge about the past. In our rapidly shrinking world, educated sensitivity to the many ancient cultural legacies that shape the values of modern global society is more than a moral imperative; it is a basic form of collaboration in the common project of survival. Archaeologists are ethically charged to advance that project through education about the complex contemporary arena of artifacts, sites and information they occupy.

Credit 3 units.  A&S : SS    A&S : IQ, SSC

L48 Anthro 4242 Social Movements
How do people change the world? They organize. Social movements mobilize to change (or defend) cultural meanings and political and economic relations. This course examines movements ranging from jihadists to anti-abortionists to inner-city activists to transnational environmentalists. We compare movement origins, strategies and effects. We ask how power and meaning are intertwined in political action and in people’s understandings of themselves; how violence and other tactics work as meaningful political instruments; and why social movements are challenging formal politics around the world today. Anthropological approaches to global disjunctures between democracy and violence are at the core of our course.

Credit 3 units.  A&S : SS, CD    A&S : IQ, HUM, LCD

L48 Anthro 4243 “Terrorism” and “The Clash of Civilizations”
This course is about conflicts in which violent means are deployed and moralistic terms are invoked so as to give legitimacy to such means. The code words in the title are in quotes in order to emphasize they are used in public discourses rhetorically, for political effect. When particular social situations are disputed, each side deploys moralistic claims so as to clothe their actions and viewpoint with an aura of legitimacy and to enlist popular support. But when issues are contested, similar terms can be used by opposing sides with similar but contrary intents: one person’s “terrorist” is another person’s “freedom fighter”; and note that certain radical Islamist groups specifically embrace Huntington’s notion of the “clash of civilizations” (formulated for Western audiences) as grounds for their anti-Western posture. Rhetorical formulea such as these are promoted or scorned, embraced or renounced, for essentially strategic reasons. In this course, we examine some notorious situations of conflict in order to identify the particular ways that
disputing sides have deployed violence and moralistic forms in their own interest — as when popular movements arise and clash with state power (e.g., the Tiananmen Square incident in China) or when coalitions with radical social agendas take form and brutalize neighbors (as in Yugoslavia in 1992; Rwanda in 1994) or when widely supported public movements develop seemingly without coordination (the 2006 demonstrations against the King of Nepal), or when movements animated by a shared ambition to establish a non-state political entity (such as Al Qaeda for the re instituted of the caliphate) form across state boundaries with little coordinated leadership. Our emphasis falls on the ways that human collectivities deploy cultural forms — linguistic and rhetorical, artistic and representational — to give particular “readings” to social issues and to clothe activities (often brutal) with an appearance of legitimacy.

Credit 3 units. A&S: SS, CD A&S: IQ, SSC, LCD

L48 Anthro 4253 Researching Fertility, Mortality and Migration
Students undertake research projects centering on the most fundamental demographic processes — fertility, mortality and migration. The first section covers basic demographic methodology so that students understand how population data is generated and demographic statistics analyzed. Then, course readings include seminal theoretical insights by anthropologists on demographic processes. Meanwhile, students work toward the completion of a term paper in which they are expected to undertake some original research on a topic of their choice (e.g., new reproductive technologies; cross-cultural adoption; ethnicity and migration). Each assignment in this course is a component of the final term paper. Prerequisite: Anthro 3612 Population and Society or permission of instructor.
Credit 3 units. A&S: SS, WI A&S: IQ, SSC, WI

L48 Anthro 4254 The Anthropology of Maternal Death
No other commonly recorded health indicator shows such great disparities between rich and poor nations as does maternal mortality. More than 500,000 women die each year around the world from complications of pregnancy and childbirth, but 99 percent of these deaths occur in impoverished, non-industrialized countries. This course examines the reasons for this stunning discrepancy, looking at the biological, social, political and economic factors involved in maternal death. The course is conducted as a seminar based on detailed readings of relevant journal articles, group discussion, case studies and class presentations. Prerequisite: Anthro 3621.
Credit 3 units. A&S: SS A&S: IQ, SSC

L48 Anthro 4252 Racialization, Engendering and Articulation: Theories of Identity Formation
This course is an opportunity for upper-level undergraduate and graduate students to explore theoretical and ethnographic texts, which focus on the social categories of race, class and gender. The purpose of this course is to interrogate our understanding of the meaning of such human variables across time and space. As the course title implies, we approach race, gender and class as processes, and this requires that we focus on their historical and cultural peculiarities. This course asks students to move conceptually from the era of European colonialism and the invention of the modern conception of “race” to the U.S. Civil War period to the ascension of negritude as well as contemporary times. In a complementary fashion, to assert that, in fact, race, gender and class do matter, requires students to investigate the diversity and complexity in various places, such as Brazil, Argentina, Martinique, South Africa and the United States.
Credit 3 units. A&S: SS A&S: IQ, SSC

L48 Anthro 4282 Political Ecology
An exploration of how the interactions between culture and environment are mediated by local, national and global politics. Topics include “overpopulation,” agricultural intensification, Green Revolution, biotechnology, corporate agriculture, green movements and organic farming. Each student prepares an in-depth research paper that may be presented to the class. Prerequisites: graduate standing, Anthro 361 or permission of instructor.
Credit 3 units. A&S: SS A&S: IQ, SSC, LCD

L48 Anthro 4284 Intentional Communities: Utopianism, Cooperation and Culture Change from Essenes to Ecovillages
This class provides an overview and examination of intentional communities over the past 2,000 years and in various regions of the world. Intentional communities are groups of people who have come together to live cooperatively and communally in pursuit of their visions of a better society. We examine intentional communities past and present, foreign and domestic, through the lenses of both scholarly treatments of intentional communities and accounts written by intentional community members. We move chronologically through time, beginning with the earliest intentional communities that scholars have identified and ending with a significant section on contemporary ecovillages and other sustainability-oriented intentional community movements. We also use various theoretical frameworks to guide our growing understanding of intentional communities. The class is in seminar format but includes short lectures, occasional videos and at least one required field trip to an intentional community in or near St. Louis. An additional ethnographic internship credit opportunity involving primary research within intentional
communities in or near St. Louis is available to anthropology majors who take the class, pending final budgetary approval. Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 430 Medical Anthropology
Credit 3 units.

L48 Anthro 4321 History of Physical Anthropology
The history of physical (or biological) anthropology are traced from Darwin’s time to the present. Factors that influenced major theories and subfields of physical anthropology are discussed along with current directions. Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L48 Anthro 4322 Brave New Crops
Same as Anthro 3322
Credit 3 units. A&S : SS A&S : IQ, SSC BU : IS FA : NSM

L48 Anthro 434 Behavioral Research at the St. Louis Zoo
Students conduct research at the St. Louis Zoo. Training in designing of projects and analysis and interpretation of data. May be repeated for credit. Prerequisite: permission of instructor. Credit 6 unit. A&S : NS, WI A&S : IQ, NSM, WI BU : BA FA : NSM

L48 Anthro 4362 Local Genders, Global Transformations
This course examines the dynamic relationship between gender and other social, economic, biological and political processes. The course compares a variety of theoretical frameworks proposed by anthropologists, as well as Foucault, Butler, Carby, Laquer and Engels. Using ethnographic and historical materials, students explore how shifts in communities’ notions of gender, femininity and masculinity are connected to larger forces, including shifts in the marketplace, global cultural flows, reproductive and sexual technologies, social movements, racial and ethnic hierarchies, international declarations, and HIV/AIDS and STDs. The course also considers ways in which gender studies and feminism have influenced anthropology. Prerequisite: Anthro 160B or permission of instructor. Credit 3 units. A&S : SS FA : SSP

L48 Anthro 4363 Sex, Gender and Power
This seminar explores various ways anthropologists have conceptualized the intersection of sex, gender and power in their ethnographies. Key questions revolve around the processes through which biological categories of sex become socially significant, and interact with various regimes of power such as the state, family, religion, medicine, the market and science in everyday life. We examine how the social processes and regulatory mechanisms associated with gender and sexuality create systems of hierarchy, domination, resistance, meaning, identity and affection. Course materials are primarily ethnographies, supplemented with articles. The aim of the course is to develop students’ critical reading, discussion and writing skills. Prerequisite: upper-level Anthro or Women, Gender and Sexuality Studies courses, or permission of instructor. Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD

L48 Anthro 4366 Europe’s New Diversities
Since the late 1980s, three major upheavals have transformed European senses of identity. The demise of the Soviet Union has forced citizens of new “post-socialist” nations to forge new senses of belonging and new strategies of survival. The rise of a new public presence of Islam, and the growth of children of Muslim immigrants to adulthood, have challenged notions that Europe is a secular or post-Christian space. Finally, the heightened authority of European institutions has challenged the nation-state from above, and by granting new forms of subnational autonomy to regions and peoples, from below. The new Europe is increasingly constituted by way of regional identifications and transnational movement(s), and by umbrella European legal and political organizations; these new realities occasion new rhetorics of secularism, nationalism and ethnic loyalties. We examine these forms of diversity, movement and debate by way of new works in anthropology, sociology and political science. Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 4392 Capitalism and Culture
Capitalism is perhaps the most important historical and social phenomenon in the modern world. In tribal settings and major cities alike, its complex impacts are evident. Through rich case studies of how capitalism touches down in diverse cultures, this course provides an introduction to anthropological perspectives on the economy and economic development. Themes covered include the history of capitalism and globalization, the cultural meanings of class and taste, the relationship between capitalism and popular culture, major artistic responses to capitalism, social movements such as environmentalism, and the field of international development. No background in anthropology or economics is required. Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD

L48 Anthro 4408 Trauma and Memory
Same as Psych 4408
Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 4441 Bubblegum, Baseball and Boom: Latin-American Cities Go Pop
Same as IAS 4581
Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI
L48 Anthro 4442 Culture and Romantic Love
This course delves into the emotional domain of intimate relations to explore romantic love from a cross-cultural perspective. It attempts to address the following questions: What is the nature of romantic love? Is romantic love universal? How do specific cultural practices shape intimate relations? Is romantic love the product of modernization? How is romantic love expressed cross-culturally? Are love and money necessarily opposed? How have the romance industries reshaped romantic experiences? How has gender, racial and ethnic stratification created unequal experiences of intimate relations? Why does love fail? And finally, how is romantic love expressed, experienced and imagined in the age of transnationalism and new technologies? Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 4451 Research Methods in Anthropology
As a critical examination of the nature of evidence and explanation within anthropology, this course provides an introduction to a broad range of methods essential for collecting ethnographic data in a systematic manner. Interviewing skills are developed as a basis for using methodologies such as life histories, free listing, pile sorting, rank ordering, social mapping and decision-tree modeling. Issues of qualitative data analysis are discussed in conjunction with software packages designed for organizing ethnographic information. This course is intended for graduate students only. Undergraduates may be enrolled with permission of the instructor. Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 4452 In the Field: Ethnographic and Qualitative Methods
Same as AMCS 441
Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 4453 Studying the City: Approaches to Social Research
Same as URST 418
Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 4454 Cultures of Science and Technology
This seminar explores questions of theory, method and ethics in the anthropology of science and technology. How is biomedicine changing what it is to be human? How can technologies and scientific practices be studied ethnographically? How are the politics of difference linked to the production of scientific knowledge? Through close reading of ethnographic texts and fieldwork experience both on- and offline, we investigate how scientific practice and technological innovation reorganize various aspects of human life on both global and local scales. Topics include the social construction of knowledge, the reproduction of racial categories in genomics, the cultures of cyberspace, the commodification of bodies in medical science, and the ways in which various technoscientific projects reshape natural and political orders in diverse locales. Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI

L48 Anthro 4455 Ethnographic Fieldwork
This is a practice-based course in ethnographic fieldwork. Using a local case study (the cultural politics of schooling), we examine ethnographic fieldwork as an academic instrument and public social action. The course prepares students for independent research in academic or professional fields developing skills in critical thought, thesis and question development, background and internet research, perspective and empathy, social and political-economic analysis, observation, interviewing, oral histories, note-taking, data analysis, cultural interpretation, and writing. Student work contributes to the ongoing “St. Louis Schools’ Ethnographic Documentation Project.” Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 4481 Writing Culture
Different ways of writing about people, culture and society in past and present times. Readings include anthropological works as well as works of fiction that represent people and the times, places and circumstances in which they live. Students conduct and write about their own ethnographical observations. Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI FA : SSP

L48 Anthro 4517 Anthropology and Development
The Bolivia-Brazil Project. This writing-intensive seminar examines the cultural politics of global “development” through an in-depth focus on Bolivia and Brazil. Brazil, a rising giant, has taken a central place in global energy and agroindustry and leads the Global South on the world stage. Bolivia, rich with natural gas, fuels Brazil and suffers collateral resource conflicts, yet inspires many through indigenous struggles to rethink economy, nature and society. Both countries express changing global geopolitics repositioning Latin American economies along east-west (China-India-Africa) — as well as north-south (U.S./Europe) — axes. In this course we consider how global political economies linking Bolivia and Brazil are interwoven with change in public cultures, territorial orders and flows, environmental dislocations, nationalism and identity, and how social movement struggles gendered inequalities, poverty, racism, indigeneity and democracy. Students acquire a foundation in anthropological approaches to development theory and ethnography and in-depth knowledge of Bolivia and Brazil. Through independent case studies tied to the instructor’s “Bolivia-Brazil Project,” students gain skills in research and writing on the cultural, social and political complexities of this thing we call development. Knowledge of Spanish and/or Portuguese and some prior knowledge of Latin America is encouraged, though not required. Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI
L48 Anthro 4519 The Moral Imagination in Social Practice
Everything humans do is framed by assumptions about what is real, important, enduring, etc., assumptions that already are implicit in the language they use. When they assess situations, establish priorities, interpret social settings, identify the significance of their affairs, or conceive of a meaningful past, humans employ such assumptions. Sometimes they do so consciously, but often they make these assumptions unthinkingly, uncritically. In this course, we read recent works — journal articles as well as monographs — on the imaginative “worlds” of people in various social settings, to consider how these “worlds” are constituted and how they are reiterated and reinforced in social practice. We also refer back to the classic works in sociocultural anthropology to remind ourselves of the various ways of approaching the comparative study of social practices. Prerequisite: junior standing, two social science courses or permission of instructor. Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 455 Archaeological Research Techniques
Discussion of dating techniques (C-14, K-Ar, U-Th, ESR, PSL, TL, dendrochronology, etc.); lithic dating analysis; magnetic survey and dating; remote sensing; elemental and residue analyses; and other technical methods employed in archaeological field research. Prerequisite: 3 credits in archaeology or permission of instructor. Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L48 Anthro 4561 Ceramic Analysis
Method, techniques and models for analyzing prehistoric ceramics. Students conduct hands-on analyses of collections from Cahokia Mounds and the St. Louis region. Prerequisite: Anthro 314, graduate standing or permission of instructor. Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L48 Anthro 4562 Artifact Analysis: Mississippian Cultures
The purpose of this course is to provide students with an introductory, hands-on experience of the methods employed in the analysis of archaeological materials common to the Mississippian culture. Students conduct class projects based on collections from Cahokia Mounds and the St. Louis region. Prerequisite: Anthro 314 or equivalent, or graduate standing, or permission of instructor. Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L48 Anthro 4564 Archaeobotanical Analysis
Advanced laboratory and analytical techniques. Prerequisite: Anthro 4211 or permission of instructor. Credit 3 units. A&S : SS FA : SSP

L48 Anthro 4581 Principles of Human Anatomy and Development
This course is designed for both undergraduate and graduate students in the anthropological, biological and/or premedical sciences who wish to learn about human anatomy from various evolutionary, functional, developmental and clinical perspectives. Lectures emphasize the organizational and developmental principles of various organ systems of the human body. The course also makes use of our extensive anatomy museum of labeled dissected human specimens as well as our cast collections of numerous specimens from the human fossil record where appropriate. Frequent use of X-rays, CT and MRI scans also are used to help students visualize human anatomy from a number of different imaging modalities. Prerequisite: undergraduate or graduate students in the anthropological, biological and/or premedical sciences must have had at least one course in physical anthropology and/or biology, or consent of instructor. Credit 3 units. A&S : SS A&S : IQ, NSM FA : NSM

L48 Anthro 4582 Human Life History Theory
Life history theory postulates that organisms must allocate finite time and finite resources between growth, maintenance and reproductive effort. This balance necessitates trade-offs in specific traits related to body size and energy allocation between competing functions across the life of the organism. In this class, we start from this broad theory and look at the specific application of life history theory within anthropology. Humans, in particular, present unique and unusual life history characteristics, which we discuss in depth. Credit 3 units. A&S : SS A&S : IQ, NSM

L48 Anthro 4583 Comparative Life Histories
Prerequisite: one course in physical anthropology and/or biology, or consent of instructor. Credit 3 units. A&S : SS A&S : IQ, NSM

L48 Anthro 459 Human Osteology
Analysis of skeletal material recovered in human paleontological and archaeological excavations. The development of bone and major diseases that affect skeletal structure. Prerequisite: permission of instructor. Credit 3 units. A&S : SS A&S : IQ, NSM FA : NSM

L48 Anthro 4591 Human Functional Morphology
A detailed consideration of the biological basis for variation in recent and past human skeletal anatomy as a framework for the interpretation of prehistoric human skeletal and fossil remains. Emphasis is placed on the structure, development and degeneration of bones and joints, the soft tissues which impinge upon individual bones; and the biomechanical patterns relating to bone and joint structures. Prerequisite: Anthro 3661, 459 or permission of instructor. Credit 3 units. A&S : SS A&S : IQ, NSM

L48 Anthro 4593 The Living Machine: Biomechanics in Terrestrial Animals
A survey of how animals — particularly humans and other primates — interact with their physical world. How do terrestrial animals move, see, breathe and hear? We examine the
anatomy and mechanics involved in these and other behaviors and investigate their evolution. Prerequisite: Anthro 150A or permission of instructor. Credit 3 units. A&S : NS A&S : IQ, NSM

L48 Anthro 4594 Experimental Methods in Animal Biomechanics
The first portion of this lab-based course covers basic concepts in biomechanics and training in the equipment and noninvasive experimental techniques used to investigate locomotion, energetics and other biomechanics questions in terrestrial animals, including humans. In the second portion, students conduct their own research projects, developing questions and hypotheses, collecting and analyzing data, and using results to test predictions. Prerequisite: Anthro 4593 or permission of instructor. Credit 3 units. A&S : NS A&S : IQ, NSM

L48 Anthro 4595 Developmental Plasticity and Human Health
A look at how early life — gestation plus infancy and childhood — contributes to the establishment of long-term physiology, variation and individual health from an anthropological perspective. The course includes current disease models of developmental origins, combined with evolutionary and adaptive perspectives on developmental plasticity and the construction of human health. Credit 3 units. A&S : NS A&S : IQ, NSM

L48 Anthro 4596 Biomarkers: Measuring Population Health, Reproductive and Social Endocrinology
How do we study contemporary human biology and population level health? How do we investigate individual differences in health within a larger population? In this course, we specifically address these questions by looking at how anthropologists, nutritionists and public health workers investigate individual and population-level health. This is done through the study of biomarkers collected from individuals. In this class, we discuss the theory behind the use of biomarkers, the underlying biology and physiology of the human body reflected in these data, and the methods used in collection and analyses of biomarkers. Finally, we discuss how biomarkers can be integrated into studies of population and individual-level health. Credit 3 units. A&S : NS A&S : IQ, NSM

L48 Anthro 4623 Art and Science of Inferential Statistics
This course examines the historical roots, the scholarly development, and the current applications of inferential statistics in a research context. The emphasis is on how social and natural variables are distributed, framing testable research questions, and choosing appropriate statistical tests. This course covers the testing of univariate, bivariate and multivariate hypotheses using parametric, non-parametric and re-sampling methods. Requires students to undertake statistical analyses of their own on real data sets. Familiarity with descriptive statistics is assumed. Designed for graduate students and advanced undergraduates. Permission of instructor is required for undergraduate enrollment. Credit 3 units. A&S : SS, QA A&S : IQ, SSC, AN

L48 Anthro 4661 Historical Archaeology
This course focuses upon the methods and techniques employed in historical archaeology. We include method of integration of written records through contextual studies, discussion of specific artifact type identification techniques and seminar-type treatments of other aspects of the field. The class includes some hands-on lab work, working primarily with materials from the first American fort west of the Mississippi (Fort Belle Fontaine) and two Civil War period mansions. Prerequisite: 3 credits of archaeology or permission of instructor. Credit 3 units. A&S : TH, CD, WI A&S : IQ, HUM, LCD FA : SSP

L48 Anthro 4682 Ethnoarchaeology
Theories, methods and techniques applied by archaeologists to contemporary societies and materials to aid their understanding of extinct societies. Analysis of ethnographic research in both the Old and New Worlds. Participation with Professors Watson, Browman and Fritz is included in relevant topics. Prerequisites: Anthro 160B or 190BP, and permission of instructor. Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD FA : SSP

L48 Anthro 472 Social Theory and Anthropology
A seminar on social theory and its ethnographic implications. Course combines major works of modern social theory, including Marx, Weber and Durkheim, with current work by contemporary anthropologists, such as Clifford Geertz, Eric Wolf, Marshall Sahlins and Fredrik Barth, and ethnographers from related disciplines, such as Pierre Bourdieu and Paul Willis. Prerequisite: previous anthropology course work or permission of instructor. Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L48 Anthro 474 National Narratives and Collective Memory
Same as IAS 474
Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 4761 The Pleistocene Peopling of Eurasia
The paleolithic archaeology, human paleobiology and paleoecology of the geographical expansions and adaptations of Eurasian humans through the Pleistocene. Prerequisite: Anthro 150A or 190B. Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP
L48 Anthro 4762 The Neandertal Legacy
A detailed consideration of the Middle and Late Pleistocene patterns of human biological evolution relating to the origins and evolution of late archaic humans (including the Neandertals) and the emergence of modern humans. Prerequisite: Anthro 367 or permission of instructor. Credit 3 units. A&S : NS, WI A&S : IQ, NSM, WI FA : NSM

L48 Anthro 477 African Prehistory
Pathways to food production in Africa: Late hunter-gatherers and early pastoralists, their interactions and intersections with complex societies of the Nile. A survey designed for juniors and seniors in a seminar setting. Credit 3 units. A&S : SS FA : SSP

L48 Anthro 4771 Out of the Wild: Domestication and Socioeconomic Diversity in Africa
The reason for the beginnings and spread of food production during the early Holocene in so many parts of the world is one of the most interesting questions in archaeology. It now seems likely that there are many different pathways to domestication. In Africa, there is a record of up to several million years of human existence as hunter-gatherers before some human populations adopted food production. Domestication of plants and animals about 10,000 years ago resulted in fundamental changes in human societies. It provided the basis for the increase in settlement densities, specialization and social stratification, and general decrease in mobility and dietary diversity characteristic of non-hunter-gatherer societies in the modern world. In this seminar, the class explores the phenomenon of domestication and the spread of food production, surveying the evidence for manipulation and domestication of plant and animal species by prehistoric peoples in Africa. We focus on how and why domestication occurred and factors that influenced its spread; interactions between late hunter-gatherers and early pastoralists; and intersections with complex societies of the Nile. We also look at the contributions of Africa to understanding pathways to food production worldwide. Credit 3 units. A&S : SS WI A&S : IQ, SSC WI

L48 Anthro 479 Climate, Culture and Human History
Using a seminar format, this course examines the temporal, geographical and environmental aspects of past climate changes, and by using specific examples, explores how climate changes may have affected the evolution of human culture and the course of human history. Archaeological and historical examples from the Americas, Africa, Asia, Europe and the Near East are used to explore if or how significant events in human history have been influenced by changes in climate. Credit 3 units. A&S : NS

L48 Anthro 4791 Archaeological Study of Social Complexity
A hallmark of anthropological theory is the idea that human societies evolve toward greater complexity or higher levels of organization through time. Yet accurately defining complexity or organization is such a difficult and frustrating undertaking that many people give up and fall back on an intuitive understanding, similar to Supreme Court Justice Potter Stewart’s famous definition of pornography: “I know it when I see it.” But what exactly does it mean to be socially complex? How does complexity in human societies emerge and how is it perpetuated? How can we infer social complexity from the archaeological record? In this seminar we examine theoretical and methodological aspects of social complexity as investigated by archaeologists. By means of case studies drawn from around the globe and ranging from the earliest humans to the recent past, we seek to define, describe and understand the concept of social complexity and its manifestations in diverse societies at different times. Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 4792 The Many Paths Leading Toward the Creation of the Ancient City
The purpose of this class is to examine the emergence of the Ancient City across the globe. We want to begin with the concepts of urbanism, city and metropolis. These are words whose derivation are to be found in the classical languages of the Mediterranean. Is there any means to reach an understanding of how other civilizations and societies characterized these special places on the landscape? In the past, many scholars have argued that market economies and state-level societies are essential to their existence. Such arguments reflect issues of sustainability in terms of the economy and the effective control of large populations through state-level institutions. While we want to understand the role of the economy and the level(s) of political integration involved in the process of urbanism, are there other cultural institutions such as religion that play a much larger and more significant role? Do these places reflect the “citizens” perception of the cosmos?. Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 4802 Theories and Practice of Landscape Archaeology
The study of “landscapes” as a particular framework for understanding the archaeological record has become increasingly widespread in the discipline today. Yet the theoretical background for defining landscapes is commonly disconnected with the actual practical application of “landscape archaeology.” What exactly do we mean by landscape archaeology, what is its utility, and how do contemporary methods of analysis and interpretation change the way we consider archaeology through this conceptual paradigm? This course explores the theoretical basis and current archaeological approaches to “landscape” and address its distinction to, and overlap with, other prevalent concepts such as environment, ecology, place and space. The course also places focus
on concrete methodological and practical approaches that
differentiate “landscape archaeology” from other approaches —
as well as illustrate their points of convergence.
Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 4803 Advanced GIS Modeling and Landscape
Analysis
The aim of this course is to learn to analyze archaeological
data in terms of its spatial layout, geography, ecology and
temporal dynamics, using Geographic Information Systems and
associated computer modeling techniques. A focus is placed
on the relationship between natural environments, cultural
geography and the mapping of archaeological landscapes, and
on the archaeologist’s ability to accurately recover, reconstruct
and analyze this relationship in a virtual environment.
Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 481 Zooarchaeology
Methods and techniques of analysis of faunal remains recovered
in archaeological context, including aging, sexing and the study
of cultural modification of archaeological faunas. Prerequisites:
any advanced course in archaeology and permission of
instructor.
Credit 3 units. A&S : SS A&S : IQ, NSM FA : SSP

L48 Anthro 4834 Health, Healing and Ethics: Comparative
Perspectives on Sickness and Society
A cross-cultural exploration of cultures and social organizations
of medical systems, the global exportation of biomedicine, and
ethical dilemmas associated with medical technologies and
global disparities in health.
Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 4881 Medicine and Anthropology
Explores the fundamental relationship of anthropology to
the art and science of medicine. Emphasis on the impact
of anthropology on current modes of biomedical research;
alternative systems of health and healing; role of anthropologist
in biomedicine and public health; critical medical anthropology;
antropology and epidemiology. Prerequisite: junior standing.
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L48 Anthro 4882 Anthropology and Public Health
Anthropological approaches to public health practice and
research; role of anthropology in public health systems; cross-
cultural public health research; community vs. institutional bases
of public health advocacy.
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L48 Anthro 4883 The Political Economy of Health
This course reviews social science contributions to
understanding health as a function of political and economic
influences. Considers the ways in which personal health
is affected by macrosocial processes. Examines effects of
globalization, international development and political instability
on the health of individuals. Examples drawn from the United
States and international contexts. Prerequisite: junior standing or
above.
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L48 Anthro 4884 Anthropology of Sexually Transmitted
Infections
Sexually transmitted infections (STIs) continue to exert a major
toll on developed and developing countries alike. Systems for
STI surveillance, control and prevention help limit the spread of
these infections, but they are often incompletely implemented
due to political or financial barriers. This seminar addresses
the biological, cultural and political dimensions of STIs in local,
national and global contexts. Issues include viral vs. bacterial
STIs, chemotherapy and prophylaxis, sociocultural factors of
STI epidemiology, structural aspects of partner management,
and transnational STI control and prevention. Prerequisite: prior
course work in medical anthropology, graduate standing or
permission of the instructor.
Credit 3 units. A&S : SS A&S : IQ, SSC

L48 Anthro 4893 Pastoral Nomads of the Past
The archaeology of nomadic herders or pastoralists of Africa,
Asia and South America is the focus of this seminar. Cattle
herders of Africa, horse and camel-based nomads of Asia,
and llama herders of the Andes are famous for their mobility,
effective use of arid and mountainous lands, and distinctive and
varied social organization and material culture. Nomads are known in many regions for long-distance trade, warfare and as agents of widespread political and religious change. We examine issues such as the ecological background to mobility, nomads as early food producers, the environmental impact of nomadic societies, nomads and resilience, factors that pattern settlement structure and material culture of nomads, rock art, archaeological recovery, ancient nomadic states and gender issues in recent pastoral societies.
Credit 3 units. A&S : SS

L48 Anthro 491 Advanced Anthropological Research
Limited to those students who have successfully completed Anthro 490 and have a qualifying continuing research project. Prerequisites: Anthro 490 and permission of the faculty member supervising the continuing research project. Credit -3 unit. A&S : SS A&S : IQ, SSC FA : SSP

L48 Anthro 4951 Senior Honors Research
Limited to students who have qualified for the Anthropology honors program and who are conducting research for an honors thesis. Prerequisites: permission of the Anthropology faculty member supervising the honors research, and concurrent filing of notification with the Anthropology senior honors coordinator. Credit -3 unit. FA : SSP

L48 Anthro 4961 Senior Honors Thesis
Limited to students who have qualified for the Anthropology honors program and who are actively engaged in writing a senior honors thesis. Prerequisite: permission of the Anthropology senior honors coordinator. Credit -3 unit. FA : SSP

L48 Anthro 4975 Collecting Cultures: Taste, Passion and the Making of Art Histories
Same as Art-Arch 4975
Credit 3 units. A&S : TH A&S : IQ, HUM EN : H

L48 Anthro 4999 Capstone Experience
The Department of Anthropology offers several options for completing a capstone experience, which is recommended by the College of Arts & Sciences. One option is for students in any 400-level course in the department to secure permission of the instructor to simultaneously enroll in Anthro 4999. The instructor and student develop an individualized plan for expanding the normal content of the selected 400-level course into a capstone experience. Prerequisite: junior or senior standing. Enrollment requires permission of the department and the instructor. Credit 1 unit.

Arabic
The Department of Jewish, Islamic and Near Eastern Languages and Cultures offers a major and a minor in Arabic. As majors in Arabic, students can expect to gain proficiency in the language, study the area's literary and cultural landmarks, and gain familiarity with Near Eastern history and civilizations. As majors, students are expected to maintain a B average in all departmental courses. The prerequisites for a major include successful completion of the first two levels of language study or its equivalent and one lower-level foundational course: JINE 210C Introduction to Islamic Civilization.

Language Placement: Placement tests are required for all students entering our language programs. Students who test into Intermediate Arabic and satisfactorily complete (with a grade of B– or better) at least one semester of language study may petition for 3 units of retroactive credit; students who test into third year or above and satisfactorily complete (with a grade of B– or better) at least one semester of language study may petition for 6 units of retroactive credit. Credit is limited to 3 units for testing into intermediate and 6 units for testing into third year or above. Please note that students with native language proficiency as determined by the individual language section, as well as students who enroll in a course below their placement level, are ineligible for retroactive credit units. Students who misrepresent the extent of their background to gain entrance to a course at the elementary or intermediate level will be dropped from that course.

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Departmental website: http://jinelc.wustl.edu

For a list of affiliated faculty, please see the Department of Jewish, Islamic and Near Eastern Languages and Cultures (p. 504) faculty page.

The Major in Arabic
Total units required: 47. First- and second-level language study, 20 units, plus 27 upper-level units, no more than 12 of which may be language courses.

Required courses:
The prerequisites for a major in Arabic include successful completion of the first two levels of language study or its equivalent (Arab 107D Beginning Arabic I, Arab 108D Beginning Arabic II, Arab 207D Intermediate Arabic I, Arab 208D Intermediate Arabic II) and one lower-level foundational course: JINE 210C Introduction to Islamic Civilization.

Required upper-level courses for the major include language courses at the third- (Arab 307D Advanced Arabic I, Arab 308D
Advanced Arabic II) and fourth-year (Arab 407 Fourth-Level Arabic I) levels. Students normally complete four years of Arabic, or three years of study in Arabic and one year in a second language. All students are expected to maintain a minimum grade of B– in language classes.

In addition, Arabic majors must complete 15 units of relevant upper-level literature, culture and civilization courses, chosen in consultation with their adviser. (Please note that many courses in Near Eastern literatures and cultures can be found under Religious Studies, Comparative Literature, or Jewish, Islamic and Near Eastern Studies and Anthropology.) Unless a student is writing an honors thesis or fulfilling a capstone requirement for a second major, he or she also is required to take the departmental capstone course during the senior year.

Additional Information

Study Abroad: Students are strongly encouraged to participate in Washington University-approved study abroad programs in Israel, Egypt and other countries of the Middle East. Study abroad is usually during the junior year and after a minimum of one year of language study at Washington University. Students who participate in Washington University-sponsored and/or approved overseas programs are normally able to apply most or all of these units to their undergraduate degree, although no more than 9 upper-level units may be applied to the major. However, all transfer of credit is subject to review and approval by the department and the Study Abroad office.

Transfer Credit: Normally no more than 6 units of credit earned at an institution other than Washington University (this does not include Washington University-approved study-abroad programs) may be applied to the major, and no more than 3 units for the minor.

Senior Honors: Qualified majors are encouraged to apply for Senior Honors before the end of the junior year. Students wishing to pursue this option need to meet the minimum honors requirements stated in this Bulletin; have outstanding performance in language work; and satisfactorily complete, during the senior year, Arab 488 Independent Work for Senior Honors (fall) and, if possible, Arab 489 Independent Work for Senior Honors (spring), to be taken in addition to all other departmental requirements. Honors work will be supervised by a three-member departmental Honors Committee composed of a primary adviser and two additional faculty, which plans each student special language work as needed and an independent honors research paper in the student’s area of academic interest.

The Minor in Arabic

Total units required: Varies, 18–29

Required courses: The minor in Arabic Language and Literature requires the completion of JINE 210C Introduction to Islamic Civilization and 18 credits, no more than 12 of which may be in language, and a minimum of 9 units at the 300 level or above. Minimum requirements for the minor include two years of Arabic language and the successful completion of at least 9 units in literature/culture courses chosen in consultation with the minor adviser.

Additional Information

Students must earn a minimum of B– in language courses in order to proceed to the next level. Students who place out of language courses because of previous language training, or because they are native speakers of the language, must complete 15 units with literature and culture courses as approved by their minor adviser.

Arabic

L49 Arab 107D Beginning Arabic I
Introduction to modern Arabic; concentrates on rapidly developing basic skills in reading, writing, speaking and understanding. Five class hours, including one culture hour and additional drill or laboratory hours. Students with previous Arabic language background must take a placement examination.
Credit 5 units. A&S: LA A&S: IQ, LCD, LS BU: HUM, IS

L49 Arab 108D Beginning Arabic II
Continuation of Arab 107D. Emphasis on enhancing skills in reading, writing, speaking and aural comprehension of modern Arabic. Prerequisite: grade of B– or better in Arab 107DQ or placement by examination. Five class hours a week with additional drill or laboratory hours arranged by instructor.
Credit 5 units. A&S: LA A&S: IQ, LCD, LS BU: HUM, IS

L49 Arab 200 Topics in Asian & Near Eastern Languages & Literatures
Same as ANELL 200
Credit 3 units. A&S: TH, CD BU: BA, HUM, IS

L49 Arab 207D Intermediate Arabic I
Study of grammar of literary Arabic and reading of annotated classical and modern prose texts; elementary composition; practice in speaking and comprehending modern Arabic. Prerequisite: grade of B– or better in Arab 108DQ or placement by examination. Five class hours a week with additional drill or laboratory hours set by instructor.
Credit 5 units. A&S: LA A&S: IQ, LCD, LS BU: HUM, IS

L49 Arab 208D Intermediate Arabic II
Continuation of Arab 207D. Study of grammar of literary Arabic and reading of annotated classical and modern prose text.
texts; elementary composition; practice in speaking and comprehending modern Arabic. Prerequisite: grade of B– or better in Arab 207D or placement by examination. Five class hours a week with additional drill or laboratory hours arranged by instructor.
Credit 5 units. A&S : LA  A&S : IQ, LCD, LS  BU : HUM, IS

L49 Arab 307D Advanced Arabic I
Continuation of Arabic 208D. Competence in reading, writing, speaking, listening and culture is developed through intensive exposure to classical and modern standard Arabic in its written and audiovisual forms. Prerequisite: grade of B– or better in Arab 208D or placement by examination. Three class hours a week with one additional laboratory hour as assigned by instructor.
Credit 4 units. A&S : LA  A&S : IQ, LCD, LS  BU : HUM, IS

L49 Arab 308D Advanced Arabic II
A continuation of Arabic 307D. Continued integration of language development through reading, writing, speaking and listening activities centered on advanced authentic material. This semester proves critical for making the transition from Modern Arabic to Classical Arabic, including Qur’anic Arabic. Continued development of colloquial Arabic. Prerequisite: Arab 307D or equivalent.
Credit 4 units. A&S : LA  A&S : IQ, LCD, LS  BU : HUM, IS

L49 Arab 329C Middle Eastern Islamic Literatures in Translation
This course studies, in English translation, several great works of Islamic literature that still influence or reflect the ways in which we perceive Islamic culture today. We critically consider great and disparate literary works, originally written in a variety of languages including Arabic, Turkish and Persian and stretched from Spain to India, that share the common backdrop of an urban and educated milieu in which they were produced, widely read and circulated. The course aims at exploring the literary cultures in their historical and social context. Possible themes include court literature, politics, Sufi literature, history, theology and literature of romance. All readings are in English.
Credit 3 units. A&S : TH, CD  A&S : IQ, HUM, LCD

L49 Arab 355C The Flowering of Islamic Literature, 500–1200
Same as Comp Lit 355C
Credit 3 units. A&S : TH, CD  BU : HUM  FA : Lit

L49 Arab 361 City of Peace: Baghdad in Medieval Times (ca. 762–1250)
Same as JNE 361
Credit 3 units. A&S : TH  A&S : IQ, HUM  EN : H

L49 Arab 400 Asian & Near Eastern Languages & Literatures Senior Seminar
Same as ANELL 400
Credit 3 units. A&S : TH, CD  A&S : IQ, HUM, LCD

L49 Arab 405 Colloquial Arabic
The aim of this course is to introduce the students to colloquial Arabic through their knowledge of Modern Standard Arabic (MSA). We focus on the main differences between colloquial and MSA so that the students can use the colloquial form for practical purposes in everyday life. Prerequisite: Arab 208D or instructor’s permission.
Credit 3 units. A&S : LA  A&S : IQ, LCD  BU : IS

L49 Arab 407 Fourth-Level Arabic I
Focused reading and discussion of classical and modern texts centered on selected topics in Arabic literature, poetry and media. Continued development of oral, aural and writing skills. Students’ interests are taken into consideration before finalizing the selection of texts. Practice in writing and grammar. Prerequisite: grade of B– or better in Arab 308D or placement by examination.
Credit 3 units. A&S : LA  A&S : IQ, LCD, LS  BU : IS  FA : Lit

L49 Arab 408 Fourth-Level Arabic II
Readings and discussion in Arabic of selected classical texts. Students’ interests are taken into consideration before finalizing the selection of texts. Practice in writing and grammar. Continued development of colloquial Arabic.
Credit 3 units. A&S : LA  A&S : IQ, LCD, LS  BU : IS  FA : Lit

L49 Arab 450 Topics in Classical Arabic Literature and Culture
Exploration of medieval Arabic Belles-Lettres (Adab). All texts read in Arabic. Prerequisite: senior standing.
Credit 3 units. A&S : TH  BU : IS  FA : Lit

L49 Arab 451 Topics in Modern Arabic Literature and Culture
Credit 3 units. A&S : TH  A&S : IQ, HUM, LCD  BU : HUM

L49 Arab 464 Arabic Textual Analysis
This course introduces the advanced student of Arabic to a variety of prose narratives in the modern language. Readings, which include literary texts and topical essays on aspects of Arabic society and culture, reflect the needs and interests of the enrolled students.
Credit 3 units. A&S : TH  A&S : IQ, HUM, LCD

L49 Arab 465 Topics in Arabic
This course is an in-depth study of a particular segment of Arabic literature and/or culture.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

**L49 Arab 470 Topics in Classical Arabic Literature in Translation**
Various themes in Arabic religious literature and Belles-Lettres (Adab), e.g., the intertwining of religion and politics, court culture and fashions, social critiques, gender roles, etc., are read in English.
Credit 3 units. BU : ETH FA : Lit

**L49 Arab 471 Topics in Modern Arabic Literature in Translation**
Modern Arabic narratives read in English translation foregrounding themes such as the conflict between tradition and modernity, civil war, poverty, alienation, religion and politics, and changing gender roles.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD BU : ETH FA : Lit

**L49 Arab 488 Independent Work for Senior Honors**
This course to be taken in the fall semester. Prerequisites: senior standing, eligibility for honors, and permission of the department.
Credit 3 units.

**L49 Arab 489 Independent Work for Senior Honors**
This course to be taken in the spring semester. Prerequisite: senior standing, eligibility for honors, and permission of the department.
Credit 3 units.

**L49 Arab 497 Guided Readings in Arabic**
Prerequisites: senior standing and permission of instructor and department chair.
Credit -5 unit. A&S : LA

**L49 Arab 498 Guided Readings in Arabic**
Prerequisites: senior standing and permission of the instructor and the department chair.
Credit 3 units. A&S : LA

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**Archeology**

Archeology provides the opportunity to investigate the material remains of past societies and cultures and the methods by which they are recovered, analyzed, interpreted and reconstructed.

Archaeologists investigate the entire human past from the first evidence of tool use 2.5 million years ago to historical studies as recent as the 20th century. To provide a comprehensive understanding of archaeology, the department emphasizes two approaches: the humanistic, which is represented by classical archaeology, and the social scientific, which is represented by anthropological archaeology.

As an archeology student, you will encounter a range of specialties within the field, from topical studies, such as prehistoric pastoralism, hunter-and-gatherer societies, Mayan archaeology, or Greek and Roman archaeology, to methodological approaches such as historical archaeology, ethnoarchaeology, zooarchaeology, paleoethnobotany, geoarchaeology, geographic information systems (GIS) and radiometric dating. A strength of this institution in anthropological archaeology is the focus upon biologically based studies (paleoethnobotany, zooarchaeology and GIS) to investigate such questions as the origins of food production or complex societies. The strength of the classical archaeological program capitalizes on ancient documents in investigating the more recent Eurasian human past.

While acquiring basic training in archaeology, you may choose to concentrate on a specific region, such as the Eastern Woodlands of the United States, the Andes, Mesoamerica, Africa, Central Asia, China or the Mediterranean world. Ancient and/or modern languages, as well as history and art, are essential for some areas of study. A specialized set of courses that meet your goals can be designed in conjunction with your adviser.

Washington University archeology faculty members are involved in research projects in many regions, such as Central Asia, Northern Africa, Greece, the Andes, the Mayan area, New Mexico and the Mississippi River valley. With a degree in archeology, you can work in academia, private consulting firms, government conservation and compliance agencies, and museums. Academic and museum positions generally require graduate-level training.

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**Chair**

David L. Browman
Professor
PhD, Harvard University
(Anthropology)

**Endowed Professor**

Susan Rotroff
Jarvis Thurston and Mona Van Duyn Professor in the Humanities
PhD, Princeton University
(Classics)
The major requires 21 advanced units at the 300/3000 level or above. These 21 advanced units must be distributed such that at least two courses (6 units) come from each of the two disciplinary foci — classical archaeology and anthropological archaeology. Each student must complete a supervised archaeological field school of six weeks or the equivalent, approved by the department.

**Additional Information**

**Internships/Research:** The hands-on experience of archaeological fieldwork is particularly attractive to many students. As an undergraduate major in archaeology, you will complete at least one supervised field project, which is selected to best meet your long-term goals. Most field research projects are small, which allows you to work closely with faculty and staff. Recently, students have worked at excavations in such diverse areas as Ireland, France, Kazakhstan, Greece, Israel, China, Japan, Guatemala, Bolivia, the U.S. Southwest and Cahokia, Illinois. Students focusing on North American archaeology often take an internship at one of the local private firms to gain experience in contract archaeology. Undergraduate participation in research is encouraged particularly for students working on Senior Honors theses.

**Senior Honors:** As an archaeology major, you are encouraged to work for Senior Honors, for which you may apply in your junior or senior year. Acceptance into the program is based on your previous academic performance, a proposal accepted by an archaeology faculty member who agrees to supervise your honors research, and approval of the Archaeology program director. Your Honors thesis will be evaluated by a three-member faculty committee, who recommend honors level.

**Study Abroad:** In addition to field schools in the summer, many students also opt to take a semester abroad, particularly those focusing in classical archaeology.

### The Minor in Archaeology

**Units required:** 15

**Required courses:** The minor in the Interdisciplinary Program in Archaeology requires completion of 15 course credits. The minor should include one of the two introductory courses (ARC 190 and ARC 200), and at least 12 advanced units from 300- and 400-level courses.

**Additional Information**

The Archaeology minor is usually fulfilled by a concentration in either the humanistic or in the social science areas. Thus, the minor will satisfy the Textual and Historical Studies distribution area or the Social Sciences distribution area, depending on which courses the minor includes.
Arts & Sciences

Archaeology

L52 ARC 130 Freshman Seminar: The Ritual Landscape of Cahokia: Perspectives on the Politics of Religion & Chiefly Power
Same as Anthro 130
Credit 3 units.   A&S : SS   A&S : IQ, SSC   BU : HUM   FA : SSP

L52 ARC 190B Introduction to Archaeology
Same as Anthro 190B
Credit 3 units.   A&S : SS   A&S : IQ, SSC   BU : BA   FA : AH

L52 ARC 200C World Archaeology
If we carefully peer beneath the earth's surface, we discover a hidden world that is being rediscovered by archaeologists. A considerable amount of excitement is generated by the discovery of lost civilizations and societies. Archaeologists from every corner of the earth come to Washington University to share their experiences as they use the most sophisticated technology to rediscover those forgotten and sometimes embarrassing aspects of our human past.
Credit 3 units.   A&S : TH, CD   A&S : IQ, HUM, LCD   BU : IS   FA : SSP

L52 ARC 212 Archaeological Fantasies and Hoaxes
Same as Anthro 212
Credit 3 units.   A&S : SS   A&S : IQ, SSC, LCD   FA : SSP

L52 ARC 300 Internship in Archaeology
Internship with an archaeological project or organization where the primary objective is to obtain professional experience outside of the classroom. Student must have a faculty sponsor and a site or project supervisor. Prerequisites: open only to Archaeology majors with junior standing and permission of department.
Credit 3 unit.   FA : SSP

L52 ARC 3053 Nomadic Strategies and Extreme Ecologies
Same as Anthro 3053
Credit 3 units.   A&S : SS   A&S : IQ, SSC, LCD   BU : BA , HUM , IS   FA : SSP

L52 ARC 310C Ancient Civilizations of the New World
Same as Anthro 310C
Credit 3 units.   A&S : TH, CD   A&S : IQ, HUM, LCD   BU : HUM   FA : AH

L52 ARC 3122 From Country to Heavy Metal: Ancient Civilizations of the Old World
Same as Anthro 3122

L52 ARC 314B Prehistory of North America
Same as Anthro 314B
Credit 3 units.   A&S : SS, CD   A&S : IQ, SSC, LCD   BU : BA   FA : SSP

L52 ARC 3182 Ancient Africa: Social Mosaics and Environmental Challenges
Same as Anthro 3182
Credit 3 units.   A&S : SS, CD   A&S : IQ, SSC, LCD   BU : BA, HUM, IS   FA : SSP

L52 ARC 318C Prehistory of Africa
Same as Anthro 318C
Credit 3 units.   A&S : SS, CD   A&S : IQ, SSC, LCD   BU : BA, HUM, IS   FA : SSP

L52 ARC 3211 Art in the Egypt of the Pharaohs
Same as Art-Arch 3211
Credit 3 units.   A&S : TH, CD   A&S : IQ, HUM, LCD   BU : HUM   FA : AH

L52 ARC 330 Experimental Archaeology
Same as Anthro 330
Credit 3 units.   FA : SSP

L52 ARC 3301 Homeric Archaeology
Same as Art-Arch 3301
Credit 3 units.   A&S : TH, CD   A&S : IQ, HUM, LCD   BU : IS   FA : AH

L52 ARC 3304 Bones to Behavior: Undergraduate Research in the Lab and at the Zoo
Same as Anthro 3304
Credit 3 units.   A&S : NS   A&S : IQ, NSM   BU : BA   FA : SSP

L52 ARC 3305 Bones to Behavior II
Same as Anthro 3305
Credit 3 units.   A&S : SS   A&S : IQ, SSC   FA : SSP

L52 ARC 331 Greek Art and Archaeology
Same as Art-Arch 331
Credit 3 units.   A&S : TH   A&S : IQ, HUM   BU : HUM   FA : AH

L52 ARC 334 Roman Art and Archaeology
Same as Art-Arch 334
Credit 3 units. A&S : IQ, HUM BU : HUM FA : AH

L52 ARC 3351 The Ancient Maya: Archaeology and History
Same as Anthro 3351
Credit 3 units. A&S : SS, CD A&S : IQ, SSC LCD FA : SSP

L52 ARC 336 Ancient Sanctuaries: The Archaeology of Sacred Space in the Ancient Mediterranean
Same as Art-Arch 336
Credit 3 units. A&S : TH, CD BU : HUM FA : AH

L52 ARC 3369 Underwater Archaeology
Survey of the history, techniques and results of underwater excavation worldwide, with emphasis on the ancient Mediterranean. Prerequisite: Archaeology 190 or 200, or permission of instructor.
Credit 3 units. A&S : TH BU : HUM FA : SSP

L52 ARC 345E The Art and Archaeology of Ancient China
Same as Art-Arch 345E(Q).
Credit 3 units. A&S : TH BU : IS FA : SSP

L52 ARC 3461 Native Americans at Westward Expansion
Same as Anthro 3461
Credit 3 units. A&S : SS, CD A&S : IQ, SSC LCD FA : SSP

L52 ARC 347E Fantastic Archaeology
Same as Anthro 3475
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L52 ARC 347B Ancient Mound Builders of the Mississippi Valley
Same as Anthro 347B
Credit 3 units. A&S : SS, CD BU : BA FA : SSP

L52 ARC 372 Geoarchaeology
Same as Anthro 372
Credit 3 units. A&S : SS A&S : IQ, SSC

L52 ARC 373 Introduction to GIS for Anthropologists
Same as Anthro 373
Credit 3 units. A&S : SS A&S : IQ, SSC

L52 ARC 374 Social Landscapes in Global View
Same as Anthro 374

L52 ARC 3755 Ancient Eurasia and the New Silk Roads
Same as Anthro 3775
Credit 3 units. A&S : SS, CD, SD A&S : IQ, SSC, LCD, SD EN : S

L52 ARC 379 Feast or Famine: Archaeology and Climate Change
Same as Anthro 379
Credit 3 units. A&S : SS A&S : IQ, SSC

L52 ARC 3793 Mississippi River Basin: Past, Present and Future
Same as Anthro 3793
Credit 4 units. A&S : SS

L52 ARC 3932 Introduction to Archaeological Field Survey
Same as L48-3932.
Same as Anthro 3932
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L52 ARC 399 Undergraduate Teaching Assistant
Open to advanced undergraduates only. Usual duties of teaching assistant in laboratory or other selected courses. Prerequisite: permission of instructor.
Credit 3 units.

L52 ARC 4020 Jerusalem, The Holy City
Same as JNE 4020
Credit 5 units. A&S : TH, CD, SD

L52 ARC 403 Culture and History of the Southwestern United States
Same as Anthro 403
Credit 3 units. A&S : SS, CD A&S : IQ, SSC LCD FA : SSP

L52 ARC 420 Plundered Past: Archaeology's Challenges in the Modern World
Same as Anthro 4240
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L52 ARC 421 Minoan and Mycenean Archaeology
Same as Art-Arch 421.
Credit 3 units. A&S : TH, CD FA : SSP

L52 ARC 4211 Paleoethnobotany and Ethnobotany
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Units</th>
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<td>ARC 4211</td>
<td>Same as Anthro 4211</td>
<td>3</td>
<td>A&amp;S : SS, WI</td>
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<td>L52 ARC 4212</td>
<td>Advanced Methods in Paleoethnobotany</td>
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<td>L52 ARC 4213</td>
<td>Plants and American People: Past and Present</td>
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<td>A&amp;S : SS</td>
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<td>The Archaeology of Food and Drink</td>
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<td>Athenian Vase Painting</td>
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<td>Ancient Coins</td>
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<td>Greek Sculpture</td>
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<td>Greek and Roman Pottery</td>
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<td>L52 ARC 4375</td>
<td>Ancient Greek Sculpture in Context</td>
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<td>L52 ARC 455</td>
<td>Archaeological Research Techniques</td>
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L52 ARC 4561 Ceramic Analysis
Same as Anthro 4561.
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L52 ARC 4562 Artifact Analysis: Mississippian Cultures
Same as Anthro 4562.
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L52 ARC 4661 Historical Archaeology
Same as Anthro 4661.
Credit 3 units. A&S : TH, CD, WI A&S : IQ, HUM, LCD FA : SSP

L52 ARC 4682 Ethnoarchaeology
Same as Anthro 4682.
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD FA : SSP

L52 ARC 4752 Practicing Archaeology
Credit 3 units. A&S : SS, WI

L52 ARC 4761 Pleistocene Peopling of Eurasia
Same as Anthro 4761.
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L52 ARC 4762 The Neandertal Legacy
Same as Anthro 4762.
Credit 3 units. A&S : NS, WI A&S : IQ, NSM, WI FA : NSM

L52 ARC 477 African Prehistory
Same as Anthro 477.
Credit 3 units. A&S : SS FA : SSP

L52 ARC 4771 Out of the Wild: Domestication and Socioeconomic Diversity in Africa
Same as Anthro 4771.
Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI

L52 ARC 479 Climate, Culture and Human History
Same as Anthro 479.
Credit 3 units. A&S : NS

L52 ARC 4791 Archaeological Study of Social Complexity
Same as Anthro 4791.
Credit 3 units. A&S : SS A&S : IQ, SSC
L52 ARC 4792 The Many Paths Leading Toward the Creation of the Ancient City
Same as Anthro 4792
Credit 3 units. A&S : SS  A&S : IQ, SSC

L52 ARC 4802 Theories and Practice of Landscape Archaeology
Same as Anthro 4802
Credit 3 units. A&S : SS  A&S : IQ, SSC

L52 ARC 4803 Advanced GIS Modeling and Landscape Analysis
Same as Anthro 4803
Credit 3 units. A&S : SS  A&S : IQ, SSC

L52 ARC 481 Zooarchaeology
Same as Anthro 481
Credit 3 units. A&S : SS  A&S : IQ, NSM  FA : SSP

L52 ARC 482 Experimental Zooarchaeology
Same as Anthro 482.
Credit 3 units. A&S : SS  FA : SSP

L52 ARC 484 Paleoenvironmental Reconstruction
Same as EPSc 484
Credit 3 units. A&S : NS  A&S : IQ, NSM

L52 ARC 489 Pathways to Domestication
Same as Anthro 489
Credit 3 units. A&S : SS  A&S : IQ, SSC  FA : SSP

L52 ARC 4892 Hunter-Gatherer Socioeconomic Variation
Same as Anthro 4892.
Same as Anthro 4892
Credit 3 units. A&S : SS  A&S : IQ, SSC  FA : SSP

L52 ARC 4893 Pastoral Nomads of the Past
Same as Anthro 4893
Credit 3 units. A&S : SS

L52 ARC 491 Archaeological Research
Undergraduate research experience sponsored by one of the archaeology staff. May be taken more than once for credit. Prerequisite: permission of the faculty member under whom the research will be done. Credit 1–3 units.

L52 ARC 492 Independent Studies
Supervised independent research. For advanced undergraduates only. Prerequisite: permission of the faculty member under whom the work will be done. Credit 1–3 units. FA : SSP

L52 ARC 493 Honors Thesis
Limited to students accepted into the honors program. Prerequisite: permission of department. Credit 3 units. A&S : SS  FA : SSP

L52 ARC 497 Senior Project
Designed for majors in Archaeology who have not satisfied their college capstone experience in another manner, or who are not satisfying this requirement through ARC 493 Honors Thesis. This course involves a structured research assignment, internship, fieldwork or independent project under the supervision of one of the department’s faculty. Limited to students in the junior level and above. Permission of instructor who will supervise the work is required. Credit -3 unit. A&S : SS  FA : SSP

L52 ARC 4975 Collecting Cultures: Taste, Passion and the Making of Art Histories
Same as Art-Arch 4975
Credit 3 units. A&S : TH  A&S : IQ, HUM  EN : H

L52 ARC 498 Intensive Writing Course: Archaeology
Designed for majors who have not satisfied their college writing requirement in another fashion. This course ordinarily is taken in tandem with another 300- or 400-level course in Archaeology, with the required permission to enroll granted by the instructor in that course. The student prepares a portfolio of papers, which undergo revision and rewriting, as assigned by that course instructor. In some cases, this writing-intensive course may be taken as an independent study course with one of the Archaeology professors. This latter option requires permission of both the department and the instructor. When the course is integrated with another 300- or 400-level course, credit is limited to 1 unit. If taken as an independent study course, credit is no more than 3 units. Permission of instructor required; limited to juniors and seniors. Credit -3 unit. A&S : SS, WI  A&S : IQ, SSC, WI  FA : SSP
Art History and Archaeology

Art history provides the opportunity to explore the fine arts, architecture and visual culture, as well as the social, aesthetic and personal values that help shape it.

Students are introduced to the study of art history and archaeology through general introductory courses that focus on European, Asian and American art, as well as world archaeology. In more advanced courses, students enjoy studying original works of art owned by the Washington University Mildred Lane Kemper Art Museum, the Saint Louis Art Museum, the Pulitzer Foundation and local private collectors. Students also are invited on annual field trips organized by the faculty to visit cities with major museum collections.

A variety of career paths are available to majors in art history and archaeology. Many graduates earn advanced degrees in both related and unrelated fields and work in museums or academia or for art publishers, commercial art galleries, auction houses, nonprofit organizations and other arts-related organizations.

Contact Person: Nancy Rubin
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Departmental website: http://www.artsci.wustl.edu/~artarch/

Chair
Elizabeth C. Childs
Etta and Mark Steinberg Professor of Art History
PhD, Columbia University

Endowed Professors
Susan Rotroff
Jarvis Thurston and Mona Van Duyn Professor in the Humanities
PhD, Princeton University
(Classics)
William E. Wallace
Barbara Murphy Bryant Distinguished Professor of Art History
PhD, Columbia University

Professors
Angela Miller
PhD, Yale University
Sarantis Symeonoglou
PhD, Columbia University

Associate Professor
John Klein
PhD, Columbia University

Assistant Professors
Marisa Bass
PhD, Harvard University
Kristina Kleutghen
PhD, Harvard University
Ila Sheren
PhD, Massachusetts Institute of Technology

Affiliated Faculty
Eric Mumford
(Professor of Architecture, Sam Fox School of Design & Visual Arts)

Professor Emeritus
Mark S. Weil
E. Desmond Lee Professor Emeritus
PhD, Columbia University

Affiliated Curators, Mildred Lane Kemper Art Museum, Washington University
Sabine Eckmann
Director and Chief Curator
PhD, University of Erlangen–Nürnberg
Meredith Malone
Associate Curator
PhD, University of Pennsylvania
Karen K. Butler
Assistant Curator
PhD, Columbia University

Affiliated Curators and Directors, Saint Louis Art Museum
Brent Benjamin
MA, Williams College
David Conradsen
MA, University of Delaware
Phillip Hu
MA, Institute of Fine Arts, New York University
Simon Kelly
PhD, Oxford University
Eric Lutz
PhD, University of California–Santa Barbara
Judith Mann
PhD, Washington University
Tricia Paik
PhD, Institute of Fine Arts, New York University
Matthew H. Robb
Arts & Sciences

PhD, Yale University
Elizabeth Wyckoff
PhD, Columbia University

Guest Scholar, Pulitzer Foundation
Kristina Van Dyke
Director
PhD, Harvard University

Postdoctoral Teaching Fellows
Melanie Michailidis
PhD, Massachusetts Institute of Technology
Adrian Ossi
PhD, University of Michigan

The Major in Art History and Archaeology

Total units required: 30 (33 for those students undertaking Senior Honors)

Required courses:
Art-Arch 111 Introduction to Asian Art (spring) 3 units
Art-Arch 113 History of Western Art, Architecture and Design (fall) 3 units
* A score of 4 or 5 on the AP Art History exam may be substituted for Art-Arch 113. To substitute a 4 or 5 on the AP Art History exam, you must earn at least a B in a related upper-division departmental course.

Elective credits:
24 upper-level (300-level or above) art history credits. (Students may substitute one 200-level course for one upper division course). One course at the 300-level or above is required in three of the five distribution areas: Ancient/Medieval, Renaissance/Baroque, European and American Modern, non-Western, and Architecture. Students undertaking honors complete 3 additional credits of independent study in the second semester of their senior year. All courses for the major must be taken for a letter grade.

Majors are encouraged to acquire a good reading knowledge of French, Italian or German. For a concentration in ancient Mediterranean art and archaeology or Medieval art, Greek, Latin or both will be useful. Similarly, Chinese, Japanese, Hindi or Arabic, for example, will be useful for a concentration in non-Western art. Majors also are encouraged to take studio courses in art and/or architecture in the Sam Fox School of Design & Visual Arts.

Prerequisites: Students should have the proper prerequisites before enrolling in 300- or 400-level courses. Courses in other departments (including courses in the Sam Fox School of Design & Visual Arts) do not count for the major unless they are cross-listed as Art History & Archaeology courses.

Additional Information

Internships: Internships in the curatorial and education departments of local museums, arts organizations or commercial galleries are available to undergraduate art history and archaeology majors. Students may enroll in up to 6 credit hours of a voluntary internship, or secure a paid internship for no credit. Such internships provide invaluable experience and may help lead to employment opportunities after graduation. Internship credit may not be applied to the major but does count toward graduation.

Study Abroad: Students are encouraged to participate in a variety of international programs available in a number of overseas locations. Although students are strongly encouraged to acquire and use foreign languages, programs based in English also are available in most countries. Students may work with the department’s Study Abroad adviser to find the program that best meets the student’s particular interests and needs.

Senior Honors: Exceptional students who hold a 3.65 grade point average or better in advanced courses (300 level or higher) and an overall GPA of 3.65 may apply to work toward honors in the department. Honors are awarded to students for maintaining their GPA during their senior year and writing an honors thesis (enrolling in Art-Arch 4900 in fall and Art-Arch 499 in spring semester of the senior year), which is defended before at least two faculty members from the department. Students completing the thesis accrue 33 (rather than the usual 30) course credits in the major.

The Minor in Art History and Archaeology

Units required: 18

Required courses:
Art-Arch 111 Introduction to Asian Art (spring) 3 units
Art-Arch 113 History of Western Art, Architecture and Design (fall) 3 units
* A score of 4 or 5 on the AP Art History exam may be substituted for Art-Arch 113. To substitute a 4 or 5 on the AP Art History exam, you must earn at least a B in a related upper-division departmental course.

Elective courses:
Four courses at the 300 level or above must be from at least two of the following areas:
1. Ancient Mediterranean and Medieval Art and Archaeology
2. European Renaissance and Baroque Art
3. Modern American and European Art

4. Non-Western Art and Archaeology (such as Asian, Islamic)

5. Architecture

Each of these upper-level courses must be taken for a letter grade.

**Additional Information**

Courses at the 200 level and courses in the Colleges of Architecture or Art do not count for the minor. Students should have the proper prerequisites before enrolling in 300- or 400-level courses. Courses in other departments (including courses in the Sam Fox School of Design & Visual Arts) do not count for the minor unless they are cross-listed as Art History & Archaeology courses at the 300 level or above. At least two of the 300-level courses must be completed in residence at Washington University. Space in 400-level seminars is limited, and majors will be given priority over minors, even from wait lists. Internship credit may not be applied to the minor but does count toward graduation. To declare a minor, students must have completed at least four of the six required courses.

**Art History and Archaeology**

**L01 Art-Arch 106 Freshman Seminar: Van Gogh and the Avant-Garde**

This freshman seminar focuses on the art and career of Vincent Van Gogh, and his relationship to artists of the 1880s in France. We explore his art in connection to the movements of Impressionism, Japonism and Symbolism. We examine the avant-garde world of Paris, and Van Gogh's relationship to such figures as Gauguin, Bernard and Toulouse-Lautrec. The larger current of fin-de-siècle nostalgia for the countryside informs our study of his work in the south of France. Van Gogh's life and the critical reception of his art offer an excellent opportunity to study how the legends of modern art are formed. Visits to the St. Louis Art Museum complement our study. Readings include the artist's letters, critical studies and biographies of Van Gogh and key figures in his circle. No prerequisite, but either Art-Arch 112 or co-enrollment with Art-Arch 211 is recommended.

Credit 3 units. A&S : LA BU : HUM FA : AH

**L01 Art-Arch 107 Freshman Seminar: What's New? Contemporary Art in St. Louis and Beyond**

This freshman seminar. This course introduces a broad range of practices within the field of contemporary art (art of the past two to three decades), paying particular attention to museum collections and exhibitions in St. Louis (Kemper Art Museum, Saint Louis Art Museum, Contemporary Art Museum, the Pulitzer Foundation for the Arts and the Museum of Contemporary Religious Art). Works in both new and traditional media are discussed (ranging from photography and sculpture to installation, performance, film and mixed media). Readings include artists' statements, theoretical texts, art criticism and art historical essays. Students with little or no background in art history are encouraged to register. Class meetings are complemented by local field trips and some visits to artists' studios. No prerequisite.

Credit 3 units. A&S : TH BU : HUM

**L01 Art-Arch 1075 Freshman Seminar: What's New?**

**Contemporary Art in St. Louis and Beyond**

Freshman seminar. This course introduces a broad range of practices within the field of contemporary art (art of the past two to three decades), paying particular attention to museum collections and exhibitions in St. Louis. Space in 400-level seminars is limited, and majors will be given priority over minors, even from wait lists. Internship credit may not be applied to the minor but does count toward graduation. To declare a minor, students must have completed at least four of the six required courses.

Credit 3 units. A&S : TH BU : HUM

**L01 Art-Arch 111 Introduction to Asian Art**

Selected topics in the arts of South and East Asia from earliest times to the present day. Emphasis on the cultural setting and roles of the arts in Asian societies. Attention to cross-cultural comparisons and to media and technique. Classroom lectures; smaller, bi-weekly discussion sections. No prerequisite.

Credit 3 units. A&S : LA, CD A&S : IQ, HUM, LCD BU : HUM, IS

**L01 Art-Arch 113 History of Western Art, Architecture and Design**

A history of the visual arts, including architecture, sculpture, painting and design, from the ancient world to the present with emphasis on the relationship of art to society and to political and cultural events.

Credit 3 units. A&S : TH A&S : IQ, HUM

**L01 Art-Arch 116 Pompeii: Uncovering the Past**

This course examines the Roman city of Pompeii from archaeological, art historical and literary perspectives. Topics include the city's public spaces and religious sanctuaries, its grand mansions and common houses, its political systems and leisure activities. Class discussions probe the problems inherent
in the interpretation of a city captured in a moment of crisis, and how ancient literary tropes have affected our understanding of the archaeological remains. Students also investigate modern interpretations of the site in the form of novels, exhibitions and documentaries. Freshmen and sophomores only. No prerequisites.
Credit 3 units. A&S : TH A&S : IQ, HUM

L01 Art-Arch 120 Majors’ Colloquium
This one-credit course provides students the chance to explore opportunities available to majors in the history of art and archaeology both during their time at Washington University and post-graduation. It was developed in response to the suggestion of past graduating seniors, who requested more formal guidance in professional development. Topics discussed include, among others: securing internship and fieldwork experience; preparing for an honors thesis; applying to graduate school in art history and archaeology; preparing for careers in museum, gallery and academic fields; and transferring the undergraduate degree to graduate programs in business, law and medicine. Guest speakers from the university and from the St. Louis community attend various sessions to provide current professional perspective on relevant topics. Prerequisite: a declared major in the Art History and Archaeology. Other students with a strong interest in Art History and Archaeology are admitted at the discretion of the instructor.
Credit 1 unit. A&S : TH A&S : IQ, HUM

L01 Art-Arch 131 Art and War at the Dawn of Civilization
War is evil and has caused great harm to society. Contrary to commonly held belief, war — as opposed to strife — is neither a natural state of mankind nor has it always been a necessary evil. This course explores the origins, development and impact of warfare by examining works of art. Warfare emerged during the Bronze Age and was documented not in historical treatises but in various works of art and architecture that need art historical interpretation. In this class, we analyze normal strife as documented in pre-dynastic Egypt and the more normal state of affairs in pre-dynastic Mesopotamia where there was no war whatsoever but the society was instead completely matriarchal. We then witness how the discovery of metallurgy ca. 3000 BCE quickly brought about warfare in Mesopotamia and follow the extraordinary developments of warfare in the ancient world that gradually made it the necessary evil we know today. No prerequisites.
Credit 3 units. A&S : TH A&S : IQ, HUM

L01 Art-Arch 190B Introduction to Archaeology
Same as Anthro 190B
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : AH

L01 Art-Arch 200C World Archaeology
Same as ARC 200C
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : IS FA : SSP

L01 Art-Arch 215 Introduction to Modern Art, Architecture and Design
An introduction to major developments in modern art, architecture and design in Europe, the Americas and across the globe from the mid-19th century to the present. Focus is on the history and theories of modernism and its international legacies, and the relationship of the visual arts, architecture and visual culture more generally to the social, cultural and political contexts of the modern era. While the precise topics covered may vary from one instructor to another, foundational movements and trends discussed typically include Beaux-Arts style, the Arts and Crafts Movement, Impressionism, Symbolism, Art Nouveau, Cubism, Dada, Surrealism, Purism, Art Deco, the Bauhaus, the International Style, Abstract Expressionism, Pop Art, Minimalism and Postmodernism. Cross-currents in various media are emphasized as we seek to understand the origins and complexity of modern visual forms in relation to political and cultural history and to critical theory. Students engage a wide range of readings in historical sources, theories composed by artists, architects and designers, critical responses to the arts, and secondary critical literature.
Credit 3 units. A&S : TH A&S : IQ, HUM

L01 Art-Arch 225 Matisse and Picasso
These artists are considered individually, and in relation to such artistic movements as Cubism, Fauvism and Surrealism. Examines work in all media (painting, sculpture, decorative arts, theater and printmaking). Explores response to the political environment of modern France, including the two World Wars. Weekly class meetings, plus several required visits to the exhibit and to special lectures at the Saint Louis Art Museum. Class limited to 10. Prerequisite: Art-ARCH 112 or 211, or permission of instructor.
Credit 3 units. A&S : TH BU : HUM FA : AH

L01 Art-Arch 232 Myths and Monuments of Antiquity
An introduction to the ancient world (ca. 3500 BC to 400 AD) based on masterpieces of art and architecture from Mesopotamia, Egypt, Greece and the Roman Empire. The monuments are accompanied by a selection of myths and documents representing the cultural life of these ancient societies and constituting their legacy to our modern world.
Credit 3 units. A&S : LA, CD A&S : IQ, HUM, LCD

L01 Art-Arch 299 Internship in the Art Community
Prerequisite: a major or minor in Art History; permission of the undergraduate adviser requested in advance; and a letter from the sponsoring institution stating the nature of the internship.
L01 Art-Arch 3001 Writing-Intensive in Art History and Archaeology
Selected topics in Art History and Archaeology. Writing-intensive course; topics vary. See current semester listings. Prerequisite: permission of the instructor.
Credit 3 units. A&S: TH, WI A&S: IQ, HUM, WI BU: HUM FA: AH

L01 Art-Arch 307 Northern Renaissance Art
A survey of the major artistic developments in Northern Europe, ca. 1400–1575. The course looks at the production of painting, sculpture, printmaking, drawing, manuscript illumination and architecture in social, political and religious contexts. The major artists covered include Jan van Eyck, Rogier van der Weyden, Albrecht Durer, Hans Holbein, Hieronymus Bosch and Pieter Bruegel the Elder.
Credit 3 units. A&S: TH, WI A&S: IQ, HUM, WI BU: HUM FA: AH

L01 Art-Arch 311C Ancient Civilizations of the New World
Same as Anthro 310C
Credit 3 units. A&S: TH, CD A&S: IQ, HUM, LCD BU: HUM FA: AH

L01 Art-Arch 313 Art Restoration: Issues and Techniques
Focuses on the history, concepts and methods of art restoration and conservation. Focuses on construction techniques and the applied science of modern restoration. Emphasis on the importance of photographic documentation and restoration reports. Discussion of ethics. Includes visits to museums and restoration workshops. Final paper related to piece of art chosen during a museum or workshop visit, using acquired knowledge and insight. This course is part of the Art History Program in Florence and is taken in Florence, Italy.
Credit 3 units. A&S: TH A&S: IQ, HUM BU: HUM FA: AH

L01 Art-Arch 3161 Special Topics in Printmaking: History and Practice of Printmaking
This course focuses on the history and creation of prints. We examine the specificities of the medium, historically and in the present, that contribute to its particular meaning, and that render it distinct from other forms of visual culture. Ideas of expression, interpretation and ideological investment are seen on the continuum that ranges from the highly personal relationship of a print to its maker, to the commodification of the print within popular culture. Weekly lectures on the history of prints complement the studio sessions, as do field trips to studios of St. Louis artists, and visits to local museums. We look at prints in their historical role as reproductions in a pre-photographic age, as representations of shared religious and social values, and as vehicles of social or political critique. Artists discussed include, among others, Durer, Rembrandt, Daumier, Degas, Gauguin, Kirchner, Kollwitz, Warhol, Spero, Rauschenberg, Gonzales-Torres and Kiki Smith. All students make prints, and all write critical and historical analyses. Prerequisite: Art-ARCH 112 or Art-Arch 113.
Credit 3 units. A&S: TH BU: HUM FA: AH

L01 Art-Arch 3211 Art in the Egypt of the Pharaohs
A penetrating study of the artistic achievements in ancient Egypt during the Old, Middle and New Kingdom (ca. 3000–1100 BC) The great monuments of Egypt are considered both for their aesthetic importance and as expressions of the superior culture developing, flourishing and declining in the pristine valley of the Nile. Prerequisite: sophomore standing or permission of the department.
Credit 3 units. A&S: TH, CD A&S: IQ, HUM, LCD BU: HUM FA: AH

L01 Art-Arch 3301 Homeric Archaeology
The art and culture of prehistoric Greece as reflected in The Iliad and The Odyssey of Homer. The course examines, analyzes and researches the Minoan/Mycenaean civilization and its legacy that resulted in the renaissance of the 8th century BC. Topics range from the 20th to the 8th centuries BC and focus on major sites such as Knossos, Phaistos and Mycenae, burial customs, trade, warfare, and the emergence of the Greek city-state. No prerequisite.
Credit 3 units. A&S: TH, CD A&S: IQ, HUM, LCD BU: IS FA: AH

L01 Art-Arch 331 Greek Art and Archaeology
A survey of the artistic achievements and material culture of the Greeks from ca. 1000 BC to the birth of Christ (Iron Age through the Hellenistic period). Development of architecture, sculpture and painting, as well as minor arts and utilitarian objects, with emphasis on the insights they offer into Greek society and interactions with the wider Mediterranean world.
Credit 3 units. A&S: TH A&S: IQ, HUM BU: HUM FA: AH

L01 Art-Arch 334 Roman Art and Archaeology
The art and archaeology of the Romans, with emphasis on the late Republic and the Imperial period. Major monuments of sculpture and architecture, as well as town planning, domestic architecture and the minor arts are used as evidence for reconstructing ancient life.
Credit 3 units. A&S: TH A&S: IQ, HUM BU: HUM FA: AH

L01 Art-Arch 3355 From Parthenon to Pantheon: The Architecture of Ancient Greece and Rome
Classical architecture, defined as the architecture of the cultures of ancient Greece and Rome, forms a major part of the foundation of western architecture. Consistently updated, responded to, rejected, revived, dismissed, and revived again,
classical architecture has been a touchstone for architects for over two and a half millennia. This course examines the invention of classical forms in Greece and their subsequent development and spread throughout the Mediterranean region by the cultures of Greece and Rome. We will study form, function, style, and construction techniques, and we will see how these characteristics interact and influence one another over the course of time. We will see how different cities and cultures appropriated and interpreted canonical forms to create distinct regional styles. In the Roman period, we will see how emperors used architecture as a form of communication and propaganda to interact with their subjects. At the end of the class, we will briefly chart the course of classical architecture in later periods, to see how it has been accepted and rejected at different times. Prerequisites: L01 112, L01 113, L01 211, or L01 215, or permission of instructor. Credit 3 units. A&S : TH A&S : IQ, HUM

L01 Art-Arch 336 Ancient Sanctuaries: The Archaeology of Sacred Space in the Ancient Mediterranean
Like the Vatican today, ancient sanctuaries were both the focus of religious activities and repositories for artistic treasures. Marked off from the secular world by physical boundaries, the sanctuary provided a common ground where gods and humans came together through sacrifice, shared meals and other rituals. Shrines were often spectacularly sited and adorned with splendid architecture with both temples for the divinities and treasuries for the gifts they received. The course focuses on the great shrines of ancient Greece: Eleusis, the setting of the mysteries of Demeter; Olympia, home of the Olympic games. Credit 3 units. A&S : TH, CD BU : HUM FA : AH

L01 Art-Arch 3415 Early Chinese Art: From Human Sacrifice to the Silk Road
This course examines Chinese art and material culture from the prehistoric period through the end of the medieval Tang dynasty, when the Chinese capital boasted a cosmopolitan population of more than 1 million people. Topics covered include Neolithic ceramics and jades, the bronzecasting tradition, funerary art and architecture, the Terracotta Army, the origins of Chinese brush arts, Buddhist painting and sculpture, and the varied exotica of the Silk Road. Each class teaches recent works together with the ancient to demonstrate how the origins of Chinese art and architecture continue to influence contemporary works. Prerequisite: Art-Arch 111 Introduction to Asian Art or permission of instructor. Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD EN : H

L01 Art-Arch 3422 Art of the Islamic World
This course surveys the art and architecture of societies where Muslims were dominant or where they formed significant minorities from the 7th through the 20th centuries. It examines the form and function of architecture and works of art as well as the social, historical and cultural contexts, patterns of use, and evolving meanings attributed to art by the users. The course follows a chronological order, by which selected visual materials are treated along chosen themes. Themes include the creation of a distinctive visual culture in the emerging Islamic polity; the development of urban institutions; key architectural types such as the mosque, madrasa, caravanserai, palace and mausoleum; art objects and the arts of the illustrated book; cultural interconnections along trade and pilgrimage routes; Westernization and modernization in art and architecture. Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

L01 Art-Arch 3442 Tradition and Innovation: Chinese Painting from the 4th to 20th Centuries
This course examines the representative works by Chinese painting masters from the 4th to 20th centuries, with special emphasis on landscape paintings by scholar painters. We explore the innovations the masters created with the visual traditions from previous artists, to represent the development of Chinese painting in the history of 1,800 years. The course also traces the influence of Western masters on the different genres of modern Chinese paintings from the early 20th century to contemporary period. Readings and discussions cover Chinese traditional ink painting and Chinese oil painting. The development of specific iconographies and issues of Chinese painting masters also are discussed. Prerequisites: Art-ARCH 111 Introduction to Asian Art or one course in East Asian Studies recommended. Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L01 Art-Arch 3528 Introduction to Early Medieval Art and Architecture
This course surveys the artistic achievements of the medieval era in Western Europe from the fourth to the 9th century and in the eastern Mediterranean from the fourth to the 13th century. In addition to early Christian art of the late Roman, Carolingian, Ottonian, Anglo-Saxon and Byzantine worlds, we also consider works of art and architecture from the medieval Islamic and Jewish spheres as well as arts of the Migration Period. A broad geographic and chronological span — from England to the Near East and Constantinople to Spain; from the establishment of Constantinople in the 330s to cross-cultural exchange of the Crusader era — allows for full exposure to the rich variety of objects and monuments that fall under the rubric of early medieval art. Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L01 Art-Arch 353 History of Ancient Architecture
A survey of architectural history in ancient Greece and Italy. Selected groups of monuments illustrate the development of religious and secular buildings during the Minoan-Mycenaean, classical, Hellenistic and Roman periods. Prerequisite: Art-ARCH 112 or 113, or permission of the department.
L01 Art-Arch 3545 The Art and Architecture of Ancient Mesoamerica: Objects of Ritual, Places of Power
This course examines the artistic and architectural achievements of the civilizations of ancient Mesoamerica, a cultural region covering most of modern-day Mexico, Guatemala, Belize and Honduras. From the emergence of complex societies in the second millennium BC through the rise of the spectacular cities of the Maya and ending with the violent fall of the Aztec Empire in the 16th century AD, rulers of ancient Mesoamerica relied on a consistent set of themes, images and media to proclaim their religious and political authority. This class explores how artists, farmers, priests, elites, kings and other community members created a vast array of images and objects that expressed cultural ideals, political and religious narratives, and distinct ethnic and civic identities. Prerequisites: Art-ARCH 112, ARCH 200, Anthro 335 or permission of the instructor.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM

L01 Art-Arch 3591 Rembrandt van Rijn: A Lesson in Connoisseurship
The focus of the course is on modes of studying and understanding the work of Rembrandt van Rijn, one of the dominant artists of the Netherlands in the 17th century. Students are introduced to the history, culture and art of the Netherlands in the 17th century and to the work of Rembrandt as well as the analytical methods art historians have used to explain his work. Class sessions include the study of original Rembrandt etchings in the collections of the Saint Louis Art Museum, The Mildred Lane Kemper Art Museum and a private collection.
Credit 1 unit. A&S : TH A&S : IQ, HUM

L01 Art-Arch 360 Renaissance Architecture
The modern concept of the architect as creator and genius began with Filippo Brunelleschi, the great innovator of 15th-century Florentine art. The course explores the spread of architecture and architectural theory as it begins in the hands of the innovator and is expressed and changed by other men of genius such as Leon Battista Alberti, Donato Bramante, Michelangelo Buonarroti and Andrea Palladio.
Credit 3 units. A&S : TH BU : HUM FA : AH

L01 Art-Arch 361 Art of Early Italian Renaissance
A survey of Italian Renaissance art from its origins to the end of the 15th century, examining artists such as Giotto, Masaccio, Donatello, Botticelli and Leonardo da Vinci. Prerequisite: Art-ARCH 112 or 113.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : AH

L01 Art-Arch 362 High Renaissance Art
A general survey focusing on such outstanding figures of the period as Botticelli, Leonardo da Vinci, Michelangelo, Bellini, Giorgione, Titian.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : AH

L01 Art-Arch 3620 Mannerism in Italy
This course surveys the various embodiments of Mannerism, “maniera,” or what has been called the “stylish style,” in Italian art following in the wake of the High Renaissance. The nature of this self-conscious response to the achievements of the Raphael, Michelangelo and the revival of the antique has resisted easy classification both in contemporary writings and modern scholarship. The works of the “maniera” have been framed both in terms of decadence and refinement. The period was also a time of great social and religious upheaval, leading some to define Mannerism as a style of crisis. On the other hand, the deliberate elegance and grace that characterizes so many works responded to the tastes of court society. The course addresses the conflicting definitions of Mannerism by analyzing the works of art themselves and placing them in their social and cultural contexts.
Credit 3 units. A&S : TH BU : HUM FA : AH

L01 Art-Arch 3632 Renaissance Bodies: Art, Magic, Science
Against the notion of ideal classical form commonly associated with Early Modern art, this course pursues the complex and often contradictory conception of Renaissance bodies at the intersection of aesthetic ideal, empirical study and superstition. Topics include anatomical illustration, pornographic prints, bodily metaphors for the artist, and the corporeal representation of sin, holiness and savagery. Prerequisites: Art-ARCH 112, Art-Arch 113, Art-ARCH 211 or Art-Arch 215, or permission of instructor.
Credit 3 units. A&S : LA A&S : IQ, HUM EN : H

L01 Art-Arch 3635 Baroque Art
A survey of the development of painting and sculpture in 17th-century Europe. Emphasis on the works of Caravaggio, Bernini, Poussin, Rubens, Rembrandt and Velazquez. Prerequisite: Art-ARCH 112 or permission of the department.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : AH

L01 Art-Arch 3671 Michelangelo: Painter, Sculptor, Architect
An examination of his life, his work and his time. A consideration of the artist’s painting, sculpture and architecture in relation to his contemporaries and to the broad historical, political and artistic currents of his day. Prerequisite: Art-ARCH 112.
Credit 3 units. A&S : TH BU : HUM FA : AH

L01 Art-Arch 370 The American West: The Image In History
Examines representations of the American West and of the frontier encounter between Euro-American and Native American cultures, from the early 19th to the early 20th centuries. We
consider travel accounts, fiction painting, ledger drawings, photography and film in order to analyze the ways in which historical circumstances have shaped artistic and literary representations. At the same time, we look at how images and texts have shaped formative myths about the West that in turn leave their impact on history.

Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD  BU : HUM  FA : AH

L01 Art-Arch 3712 Art and Culture in America's Gilded Age
Developments in American culture from the end of the Civil War to the turn of the century: novels, buildings, images, public and private spaces of this transitional period — a time of new class formation, of unparalleled social diversity, and of new urban forms. The connections between art, literature and social experience. Representative figures include Henry James, Henry Adams, Louis Sullivan, Stanford White, Thomas Eakins, Louis Tiffany.

Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : BA  FA : AH

L01 Art-Arch 372 American Art to 1960
From the beginnings of modernism in the visual arts of the United States, around 1900, to Abstract Expressionism and the Beat aesthetic. Focus on the cultural reception and spread of modernism, native currents of modernist expression, from organicism to machine imagery, the mural movement and the art of the WPA, the creation of a usable past, abstraction and figuration, regionalism and internationalism, photography and advertising.

Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM  FA : AH

L01 Art-Arch 376 American Modernism, 1900–1940
American modernism: what is it? What is the nature of its encounter with mass culture? What happened to modernism as it migrated from its “high” European origins to its “middlebrow” version in America between the turn of the century and the eve of World War II? What was the rhetoric of modernism in everyday life — its impact on design, photography, advertising? In addition to the fine arts, we look at popular media, film and photography. Lecture/discussion. Prerequisite: Art-ARCH 211 Introduction to Modern Art or permission of the instructor.

Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM  FA : AH

L01 Art-Arch 3762 American Modernisms, 1900–1940
American modernism: what is it? What is the nature of its encounter with mass culture? What happened to modernism as it migrated from its “high” European origins to its “middlebrow” version in America between the turn of the century and the eve of World War II? What was the rhetoric of modernism in everyday life — its impact on design, photography, advertising? In addition to the fine arts, we look at popular media, film and photography. Lecture/discussion. Prerequisite: Art-ARCH 113, Art-ARCH 211 or Art-ARCH 215, or permission of instructor.

Credit 3 units.  A&S : TH

L01 Art-Arch 3782 Modern Art 1905–1960
This course investigates topics in European painting, sculpture, architecture, photography and film. Lectures and readings address major artistic developments, including Cubism, De Stijl, Futurism, Expressionism, Dadaism, Constructivism, Surrealism, the Bauhaus and Art Brut. Prerequisite: Art-ARCH 211 Introduction to Modern Art or permission of instructor.

Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM  FA : AH

The course surveys major tendencies in painting and sculpture from Fauvism in France and Expressionism in Germany to the beginnings of Postmodernism in photo-based work in the United States. About two-thirds of the course treats European art, about one-third treats American art. Photography, architecture and work in other forms are considered selectively when pertinent to the individual class topics. Within the lecture topics, emphasis is on avant-garde innovation; the tension in modernist art between idealism and critique; reaction by artists to current events; relationship between art and linguistics, philosophy, literature, economics and science; the role of geopolitics in art production; intersections of art and society; the role of mass culture; issues of race and gender in the production and reception of art; the challenge to the concept of authorship and creativity posed by Postmodernism at the end of this period. Prerequisites: Art-ARCH 112, Art-Arch 113, Art-ARCH 211 or Art-Arch 215; one 300-level course in Art History preferred; or permission of instructor.

Credit 3 units.  A&S : TH  A&S : IQ, HUM  EN : H

L01 Art-Arch 3785 Photography in America
This course considers the practice and use of photography in America from its invention up to the present, offering various ways of thinking about the medium and its relation to society and culture. Students come to understand the ways photographic practices shape public perceptions of national identity, ethnicity and gender, nature, democratic selves, and a host of other concerns. We discuss famous practitioners such as Matthew Brady, Jacob Riis, Lewis Hine, Walker Evans and Robert Frank. We consider not only the social and public uses of the medium through such episodes as the New Deal/FSA and photojournalism, but also the private explorations of “fine art” photographers, and the everyday practices of the snapshot. Prerequisites: Art-ARCH 112 Introduction to Western Art or Art-ARCH 211 Introduction to Modern Art or one course in American History, American Cultural Studies or permission of the instructor.

Credit 3 units.  A&S : TH  A&S : IQ, HUM
L01 Art-Arch 3822 City and Country in Late Impressionism 1880–1905
This course considers the relationship between the Parisian art world and the avant-garde painters who retreated to the countryside between 1880 and 1900 to paint rural landscapes, provincial life and exotic locales. We consider the artistic dialectic of city and country through examining the art and careers of Van Gogh in Provence, Gauguin in Brittany and Tahiti, Cézanne in Aix and Monet in Giverny, among others. We consider such themes as artist colonies, the market for landscape, rural escape as a critique of bourgeois urbanism; and the connections between tourism and the nostalgia for the provincial and the exotic.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM

L01 Art-Arch 3831 Art in the Age of Revolution: 1789–1848
European painting, sculpture and printmaking from the French Revolution to the mid-19th century; French, English, German and Spanish artists discussed in social and aesthetic context, with a focus on links between art and ideology in times of political turmoil. The styles of classicism and romanticism, the rise of history painting, and the development of realism in both landscape and genre painting. Prerequisite: Art-ARCH 112 or permission of the instructor.
Credit 3 units. A&S : TH BU : HUM FA : AH

L01 Art-Arch 3833 Realism and Impressionism
An examination of the development of European art from approximately 1848 to the mid-1880s, with a focus on the development of Realism and Impressionism in England and France. Issues explored include the breakdown of academic art, the rise of landscape and naturalist themes, the emergence of alternative exhibition spaces and new dealer systems, and the relationship between gender and avant-garde practice. Prerequisite: Art-ARCH 112 or Art-ARCH 211 or permission of instructor.
Credit 3 units. A&S : TH BU : HUM FA : AH

L01 Art-Arch 3835 The Art Museum: History, Theory and Design
The course studies the conceptual basis of the institution of the art museum in the United States and Europe, including its history, theoretical foundations, design and cultural function. We begin with the origins of the modern museum in the 18th century and earlier; trace the development in the 19th century of the earliest national art museums in the U.S. and Europe; consider the opportunities and problems of museums of modern and contemporary art in the 20th century; address the question of appropriate architectural strategies for art museums of the past and the present; and consider a variety of developments in the art museum today. We study and visit art museums in St. Louis and take a field trip to selected art museums in Davenport and Des Moines. Prerequisite: Art-ARCH 211 Introduction to Modern Art or ARCH 2284/4284 Architectural History II or permission of instructor. Students in the College of Architecture may register for this course under the assigned College of Architecture course number.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM

L01 Art-Arch 3838 Modern Art in Fin-de-Siècle Europe, 1880–1907
This course examines artistic production at the turn of the century in France, Belgium, England and Scandinavia. Beginning with the re-evaluation of impressionism and naturalism in France, we examine Neo-Impressionism (Seurat and Signac) and Symbolism (Moreau, Van Gogh, Gauguin, the Nabis, Rodin, Munch), as well as later careers of impressionists (Cassatt, Monet, Degas, Renoir). Considers cross-national currents of Symbolism in Belgium and Scandinavia; the Aesthetic Movement in Britain; the rise of expressionist painting in French art (particularly with the Fauvism of Matisse and Derain), and the juncture of modernist primitivism and abstraction in early Cubism (Picasso). Prerequisite: Art-ARCH 112 or permission of the instructor.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM

L01 Art-Arch 3862 The Mediterranean and French Modernism
This course surveys the development of the Mediterranean region as an important site of modernist artistic practice. Among the artists considered are Pierre-Auguste Renoir, Henri Matisse, Pablo Picasso, Marc Chagall and Yves Klein. Excursions to museums and other artistic sites.
Credit 1 unit. A&S : TH A&S : IQ, HUM

L01 Art-Arch 3875 Dada and Surrealism in Europe and the United States
In this multimedia, interdisciplinary course, we consider the history, theory and practice of Dada and Surrealism, from its Symbolist and Expressionist roots at the end of the 19th and the beginning of the 20th centuries through its late expressions in Beat culture and Pop art of the 1950s and 1960s. Dada’s emergence in Zurich and New York in the midst of World War I set the tone for its stress on irrationality as an oppositional strategy. Surrealist research into the domain of the unconscious continued this extreme challenge to dominant culture, but in a revolutionary spirit that proposed new possibilities for personal and collective liberation. The international character of the movements, with substantial cross-transmission between Europe and the United States, are emphasized. Prerequisite: Art-ARCH 112 Introduction to Western Art or Art-ARCH 211 Introduction to Modern Art or permission of instructor.
Credit 3 units. A&S : TH A&S : IQ, HUM

L01 Art-Arch 388 Contemporary Art
A survey of global contemporary art from 1970 to the present. Topics: happenings, minimalism, body art and neo-expressionism, placed in their social and political contexts. Prerequisites: Art-ARCH 112, Art-Arch 113, Art-ARCH 211, or Art-Arch 215, or permission of instructor. Credit 3 units. A&S : TH A&S : IQ, HUM BU : IS

L01 Art-Arch 3888 Museum Theory and Practice
This course explores the history of fine art museums and related debates on the nature of collecting and modes of display. Using historical and theoretical texts as well as select case studies, we focus on how the evolving structure and mission of the museum impact our understanding of art. Topics include the Renaissance “cabinet of curiosities,” the Salon controlled by the French Academy, the rise of the modern art museum, and the proliferation of contemporary curatorial strategies in today’s global art world. In addition to the study of the history of exhibitions and the role of the museum, the course also investigates the various jobs and responsibilities that people hold within museums. Guest speakers include members of the curatorial, publications, registration, education and installation staff at the Mildred Lane Kemper Art Museum. We also take advantage of the distinct art institutions in St. Louis, exploring exhibitions and permanent collection displays at the Kemper Art Museum, Saint Louis Art Museum, the Pulitzer Foundation for the Arts, and the Contemporary Art Museum. Prerequisite: Art-ARCH 112 Introduction to Western Art or Art-ARCH 211 Introduction to Modern Art or permission of instructor. Credit 3 units. A&S : TH A&S : IQ, HUM

L01 Art-Arch 3892 Modern Sculpture: Canova to Koons
This course surveys sculpture in Europe and the United States from about 1800 to the present, with an emphasis on the period 1890–1980. A rapid traverse of Neoclassicism, Realism and the rage for statuary in the later 19th century take us to the work of Rodin and a more systematic exploration of developments in sculpture of the 20th century. Particular emphasis also is given to the work of Brancusi, Picasso, Matisse, Duchamp, Giacometti, Oppenheim, David Smith, Serra, Morris, Judd, Hesse and Bourgeois. An important theme running through the course as a whole, from an age of nationalism and manufacturing to our own time of networks and information, is the changing definition of sculpture itself within its social and political context. We also explore various new artistic practices — video, performance, installations and body art, for instance — and interrogate their relationship to sculptural tradition and innovation. Prerequisite: Art-ARCH 112 Introduction to Western Art or Art-ARCH 211 Introduction to Modern Art, or permission of instructor. Credit 3 units. A&S : TH A&S : IQ, HUM

L01 Art-Arch 4000 Topics in Art History and Archaeology
Prerequisites: Art-ARCH 112, Art-Arch 113, Art-ARCH 211 or Art-Arch 215; one 300-level course in Art History preferred; or permission of instructor. Credit 3 units. A&S : TH A&S : IQ, HUM

L01 Art-Arch 4002 The Decorative Aesthetic in Modernism, 1860–1960
In the criticism of modern art, decoration and decorative have often been used as pejorative terms, designating art that has no intellectual basis but is merely pleasing, intended to fill space and delight the eye. But in the late 19th century, these terms carried important cultural value, and opened the door to significant experiments in abstraction. Moreover, the decoration of a public space or surface may have political implications. This course investigates decoration and theories of “the decorative” in modern art in Europe and the United States, with special attention to the evolution of ideas of modernism in both 2-dimensional and 3-dimensional environments. We also consider some of the political meanings that may be borne by both public mural painting and domestic decoration, as well as easel painting that aspires to conditions of the decorative. Key figures include Puvic de Chavannes, Morris, the Nabis, Van de Velde, Monet, Matisse, the Mexican muralists, Pollock and Shapiro. Prerequisite: Art-ARCH 211 Introduction to Modern Art, or any 300-level course in art history, or permission of instructor. Credit 3 units. A&S : TH

L01 Art-Arch 4015 Theories of Modern Art and Architecture
The course presents theories of art and architecture from the 19th to the 21st century in their historical contexts through a set of in-depth investigations of selected topics. Some knowledge of history and theory is integral to contemporary understandings of the disciplines of art, art history and architecture. To foster a historical understanding of theories of modern art and architecture, we discuss a selection of key texts, divided into three sections: theoretical sources of modern art and architectural history in the 19th century; theories of modernism, from the formalist to the Marxist; postmodern critiques of modernism, in such areas as feminist theory and poststructuralism. Class visits to Sullivan and Adler's Wainwright Building (1890–91), Saarinen's Arch at the Jefferson National Expansion Memorial (completed 1964), Ando's Pulitzer Foundation for the Arts (2001), and Maki's Kemper Museum of Art (2006) are integral to the work of the course. Prerequisite: Either Art-ARCH 112 Introduction to Western Art or Art-ARCH 211 Introduction to Modern Art and any 300-level course in art history; or permission of instructors. Credit 3 units. A&S : TH A&S : IQ, HUM

L01 Art-Arch 426 Ancient Athens
Athens was one of the great cities of antiquity. From lavishly decorated marble temples on the Acropolis, to public office buildings and inscriptions in the Agora (civic center), to the
houses of the living and the monuments for the dead, the city has left a rich record of her material culture. These buildings and objects, together with an exceptionally large number of literary and historical texts, make it possible to paint a vivid picture of the ancient city. This course concentrates on the physical setting and monuments of Athens, as revealed by both archaeology and texts, and how they functioned within the context of Athenian civic and religious life.

Same as Classics 426
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : HUM FA : AH

L01 Art-Arch 427 Athenian Vase Painting
From the late 7th to the late 4th century BCE, Athenian artisans produced pottery of high quality that was particularly outstanding for its figured decoration. This seminar investigates the technology and history of this craft, with particular emphasis on the iconography of the figured scenes. Topics discussed include the relationship of form, decoration and function; the relationship between figured decoration and the textual sources; the role of pottery as an export; and genre scenes as a basis for investigating ancient Athenian society. Prerequisite: Art-ARCH 311 Greece Art and Archaeology, ARCH 331, Classics 350 or permission of instructor.
Credit 3 units. A&S : TH

L01 Art-Arch 430 Topics in Northern Renaissance Art
Credit 3 units. A&S : TH

L01 Art-Arch 4321 Ancient Coins
The seminar is designed to research the rich world of Greek and Roman coinage by using the university’s own resource, the J.M. Wulfing collection of coins. Emphasis on coin typology, works of art or buildings illustrated on our coins, and the history of coinage. We use actual coins in the gallery. Due to the delicate nature of the material, the course is by permission of the instructor only.
Credit 3 units. A&S : TH FA : AH

L01 Art-Arch 433 Greek Vase Painting
This seminar examines vase painting from the geometric period (ca. 800 BC) to the end of the red-figure style (ca. 350 BC), but the majority of class time is spent looking at Attic vase-painting of the 6th and 5th centuries BC. The iconography of Greek vases, particularly Attic black-figure and red-figure, provides an extraordinary view into the culture and beliefs of contemporary society. Some vases are clearly made as grave offerings, others as votive offerings at sanctuaries, and still others for use at home. The focus of this seminar is the relationship of a vase’s images to the context of its use. How much does the intended use and audience for the vase determine the images on it? These important questions have not received much attention by scholars, and class papers may possibly result in publications. Enthusiastic class participation required. Occasional responsibility for presentation of weekly readings. Class paper and presentation.
Credit 3 units. A&S : TH FA : AH

L01 Art-Arch 435 The Parthenon
A study of the architectural design, aesthetic principles, engineering and construction of the greatest Greek building. Its architecture is considered in conjunction with its immense sculptural program that revolutionized European art. We penetrate deeply into the background of this remarkable work of art and try to understand it by placing it in its proper context and comparing it with other similar efforts in Classical Greece. Prerequisite: junior or senior standing or permission of instructor.
Credit 3 units. A&S : TH A&S : IQ, HUM FA : AH

L01 Art-Arch 437 Greek Sculpture
The development of Greek sculpture from its earliest beginnings (ca. 800 BC) through the time of Alexander. Early influences from Egypt and the Near East. Sculpture’s relation to changing artistic concepts and the changing character of Greek society. Prerequisites: Art-Arch 331, permission of instructor.
Credit 3 units. A&S : TH A&S : IQ, HUM FA : AH

L01 Art-Arch 4371 Greek and Roman Pottery
Pottery is the most commonly found artifact on virtually all Classical sites. It therefore serves as an essential tool for the dating and interpretation of monuments and features in excavation. It also offers evidence for trade, diet, life style and many other aspects of ancient life. The course examines the typology and chronology of the major pottery types produced from the 6th century BCE to the 4th century CE, as well as the ways in which pottery has been used to throw light on the culture and society of the ancient Greeks and Romans. Prerequisite: permission of instructor.
Credit 3 units. A&S : TH FA : AH

L01 Art-Arch 4375 Ancient Greek Sculpture in Context
Sculpture counts among one of the greatest artistic achievements of ancient Greece, and one that has had the greatest impact on the art of later periods. This course focuses on original works of art of the Archaic and Classical periods (600–300 BCE), placing emphasis on how study of their contexts — the places in which they were produced, displayed and found — contributes to our understanding of their place in the ancient world. Background material, which is covered at the beginning of the semester, includes the origins of monumental Greek sculpture at the beginning of the Archaic period (late 7th to early 6th century BCE), and the stylistic development of the Archaic and Classical periods. We then proceed to discussion of various types of sculpture (architectural, cult statue, votive, commemorative, funerary) and how these works functioned...
within the context of the Panhellenic sanctuary, the city sanctuary, the secular center of the city, and the necropolis. In a different view of context, we also consider sculpture recovered from ancient shipwrecks, looted art on its way to the ancient Roman art market. Prerequisite: Art-Arch 331 or permission of the instructor.
Credit 3 units. A&S : TH A&S : IQ, HUM

L01 Art-Arch 444 The Forbidden City
Home to 24 emperors of the Ming and Qing dynasties (1368–1911), the Forbidden City today occupies the heart of Beijing and comprises the largest ensembles of premodern architecture in China. This seminar examines the origins of the palace, its construction in early Ming, the coded symbolisms of its plan and decoration, the rituals of court, and the lives of its denizens, from emperors (including Pu Yi, the “last emperor”) to concubines, from Jesuit missionaries to eunuchs. The course also considers the 20th-century identity of the site as a public museum and the backdrop to major political events, as well as its role in the urban design and contemporary art of 21st century Beijing. Prerequisites: Art-ARCH 112, Art-Arch 113, Art-ARCH 211 or Art-Arch 215; one 300-level course in Art History preferred; or permission of instructor.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD FA : AH

L01 Art-Arch 4482 Japanese Prints: Courtesans, Actsors and Travelers
Woodblock prints of the 18th and 19th centuries and their relationship to literature and popular culture. Topics include the life of the pleasure quarters, sexuality and the “erotic,” parody, kabuki theater and the representation of women. Prerequisite: 3 units in Japanese painting, or permission of instructor.
Credit 3 units. A&S : TH A&S : IQ, HUM

L01 Art-Arch 4494 East, Meet West: Cross-Cultural Aesthetics in Chinese and Japanese Art
This seminar grounded in cross-cultural aesthetics examines East Asian visual responses to European art and science from the 16th through 19th centuries. First introduced by Jesuit missionaries, continued by merchants, and culminating with the 16th through 19th centuries. First introduced by Jesuit missionaries, continued by merchants, and culminating with colonial enterprises, the same Western ideas and works left very different impressions on China and Japan. An introduction to cross-cultural aesthetics from both Western and East Asian perspectives lays the theoretical foundation to engage these works of art, before proceeding thematically through time to cover painting, cartography, woodblock prints, ceramics and photography within transregional and transcultural contexts. Prerequisites: at least one course in Asian art or permission of instructor.
Credit 3 units. A&S : TH A&S : IQ, HUM

L01 Art-Arch 4615 Caricature: The Culture and Politics of Satire
This course examines the golden age of caricature. Beginning with the prints of William Hogarth, we look at the caricatural traditions in France and England from the late 18th-century through the early 20th century. Special emphasis is placed on visual satire as a vehicle for social and political critique, on theories of humor (particularly Baudelaire and Bakhtin), and the development of a mass market for this imagery. Other figures discussed include Rowlandson, Cruikshank, Daumier, Gavarni, Philpon, and Gil. We take advantage of a major collection of French caricature in the Mildred Lane Kemper Art Museum at Washington University, as well as collections available for study in Olin Library and at the St. Louis Art Museum. Prerequisites: Art-ARCH 112 or Art-ARCH 211, or a 300-level course in modern European history or literature, or permission of the instructor.
Credit 3 units. A&S : TH A&S : IQ, HUM

L01 Art-Arch 4621 Leonardo da Vinci
Leonardo da Vinci is universally recognized to be one of the greatest artists of all time. But who was Leonardo? Artist or scientist? Master, magus or myth? This seminar explores the reality and fiction of a fascinating, yet enigmatic genius, as well as placing this unique individual in the contexts of Renaissance Italy and the modern imagination.
Credit 3 units. A&S : TH A&S : IQ, HUM

L01 Art-Arch 4624 Michelangelo
An examination of the life and works of Michelangelo. The most important developments in his architecture, painting and sculpture; with special attention to his assistants, friends, family and contemporaries. Prerequisite: permission of instructor.
Credit 3 units. A&S : TH A&S : IQ, HUM FA : AH

L01 Art-Arch 4625 Venice
A seminar focusing on the art of Venice, in particular on Bellini, Giorgione and Titian. Special attention to the international reputations of these three artists and to problems of patronage, connoisseurship and interpretation. Prerequisite: Art-Arch 361 or 362, or permission of the instructor.
Credit 3 units. A&S : TH A&S : IQ, HUM FA : AH

L01 Art-Arch 4626 The Renaissance and the Ancient World
Few topics in Renaissance cultural studies have attracted as much attention as the encounter with and “revival” of the arts and learning of classical antiquity. Recent scholarship shows, however, that antiquity for Renaissance Italians was neither a historical period nor a monolithic concept, but was an ever-shifting construct which served a variety of agendas. This seminar explores Renaissance conceptions of the ancient world in their many guises, from antiquarian study, artistic style, antiquities collections, forgery and imitation, as well as notions of artistic time and place. Focusing on the major cultural centers of Rome, Florence and Venice, we also consider how regional...
and civic identity influenced attitudes toward ancient history and
monuments. “Antiquity” is defined broadly — as it was during the
Renaissance — encompassing the diverse civilizations of Egypt,
Greece, Rome and Etruria, as well as Early Christianity and
Byzantium. Prerequisites: Art-ARCH 112 Introduction to Western
Art, one 300-level course in Art History preferred, or permission
of instructor.
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L01 Art-Arch 4662 Michelangelo the Architect
When, why and how did the great Renaissance sculptor, painter
and poet Michelangelo Buonarroti become and architect? This
seminar surveys Michelangelo’s built and unbuilt architecture, his
methods and extant drawings, and the process and influence of
his creations.
Credit 3 units.  A&S : TH  FA : AH

L01 Art-Arch 467 Topics in Baroque Art
Credit 3 units.

L01 Art-Arch 4678 Bosch and Bruegel
Humor, monstrosity, violence and vernacular culture pervade
the oeuvres of Hieronymus Bosch and Pieter Bruegel the Elder,
two of the most seminal artists of the Northern Renaissance.
This course addresses the complexity of their oeuvres and the
methodological problems raised in the interpretation of their
enigmatic imagery, with a particular focus on the dissemination
of their artistic personas in print. Prerequisites: Art-ARCH 112,
Art-Arch 113, Art-ARCH 211, or Art-Arch 215; one 300-level
course in Art History preferred; or permission of instructor.
Credit 3 units.  A&S : LA  A&S : IQ, HUM  EN : H

L01 Art-Arch 4721 American Art and Culture, 1945–1960
The rise and “triumph” of Abstract Expressionism has long
dominated the story of American art following World War II.
This new seminar puts Abstract Expressionism into context with
parallel developments in the arts, photography and film. Among
the topics we consider: the conversation between émigré artists
and American culture during and after the war; the emergence of
a “noir” aesthetic in film and literature; the early work of Jasper
Johns and Robert Rauschenberg and the so-called “aesthetic
of indifference” in relation to Abstract Expressionism; artistic
collaborations at Black Mountain College; New York school
photography and photojournalism; and the cultural impact of the
A bomb. Prerequisite: a 300-level course on 20th-century art,
photography or history; or permission of the instructor.
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L01 Art-Arch 473 Art and Culture in Fin-de-Siècle America
The particular climate of the fin-de-siècle and its expression in
art, architecture and letters. Concurrent development in Vienna,
Paris and London as basis for comparison. Themes include
new theories of mind and perception, the fate of rationalism,
the “crisis in bourgeois values,” and redefinitions of gender.
Prerequisite: permission of instructor.
Credit 3 units.  A&S : TH  FA : AH

L01 Art-Arch 474 Topics in American Art
Credit 3 units.  A&S : TH  FA : AH

L01 Art-Arch 4743 Imagining the West
The historical, visual, literary and scientific encounter of
Europeans and European-Americans with the North American
frontier. Examines how the West as myth and reality was
assimilated into, and imaginatively colonized by, both Europe
and America from the pre-discovery period through the end of
the 19th-century. Images of the first encounter, cultural
dynamics of the colonization process, cultural resistance of
native Americans. Field trips, guest lectures. Prerequisite: 100-,
200- or 300-level courses in Art History; or 300-level courses
in European or American 19th-century comparative literature,
history; or permission of instructors.
Credit 3 units.  A&S : TH  FA : AH

L01 Art-Arch 475 The City in American Arts and Popular
Culture, 1910–1940
Using visual media-painting; prints and illustration; film and
animation — along with studies of vaudeville, and other forms
of popular and mass entertainment — this seminar analyzes
the presence of the city as a theme that registers a range of
cultural attitudes toward the modern. Through close readings
of visual and verbal texts, we consider such issues as the
relationship between work and leisure, and between high culture
and popular arts. We look at critiques and celebrations as well
as at how the popular arts help the ordinary man and women to
negotiate the challenges of the new mechanized and overscaled
urban environment. Prerequisites: 300-level course in American
20th-century cultural history; or American art or literature; or
permission of instructor.
Credit 3 units.  A&S : TH  A&S : IQ, HUM  FA : AH

L01 Art-Arch 4770 Cosmopolitan and Native Modernisms:
The U.S. and Europe between the Wars
This seminar focuses on two contrasting currents within
American and European modernism between the two world
wars: native and cosmopolitan. Alternating between the United
State and France, it begins in the years before World War I and
concludes with the rise of virulent forms of cultural nationalism in
the late 1930s. We consider the subjects, personalities, aesthetic
strategies, and political and social investments associated with
these alternative modernisms, linked to a search for
roots, on the one hand, and on the other, to a desire for forms
of spatial and social mobility. Comparing “homegrown” and
expatriate experience, we consider divergent attitudes toward
today, gender, nation, time and nature, analyzing these two
fundamental responses to modernity in relation to one another.
Prerequisites: Art-ARCH 112 Introduction to Western Art or Art-
ARCH 211 Introduction to Modern Art; one 300-level course in
Art History preferred; or permission of instructor.
Credit 3 units.   A&S : TH    A&S : IQ, HUM

L01 Art-Arch 4771 Gender in 19th-Century Art
An examination of the representation of gender, i.e. the
construction of male and female identities through images,
and the role of gender in artistic practice. Readings and
class discussion focus on American, French and English art.
Prerequisite: Survey of modern art; any 300-level course in
19th-century American/European art or culture; or permission
of instructor.
Credit 3 units.   A&S : TH, SD    FA : AH

L01 Art-Arch 4776 Art and Culture in 1930s America
An interdisciplinary look at the production of culture in the United
States during the Depression years between the stock market
crash and the nation’s entry into World War II. Focus on the
evolving dialogue between aesthetic concerns and political
commitment. We consider the role of the state as an agent of
culture, the relationship between leftist politics and modernism,
regionalism and internationalism, debates over the nature of
documentary photography, and attitudes toward the past in New
Deal art, among other topics. Prerequisite: 300-level course
in European or American 20th-century art or cultural history,
concurrent enrollment in Art-Arch 372, or permission of
the instructor.
Credit 3 units.   A&S : TH, SD    FA : AH

L01 Art-Arch 4782 Modern Architecture in St. Louis
Credit 3 units.   A&S : TH    A&S : IQ, HUM

L01 Art-Arch 4785 Art and Culture in 1920s America
This interdisciplinary examines the relationship between
art and 1920s culture in the United States: how artists and
critics thought about the nature of our cultural heritage — its rich
possibilities and its limitations; the potential of technology and
urbanization as well as the threats they pose to older cultural
values; the nature of a multicultural society and the contributions
of minority traditions to the evolution of American culture; the
lure of the Southwest; early criticism of popular media; and the
conversation between popular culture and high art. Prerequisite:
Art-ARCH 112 or permission of instructor.
Credit 3 units.   A&S : TH

L01 Art-Arch 481 Topics in Modern Art
The sources, styles, influences and content of the art of such
artists as Gauguin and Cézanne examined in the context of
contemporary movements in art and literature. Prerequisite: Art
History major or permission of instructor.
Credit 3 units.   A&S : TH    FA : AH

L01 Art-Arch 4816 Art and Culture in Fin-de-Siècle Europe
An examination of painting, photography and the decorative
arts in France during the period between the two World’s Fairs
of 1889 and 1900. Artistic movements include Symbolism
(Van Gogh, Gauguin, Redon), later Impressionism (Monet
and Morisot), Neo-Impressionism (Seurat and Signac) and
Art Nouveau. Themes include urban leisure and cafe
culture; the agrarian ideal; the promises and threats of science
and technology; the lure of the primitive; and the impact of
nationalism and feminism on the arts. Prerequisites: Art-ARCH
211; any 300-level course in 19th-century art, literature or
history; or permission of instructor.
Credit 3 units.   A&S : TH    FA : AH

L01 Art-Arch 4818 Matisse and Modernisms
Certain artists generate enormous interest during their lifetimes
and long after. Over time the work of such artists is subjected to
a variety of interpretive approaches in light of changing trends
in art criticism and art history; the influence of contemporary
art; the ebb and flow of interest in different aspects of the
artist’s production; changes in the political landscape; and
the changing sense of how the artist’s work intersects with
contemporary cultural developments. This set of intersecting
concerns is especially fluid in the modern period, when there is
no single dominant idea of the role of art in society. The variety
of interpretive strategies developed from and applied to the work
of Henri Matisse demands a critical reading of the extensive
literature on the artist, as well as an understanding of the variety
of modernisms through which to assess his artistic project.
Students gain a thorough familiarity with the work of one of
the most influential artists of the 20th century; engage aspects
of the historiography of 20th-century art through a survey of
developments in the Matisse literature; and develop a specific
topic in Matisse’s art, or the writing about his art, into a class
presentation and research paper. Prerequisites: Art-ARCH 112,
Art-Arch 113, Art-ARCH 211 or Art-Arch 215; one 300-level
course in Art History preferred; or permission of instructor.
Credit 3 units.   A&S : TH    A&S : IQ, HUM

L01 Art-Arch 4854 Gauguin in Polynesia: The Late Career
This seminar focuses on the late career of Paul Gauguin, in
Tahiti and the Marquesas. This course examines closely the
colonial context of fin-de-siècle French Polynesia. Gauguin’s
response to indigenous culture, his ongoing interests in European
currents of theosophy and anarchism, the development of his
primitivist style in response to the French avant-garde, and
Gauguin’s legacy to modern art and culture in the early 20th
century. Readings range from primary texts (literature and
journals read by the artist, his letters, his satirical articles and
An interdisciplinary investigation of the development of exoticism and primitivism in Europe from the Enlightenment to World War II. Topics include exoticist representations of non-Western cultures; the links between colonialism and orientalism; the intersection of discourses on race and gender with exoticism; and the anti-modernist impulse of fin-de-siècle primitivism. Sample artists and authors include Chateaubriand, Delacroix, Flaubert, Gauguin, Picasso and Matisse. Prerequisites: any 300-level course in Art History and permission of the instructor.
Credit 3 units. A&S : TH A&S : IQ, HUM FA : AH

L01 Art-Arch 4867 The Impressionist Landscape: Style, Place and Global Legacies 1870–1920
We consider Impressionism as a dominant style of the Parisian art world, first undertaken as an extension of Barbizon naturalism, but soon expanded into an avant-garde style that objectified sensation and emotion in the name of truth in representation. We examine the place of individual perception, the physiology of sight, and theories of the natural in the development of the Impressionist landscape, through the consideration of style, genre, artistic theory and these artists’ investment in particular sites. Furthermore, the social, commercial and critical networks that supported the movement are analyzed. Particular attention is given to Monet, and a special exhibition of his water lily paintings on view at the Saint Louis Art Museum. Other key artists include Degas, Morisot, Renoir and Cassatt. We also discuss the relationship of the Impressionist landscape to the development of modernist abstraction, and the aesthetic and nationalist motivations for its appropriation across the globe. Prerequisite: Art-ARCH 112 Introduction to Western Art, Art-ARCH 211 Introduction to Modern Art, or permission of instructor.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

L01 Art-Arch 4877 Critical Studies in Portraiture, Ancient to Contemporary
To study portraiture is to confront the complexity of human identity. The central theoretical question of this course is how identity can be expressed in a portrait. Following consideration of theories of portraiture, identity and artistic representation, we treat specific historical and cultural instances of portraiture-making, from ancient Greece to the present. Non-Western cultural examples broaden the scope beyond the conventional conceptions of portraiture. We conclude by trying to understand the continuing allure of the portrait today as digital media challenge our conventional ideas of visuality, and perhaps even the urgency of portraiture in the post-human age.
Credit 3 units. A&S : TH A&S : IQ, HUM

L01 Art-Arch 4878 Cold War Cultures, United States and Europe, ca. 1945–1955
This seminar examines the art worlds that emerged in France and Germany after the end of World War II, and the ensuing
dialogue with the United States, newly established as the most influential center for art and culture. We consider the social and political conditions of the post-war years, along with the aesthetic, cultural and philosophical reactions to the devastating consequences brought about by World War II. We pay particular attention to the intellectual and ideological debates that would — by 1949 — give rise to the extreme polarities between East and West, democracy and communism — in short, the confrontations that distinguish the Cold War. Artists such as Jackson Pollock and Willem de Kooning in the United States, Hans Hartung and K. O. Götz in Germany, and Jean Frat eBook and Alberto Giacometti in France are examined, as well as the broader artistic movements that are known under such labels as Abstract Expressionism, Informel, Tachisme or Un art autre. Prerequisites: Art-ARCH 112 Introduction to Western Art, Art-ARCH 211 Introduction to Modern Art, or Art-Arch 215 Introduction to Modern Art, Architecture and Design; one 300-level course in Art History preferred; or permission of instructor. Credit 3 units. A&S : TH A&S : IQ, HUM

L01 Art-Arch 4900 Independent Study and Research
Credit -3 unit.

L01 Art-Arch 4921 Theory for Art History: Modernism/Modernity/Postmodernism
This course introduces key modern theories. Considering diverse thinkers, this seminar focuses on concepts that have framed and re-framed the study and interpretation of aesthetic modernism and postmodernism over the past century. We read and discuss primary theories and probe their application through close visual readings of individual works of art. Discussions seek a better understanding of the role and meaning of the aesthetic object within a variety of theoretical contexts, extending from an investment in the universalist modern artistic subject, to the shifting role of the contingent viewer within modernity to an expansion of the traditional boundaries of the discipline of Art History into Visual Studies. Prerequisites: advanced undergraduate standing, permission of the Instructor. Credit 3 units. A&S : TH A&S : IQ, HUM

L01 Art-Arch 4975 Collecting Cultures: Taste, Passion and the Making of Art Histories
This seminar examines the theory and cultural history of the collecting of art objects and artifacts from a range of cultures and periods, considering how and why both individuals and institutions create collections. What social and psychological factors drive this passion? What are the various cultural, political and aesthetic priorities that have driven this practice historically? How is cultural patrimony defined, and how do law, the art market and cross-cultural ethics impact the placement, study and display of a culture’s material heritage? We build the seminar around the history of collecting in America, with a focus on Midwestern examples, and particularly, important case studies in St. Louis. We, for example, consider the significant local collections built by Joseph and Emily Rauh Pulitzer (modern art), and Morton May (modern and oceanic art), as well as the histories of both modern and non-Western collections now owned by the St. Louis area museums. This course is complemented by various local field trips (SLAM, Pulitzer, Kemper and Cahokia). Prerequisites: Art-ARCH 112, Art-Arch 113, Art-ARCH 211 or Art-Arch 215; one 300-level course in art history preferred; or permission of instructor. Credit 3 units. A&S : TH A&S : IQ, HUM EN : H

L01 Art-Arch 4976 The American Trauma: Representing the Civil War in Art, Literature and Politics
This seminar is an interdisciplinary examination of how Americans represented the Civil War during and after the titanic conflict, with special attention given to the period between 1865 and 1915. The course explores how painters, novelists, photographers, sculptors, essayists, journalists, philosophers, historians and filmmakers engaged the problems of constructing narrative and reconstructing national and individual identity out of the physical and psychological wreckage of a war that demanded horrific sacrifice and the destruction of an enemy that could not be readily dissociated from the self. Thomas Eakins, Walt Whitman, Herman Melville, the Jameses (William and Henry), Mark Twain, Augustus St. Gaudens, Kate Chopin, W.E.B. Du Bois, Frederick Douglass, Henry Adams, Mary Chesnut, Charles Chesnutt, George Barnard and Alexander Gardner are some of the figures considered. Same as History 4976
Credit 3 units. A&S : TH A&S : IQ, HUM

L01 Art-Arch 4982 Public Art: History, Practice, Theory
The course considers the history and functions of public art, with special attention to public art in St. Louis. We survey not only the obvious forms of public art in urban sculpture and mural painting, but also less traditional intersections of art and public in such sites as the internet. We also examine the operations of institutions — national and local arts agencies, international exhibitions, nonprofit centers and the like — that foster a public engagement with contemporary art. Finally, we consider new priorities and projects in public art, especially socially oriented and environmentally sustainable initiatives. Prerequisites: Art-ARCH 112 Introduction to Western Art or Art-ARCH 211 Introduction to Modern Art; one 300-level course in Art History preferred; or permission of instructor. Credit 3 units. A&S : TH A&S : IQ, HUM

L01 Art-Arch 499 Honors Art and Archaeology
A major research paper acceptable to the department. Prerequisite: permission of the department. Credit 3 units. A&S : TH FA : AH
Biology

Biology is an exciting, diverse field ranging from the molecular biology of individual cells to interactions among entire populations of organisms. Members of the biology faculty are recognized internationally for their research and bring a variety of strengths and teaching styles into the classroom. The major program in biology provides a thorough education in the history of scientific discovery in biology, the logical and statistical procedures used to formulate and to test biological hypotheses, and technical skills needed for conducting contemporary biological research. The biology major program emphasizes the hierarchical nature of biological complexity and the major structures and functions that emerge at the molecular, cellular, organismal, populational and ecosystem levels. Each student masters at least one dimension of contemporary research in sufficient detail to describe the major hypotheses currently being tested and to demonstrate techniques used to test those hypotheses. Mastery of this material is evident in a student’s ability to critique published data, identifying ambiguities and uncertainties in conclusions drawn from those data, and to evaluate the societal importance of the research. Biology majors are prepared to make creative contributions to biology.

The biology major program provides a wide range of research opportunities. Because more than 400 faculty members conduct research in biology and biomedical sciences at Washington University, it is easy to find a project that suits a student’s main interests. Many students complete their research projects at the Washington University School of Medicine, one of the top-ranked medical schools in the country. Summer research fellowship programs are available, funded by sources including the Howard Hughes Medical Institute, Children’s Discovery Institute, National Science Foundation and the Washington University Office of Undergraduate Research. See http://www.nslc.wustl.edu/courses/Bio500/bio500.html for detailed information on finding a research mentor. The biology department publishes a handbook that describes relevant careers in the biotechnology industries, agriculture, science communication, academic research and teaching, and health-related areas such as medicine, veterinary medicine, dentistry and genetic epidemiology (see http://www.nslc.wustl.edu/handbook/handbook.html).

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PhD, Johns Hopkins University

Endowed Professors

Robert E. Blankenship
Lucille P. Markey Distinguished Professor in Arts & Sciences
PhD, University of California–Berkeley

Sarah C.R. Elgin
Viktor Hamburger Professor in Arts & Sciences
PhD, California Institute of Technology

Himadri B. Pakrasi
George William and Irene Koechig Freiberg Professor of Biology
PhD, University of Missouri–Columbia

Ralph S. Quatrano
Spencer T. Olin Professor of Biology
PhD, Yale University

David C. Queller
Spencer T. Olin Professor of Biology
PhD, University of Michigan

Peter H. Raven
Engelmann Professor of Botany
PhD, University of California–Los Angeles

Barbara A. Schaal
Mary-Dell Chilton Distinguished Professor in Arts & Sciences
PhD, Yale University

Alan R. Templeton
Charles Re dostock Professor of Biology
PhD, University of Michigan

Professors

Garland E. Allen
PhD, Harvard University

Ian Duncan
PhD, University of Washington

Ursula W. Goodenough
PhD, Harvard University

Erik D. Herzog
PhD, Syracuse University

Tuan-hua David Ho
PhD, Michigan State University

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Kenneth M. Olsen
PhD, Washington University

Assistant Professors
Yehuda Ben-Shahar
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Bruce A. Carlson
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Ram Dixit
PhD, Cornell University

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Scott A. Mangan
PhD, Indiana University

Jonathan A. Myers
PhD, Louisiana State University

Lucia C. Strader
PhD, Washington State University

Joint Professors
James Cheverud
PhD, University of Wisconsin–Madison
(Anatomy and Neurobiology, School of Medicine)

Gayle J. Fritz
PhD, University of North Carolina–Chapel Hill
(Anthropology)

Professors Emeriti
George B. Johnson
PhD, Stanford University

David L. Kirk
PhD, University of Wisconsin

Daniel H. Kohl
PhD, Washington University

Marilyn Krukowski
PhD, New York University

Rita Levi-Montalcini
MD, University of Turin

Walter H. Lewis
PhD, University of Virginia

Barbara Pickard
PhD, Harvard University

Owen J. Sexton
PhD, University of Michigan

Nobuo Suga
PhD, Tokyo Metropolitan University

The Major in Biology
Total units required: 58–67

Required courses:

- Biol 2960 Principles of Biology I
- Biol 2970 Principles of Biology II
- Chem 111A General Chemistry I
- Chem 112A General Chemistry II
- Chem 151 General Chemistry Laboratory I
- Chem 152 General Chemistry Laboratory II
- Chem 261 Organic Chemistry I with Lab
- Chem 262 Organic Chemistry II with Lab (or Chem 401 Physical Chemistry I)
- Math 132 Calculus II
- (or Chem 233 Calculus III (or one of the following: Math 201 Freshman Seminar Multivariable Calculus, Math 2200 Elementary Probability and Statistics, Math 3200 Elementary to Intermediate Statistics and Data Analysis; optional for students matriculating prior to Fall 2012)
- Physics 117A General Physics I (or Physics 197 Physics I)
- Physics 118A General Physics II (or Physics 198 Physics II)

Students who plan to take physical chemistry must take Math 233 Calculus III. Math 2200 Elementary Probability and Statistics, required for tracks in Ecology and Evolution and in Genomics and Computational Biology and Math 322 Biostatistics are valuable, particularly for students interested in research. Students who have taken Math 233 may take Math 3200 Elementary to Intermediate Statistics and Data Analysis rather than Math 2200 Elementary Probability and Statistics for a more advanced treatment of statistics.

At least 18 units in advanced biology courses (numbered 300 or above) are required. These 18 units may not include Biol 303A, 307A, 387, 388, 393, 487, 488; cross-listed courses originating in
other departments (except Biol 360, 4202, 4580, 4810 and 4820, which count as biology major credit despite external origins); or more than 3 units of history-of-science courses. Majors are required to take at least one course from each of these three areas:

**Area A: Cellular and Molecular Biology**

- **Biol 3041** Plant Biology and Genetic Engineering 4
- **Biol 3191** Molecular Mechanisms in Development 3
- **Biol 334** Cell Biology 3
- **Biol 3371** Eukaryotic Genomes 4
- **Biol 349** Microbiology 4
- **Biol 4028** From Seed to Senescence: The Genetics, Development and Cell Biology of Plants 3
- **Biol 424** Immunology 4
- **Biol 451** General Biochemistry 4
- **Biol 4810** General Biochemistry I 3
- **Biol 4820** General Biochemistry II 3

**Area B: Organismal Biology**

- **Biol 3151** Endocrinology 3
- **Biol 328** Principles in Human Physiology 4
- **Biol 3411** Principles of the Nervous System 3
- **Biol 3421** Introduction to Neuroethology 3
- **Biol 3422** Genes, Brains and Behavior 3
- **Biol 4030** Biological Clocks 3
- **Biol 4071** Developmental Biology 3
- **Biol 4580** Principles of Human Anatomy and Development 3

**Area C: Evolution, Ecology and Population Biology**

- **Biol 3501** Evolution 4
- **Biol 372** Behavioral Ecology 3
- **Biol 381** Introduction to Ecology 3
- **Biol 4170** Population Ecology 3
- **Biol 4181** Population Genetics 3
- **Biol 4182** Macromolecules and Cell Biology 3
- **Biol 4183** Molecular Evolution 3
- **Biol 419** Community Ecology 3
- **Biol 4202** Evolutionary Genetics 3

Majors also must take an advanced laboratory course from the following list:

- **Biol 3110** Vertebrate Structure Laboratory
- **Biol 3491** Microbiology Laboratory
- **Biol 3492** Laboratory Experiments with Eukaryotic Microbes
- **Biol 360** Biophysics Laboratory
- **Biol 404** Laboratory of Neurophysiology
- **Biol 4191** Biology Field Course in Ecology

- **Biol 4193** Experimental Ecology Laboratory
- **Biol 4241** Immunology Laboratory
- **Biol 4342** Research Explorations in Genomics
- **Biol 434W** Research Explorations in Genomics (Writing-Intensive)
- **Biol 437** Laboratory on DNA Manipulation
- **Biol 4520** Protein Function in Model Cellular Systems
- **Biol 4522** Laboratory in Protein Biochemistry

All courses to be counted toward a major in biology must be taken for a letter grade if a letter grade is offered. A grade of C− or better must be earned in all of these courses.

In special cases, students may earn credit for graduate courses offered by the Division of Biology and Biomedical Sciences.

**Optional Biology Major Tracks**

Biology majors may choose one of four optional tracks within the major if the students' interests lie primarily within one of these subfields of biology. A track provides strong training for graduate study in its subfield. **All tracks require completion of the biology major requirements as stated above but provide concentrated study in one of the four subfields.**

**Ecology and Evolution** — Additional requirements include Math 2200 or 3200. Students whose main interest is ecology must take at least two ecology electives and one evolution elective; students whose main interest is evolution must take at least two evolution electives and one ecology elective (ecology electives: Biol 372, 381, 4170, 419; evolution electives: Biol 3501, 4181, 4182, 4183, 4202). Additional required are one elective in analytical methodology (CSE 126, CSE 424 or Math 322) and one elective in earth and planetary sciences (EPSc 201, 323 or 418). The course used to fulfill the advanced laboratory requirement for the major must be Biol 4193, 437, 4342 or 434W.

**Genomics and Computational Biology** — Additional requirements include Biol 3371 or Biol 4183 or Biol 548, Math 2200 or 3200, and an outside elective (CSE 131 or 241). The course used to fulfill the advanced laboratory requirement for the major must be Biol 3492, 4342, 434W or 437. Biology courses recommended for students in this track include Biol 3191, 324, 349, 3491, 437, 4028, 4181, 4202 and 4810. Recommended electives outside biology include CSE 240, CSE 447T, Math 217 and Math 309.

**Molecular Biology and Biochemistry** — Additional requirements include Biol 4810 and 4820, Biol 334, 3371/337W or 349, and one of the following: Math 2200, Math 233 or Math 3200. The advanced laboratory course used to fulfill major requirements must be one of the following: Biol 3491, 3492, 4342/434W, 437, 4520 and 4522. Additional biology courses recommended for students in this track include Biol 3041, 3191, 3491, 4023, 4183 and 5312.
Neuroscience — Biology major requirements must be met with the following courses: Biol 3058, area A (Biol 334 or 4810), area B (Biol 3411), area C (Biol 372, 381, 3501 or 4183), and advanced laboratory (Biol 360 or Biol 404). Students must select at least one biology elective (Biol 3110, 3151, 3191, 328, 3371, 337W, 3421, 3422, 4031, 437 or 4580) and one outside elective either in physics (Physics 350 or 355) or in psychology (Psych 330, 360, 3604 or 4604). Math 2200 (or 3200) is recommended.

See also related majors in Biomedical Engineering, Philosophy–Neuroscience–Psychology (PNP) and Philosophy of Science.

The Major in Environmental Biology

Students interested in environmental biology typically take Biol 2950 Introduction to Environmental Biology during fall of the freshman year, although it may be taken later. A 400-level class to be required for Latin honors in Environmental Biology will be introduced. All other courses required for the environmental biology major are currently listed.

Required courses:

- Biol 2950 Introduction to Environmental Biology (3 credits)
- Biol 2960 Principles of Biology I (4 credits, lecture and lab)
- Biol 2970 Principles of Biology II (4 credits, lecture and lab)
- Biol 381 Introduction to Ecology (3 credits)
- Chem 111A/151 General Chemistry (5 credits, lecture and lab)
- Chem 112A/152 General Chemistry (5 credits, lecture and lab)
- EPSc 201 Earth and the Environment (4 credits, lecture and lab)
- Math 131 Calculus I (3 credits)
- Math 132 Calculus II (3 credits)
- Physics 117A/197 Physics 1 (4 credits)

One of the following Chemistry course:

- Chem 261 Organic Chemistry I with Lab (4 credits, lecture and lab)
- EPSc 323 Biogeochemistry (3 credits)
- ChE 262 Introduction to Environmental Engineering (3 credits)
- ChE 443 Environmental Chemistry (3 credits)

One of the following courses in Statistics, GIS:

- Math 2200 Elementary Probability and Statistics (3 credits)
- Math 3200 Elementary to Intermediate Statistics and Data Analysis (3 credits)
- EnSt 380 Applications in GIS (3 credits)

One upper-level Biology lab course:

- We recommend: Biol 4193 Experimental Ecology Laboratory (4 credits, writing-intensive)

One of the following Biol 300+ courses (Area A and B in Biology):

- Biol 3041 Plant Biology and Genetic Engineering
- Biol 334 Cell Biology
- Biol 349 Microbiology
- Biol 4028 From Seed to Senescence: The Genetics, Development and Cell Biology of Plants
- Biol 451/4810 General Biochemistry
- Biol 3151 Endocrinology
- Biol 328 Principles in Human Physiology
- Biol 3411 Principles of the Nervous System
- Biol 3421 Introduction to Neuroethology
- Biol 3422 Genes, Brains and Behavior
- Biol 4023 How Plants Work: Physiology, Growth and Metabolism
- Biol 4030 Biological Clocks
- Biol 4580 Principles of Human Anatomy and Development

One of the following Biol 300+ (Area C in Biology):

- Biol 3501 Evolution
- Biol 372 Behavioral Ecology
- Biol 4170 Population Ecology
- Biol 4181 Population Genetics
- Biol 419 Community Ecology
- Biol 4182 Macroevolution

One additional Biol 300+ major-track course (may include Biol 500):

- See Biology Course Listings

One of the following EPSC 300+ courses:

- EPSc 323 Biogeochemistry (only if not already taken for chemistry requirement)
- EPSc 352 Earth Materials
- EPSc 353 Earth Forces
- EPSc 385 Earth History
- EPSc 408 Earth’s Atmosphere and Global Climate
- EPSc 409 Surface Processes
- EPSc 413 Introduction to Soil Science
- EPSc 428 Hydrology
- EPSc 422 Sedimentary Geology
- EPSc 429 Environmental Hydrogeology
- EPSc 443 Methods in Biogeochemistry
- EPSc 444 Environmental Geochemistry
- EPSc 448 Microbial Geochemistry
- EPSc 484 Paleoenvironmental Reconstruction

Additional Information

Research: Research opportunities are available in your first or second year through Biol 200; such opportunities are available in the third and fourth years through Biol 500. A research emphasis in the major requires at least 6 credits (two semesters) of Biol 500 research and an approved senior thesis on this research. The research emphasis is acknowledged on the degree either
by Latin honors or by a research milestone (for students who do not meet the GPA requirements for Latin honors as described below).

**Senior Honors:** Biology majors are encouraged to work for senior honors, which requires a 3.3 average in biology, a 3.3 average in nonbiological sciences (mathematics, chemistry and physics courses) and a 3.65 overall course average at the time of graduation application to the honors program. Also required are 6 units of Biol 500 research and an approved thesis from this work. Students interested in Senior Honors should begin Biol 500 no later than spring of the junior year.

The biology department awards the Marian Smith Spector Prize to an undergraduate who has an excellent academic record and submits an outstanding honors thesis. It also awards the Harrison D. Stalker Prize to a graduating senior whose college career is distinguished by scholarship, service and breadth of interest.

### The Minor in Biology

**Units required:** 18 units of Biology and 9 units of Chemistry

**Required courses:**
- Biol 2960 Principles of Biology I (prerequisite Chem 111A)
- Biol 2970 Principles of Biology II (prerequisite Chem 112A)
- Chem 111A General Chemistry I and Chem 112A General Chemistry II
- Chem 261 Organic Chemistry I with Lab

**Elective courses:**
The minor requires 10 advanced units in Biology selected from the following:
- Biol 3041 Plant Biology and Genetic Engineering
- Biol 3058 Physiological Control Systems
- Biol 3110 Vertebrate Structure Laboratory
- Biol 3151 Endocrinology
- Biol 3182 History of the Life Sciences in the 20th Century
- Biol 3183 History of Genetics in the 20th Century
- Biol 328 Principles in Human Physiology
- Biol 334 Cell Biology
- Biol 3371 Eukaryotic Genomes
- Biol 3411 Principles of the Nervous System
- Biol 3421 Introduction to Neuroethology
- Biol 3422 Genes, Brains and Behavior
- Biol 348 Emerging Infectious Diseases
- Biol 349 Microbiology
- Biol 3491 Microbiology Laboratory
- Biol 3492 Laboratory Experiments with Eukaryotic Microbes
- Biol 3501 Evolution
- Biol 360 Biophysics Laboratory
- Biol 372 Behavioral Ecology
- Biol 381 Introduction to Ecology

- Biol 4023 How Plants Work: Physiology, Growth and Metabolism
- Biol 4028 From Seed to Senescence: The Genetics, Development and Cell Biology of Plants
- Biol 4030 Biological Clocks
- Biol 404 Laboratory of Neuropysiology
- Biol 4071 Developmental Biology
- Biol 4170 Population Ecology
- Biol 4181 Population Genetics
- Biol 4182 Macroevolution
- Biol 4183 Molecular Evolution
- Biol 419 Community Ecology
- Biol 4193 Experimental Ecology Laboratory
- Biol 4202 Evolutionary Genetics
- Biol 427 Problem-Based Learning in Biomedical Sciences
- Biol 4330 Electron Microscopy of Cellular Structures and Processes
- Biol 4331 Algae: Cell Biology and Molecular Evolution
- Biol 4342 Research Explorations in Genomics
- Biol 434W Research Explorations in Genomics (Writing-Intensive)
- Biol 437 Laboratory on DNA Manipulation
- Biol 450W Topics in the History of Eugenics
- Biol 451 General Biochemistry
- Biol 4520 Protein Function in Model Cellular Systems
- Biol 4522 Laboratory in Protein Analysis, Proteomics and Protein Structure
- Biol 4580 Principles of Human Anatomy and Development
- Biol 4810 General Biochemistry I
- Biol 4820 General Biochemistry II
- Biol 4830 Bioenergy

### Additional Information

All courses utilized for the Biology minors must be taken for a letter grade if a letter grade is offered. A grade of C– or better must be earned in all of these courses.

### Biology

**L41 Biol 112 Freshman Seminar: Introduction to Problem-based Learning in Biology**

Small groups of students take responsibility for their own active learning in their team with guidance from an instructor. Each group in rotation considers four problems of biological importance such as rainforest destruction, coral reefs, laboratory diagnoses, sleep, high altitude, deafness, infertility, modern epidemics, clinical cases, genetic engineering and cloned animals. Students find the background information by library searches and integrate this knowledge in group discussions. Enrollment limited. Intended for but not limited to prospective biology majors. Prerequisite: high school Biology, preferably an AP class. For freshmen only.

Credit 3 units.  A&S : NS  A&S : IQ, NSM  BU : SCI  FA : NSM
L41 Biol 181 Freshman Seminar in Biology
A lecture course intended for first-year students that focuses on the practice and culture of biomedical research. Active researchers describe the biological context of their research, the specific questions formulated, the means by which they pursue the answers, and their data and conclusions. The focus is on process: how biologists pursue their profession in a research setting. Additional topics of clinical and contemporary interest are often included. Students are expected to attend all lectures. Must be taken Credit/no credit.
Credit 1 unit. A&S : NS  A&S : IQ, NSM  FA : NSM

L41 Biol 1810 Freshman Seminar in Imaging Sciences
An introduction to the breadth and depth of imaging sciences across the schools of Arts & Sciences, Medicine and Engineering, on topics from radiology to cell biology. Seminars are presented by experts in these fields to acquaint undergraduate students with advances in imaging sciences and research opportunities in these areas. This seminar is the preferred entry point for freshman and sophomores for the Imaging Sciences Pathway (imagingpathways.wustl.edu/). No prerequisites, primarily for freshman and sophomores, but open to all students.
Credit 1 unit. A&S : NS  A&S : IQ, NSM  BU : SCI

L41 Biol 191 Phage Hunters
A research-based laboratory class for freshmen. Students join a national experiment organized by HHMI, with the goal of isolating and characterizing bacteriophage viruses found in the soil in the St. Louis area. Laboratory work includes isolation and purification of your own phage, DNA isolation and restriction mapping, and EM characterization of your phage. Several WU phage are selected for genome sequencing over winter break, and are annotated in the spring. Prerequisites: high school courses in biology and chemistry, at least one at the AP or International Baccalaureate level; permission of the instructor. Limited to 40 students. One hour lecture, one hour discussion and three hours lab per week.
Same as Focus 1910
Credit 3 units. A&S : NS  A&S : IQ, NSM  BU : SCI

L41 Biol 192 Phage Bioinformatics
A research-based laboratory class for freshmen. Students join a national experiment organized by HHMI, with the goal of genomic characterization of a local phage. Laboratory work focuses on learning computer-based tools for genome analysis followed by annotation and comparative analysis of the genome of the WU phage, which was isolated fall semester and sequenced over winter break. Prerequisites: high school courses in biology, chemistry and physics, at least one at the AP or International Baccalaureate level; permission of the instructor. Limited to 20 students; preference given to those completing Biol 191 Phage Hunters. One hour lecture, one hour discussion and three hours lab per week.
Same as Focus 1920
Credit 3 units. A&S : NS  A&S : IQ, NSM

L41 Biol 200 Introduction to Research
An introduction to laboratory and field research in biology for first- and second-year students. Students work under the supervision of a sponsor in a setting of established, ongoing research. Prerequisite: permission of sponsor and the department. For online enrollment instructions see: http://www.nslc.wustl.edu/courses/Bio500/bio500.html. Students are registered by the department after approval is granted. Registration may not appear in Webstac until mid-semester.
Credit -3 unit. A&S : NS  A&S : IQ, NSM  FA : NSM

L41 Biol 210A Epic of Evolution: Life, Earth and Cosmos
Same as L19 EPSc 210A.
Same as EPSc 210A
Credit 3 units. A&S : NS  A&S : IQ, NSM  BU : SCI  FA : NSM

L41 Biol 224 Infectious Diseases: Past, Present and Future
A variety of important infectious diseases are discussed. Attention is paid to the causative agent, natural source, disease symptoms, mode of transmission, treatment, prevention, evolution, eradication and historical impact of each. Lectures and assigned reading include discussions of small pox, yellow fever, Ebola and Marburg fevers, AIDS, influenza, rabies, SARS, bubonic plague, typhus, cholera, syphilis and malaria. The mechanisms underlying the emergence of “new” diseases are emphasized. Two one-hour lectures per week; three in-class exams and a final constitute the basis for grades. Not available to students who have credit for Biol 2960.
Credit 2 units. A&S : NS  A&S : IQ, NSM

L41 Biol 265 Experience in the Life Sciences
Section 01: Earn credit for nonclassroom learning in the life sciences in a variety of activities: accompany a physician on rounds and prepare a paper on an organ system or disease; participate in a clinical or applied ecological study and report on it; participate in science outreach teaching, etc. Participants must meet regularly with a supervisor and commit at least 140 hours over two semesters. A work plan is approved prior to registration. A progress report is due after one semester and a final paper after two semesters. Does not count toward the major. Credit: 1.5 units per semester, contingent upon completion of two semesters. See http://www.nslc.wustl.edu/research.html. CBTL course. Credit/no credit only.

Section 02: Participate in teaching anatomy and physiology, exercise science (fitness education) and/or nutrition in the St. Louis area. Students serve the community by offering
knowledge-based teaching assistance, including development of educational materials, to a diverse population of students and/or adults. Participants spend at least 72 hours per semester as a classroom teaching assistant and/or as a health educator during community health fairs. Mandatory seminars include readings relevant to the semester plan. A class schedule and a contract for successful completion of the course is reviewed and approved by the course coordinator (Ruth Clark, P.T., Ph.D.), high school instructor (TBD) and individual student. Permission of course coordinator required via interview. Prerequisites: minimum 6 credits of college-level anatomy and/or physiology course work, minimum science GPA of 3.2. Does not count toward the major. Credit: 2–3 credits/semester; Credit/no credit only.

Section 03: Conduct a clinical research project with an emergency-medical faculty member. Activities may include screening/enrolling patients, chart reviews, collecting and analyzing data, and clinical shadowing time. Goals include submitting an abstract for a national research meeting and coauthoring a manuscript for publication. Prerequisite: Biol 2652 or Biol 2653. Does not count toward the major. Credit: 1.5 units per semester, contingent upon completion of two semesters. CBTL course. Credit/no credit only.

Credit 1.5 unit.

L41 Biol 2653 MedPrep Program — Experience in Life Sciences
MedPrep I is a unique lecture series taught by a physician, medical school Course Master and member of the Committee on Admissions for the School of Medicine. Through a weekly two-hour lecture, this course gives students accurate, honest and detailed information regarding every step of the application and admissions process to medical school and the educational process and life of a physician. MedPrep I is particularly useful for freshmen and sophomores in that it reviews the common pitfalls encountered by unsuccessful applicants to medical school. There is no outside course work and no exam. Attendance at all classes is required. Registration for Biol 2651 is done through the new MedPrep website at medprep.wustl.edu. Registration is NOT done through WebStac.
Credit 1 unit.

L41 Biol 2652 Pediatric Emergency Medicine Research Associates Program: Experiences in Life Sciences
The Pediatric Emergency Medicine Research Associates Program (PEMRAP) offers undergraduate premedical students an opportunity to participate in clinical, patient-oriented research projects in a hospital setting. Students have the opportunity to work in the St. Louis Children’s Hospital Emergency Department, a nationally recognized pediatric emergency medicine and trauma care facility. A number of research projects are currently under way in various areas of pediatric emergency medicine. Credit/no credit research associates are expected to work two four-hour shifts per week in the St. Louis Children’s Hospital Emergency Department and to attend a weekly two-hour lecture on Tuesdays in conference room 10A of the Northwest Tower Building (across from Children’s Hospital) from 1:30 – 3:30 p.m. Weekly meetings include lectures given by Emergency Department faculty members. This program offers students the unique opportunity to be a vital part of the ED research team. In addition, the RA’s experience in the ED may help students determine if medicine is truly the career path they wish to choose. May not be taken concurrently with Biol 2654 MedPrep II. CBTL course.
Credit 3 units.

L41 Biol 2654 Course for Associates of Research in Emergency Medicine (CAREm)
CAREm is a unique program designed specifically for students considering a career in medicine and/or research. In this course, students introduced to clinical research work in the Emergency and Trauma Center of Barnes-Jewish Hospital at Washington University School of Medicine. Students assist investigators on various research studies, including traumatic brain injury, diabetes, influenza, pneumonia, radiology and more. CAREm is limited to 12 students per semester. Spots in the course are given to the first 12 students who have submitted a completed registration packet and fulfilled the requirements of the Barnes-Jewish Hospital Volunteer Program. Students are contacted individually prior to the first week of class to ensure that the mandatory requirements are met and to schedule times for other specific requirements to take place. Each student is required to dedicate eight hours per week as a research assistant (RA) for clinical research trials. As research assistants, students’ duties require them to screen patients in the Emergency Department, consent eligible patients, complete various documentation, and perform other research-related activities. Through a weekly two-hour lecture, students are educated on the importance of ethical research and the different types of research conducted. In addition, students are introduced to methodological concepts of the various clinical research projects. Weekly lectures include presentations given by faculty members and the course masters. The lecture series includes topics such as basics of clinical research, types of clinical research, study design and methodology, and basic statistics. Credit/no credit only. Prerequisite: sophomore, junior and senior level only. CBTL course.
Credit 3 units.

L41 Biol 2654 MEDPREP II — Experience in the Life Sciences
MedPrep II offers students a real world, behind-the-scenes experience of a life in medicine. For three hours every other week, students shadow physicians in the Charles F. Knight Emergency and Trauma Center of Barnes-Jewish Hospital, the main teaching hospital of the Washington University School of
into three modules. In the first, we explore popular literature on an informed citizen. This reading-intensive course is divided conservation ethics and scientific information are needed to be biases on all sides of controversial conservation issues. Sound important to develop critical thinking skills necessary for handling changes, the solutions are often controversial. Therefore, it is expected to survive this mass extinction. Although conservation lasting consequences for the 5 percent of all current life forms Human-caused changes in natural environments will have long-continental categories: Are Crohn’s and lupus more important than protecting the environment? Should DDT be banned worldwide? Seminar requires concurrent enrollment in Biol 2950. Credit 3 units. A&S : NS A&S : IQ, NSM

L41 Biol 2951 Environmental Debates
Solving major environmental problems requires understanding the range of interests, priorities and perspectives surrounding each issue and developing solutions that satisfy all constituencies. In this seminar, you research and discuss both sides of each issue. This helps you to develop informed opinions and foster a sense of civic engagement. You present your debate points to students in Biol 2950 Introduction to Environmental Biology. Debate topics include: Is China’s one child policy an appropriate way to stabilize human population growth? Coal: energy of the future or energy of the past? Should edible crops be used for biofuels? Will genetic engineering make our agriculture more sustainable? Is the economic development of developing countries more important than protecting the environment? Should DDT be banned worldwide? Seminar requires concurrent enrollment in Biol 2950. Credit 1 unit. A&S : NS A&S : IQ, NSM

L41 Biol 2952 Freshman Seminar: Controversies in Conservation Biology
The goal of this course is the development of critical thinking skills needed to evaluate conservation and biodiversity controversies in a complex and rapidly deteriorating world. We are currently in the sixth known mass extinction of life on earth; it is estimated that 60,000 species now go extinct annually. Human-caused changes in natural environments will have long-lasting consequences for the 5 percent of all current life forms expected to survive this mass extinction. Although conservation and management of biodiversity are needed to address these changes, the solutions are often controversial. Therefore, it is important to develop critical thinking skills necessary for handling biases on all sides of controversial conservation issues. Sound conservation ethics and scientific information are needed to be an informed citizen. This reading-intensive course is divided into three modules. In the first, we explore popular literature on conservation biology to gain a general understanding of common topics and concerns. In Module 2, current scientific literature and news articles are used to evaluate both sides of a controversial issue in conservation biology. The last module allows students to focus on a controversial topic of their choice, present it to the class, and take action by sending a letter to a political figure. The topics presented in this course are designed for freshmen and sophomores in the field of environmental sciences. No prerequisites required. Class limited to 16 students. Credit 2 units. A&S : NS A&S : IQ, NSM
L41 Biol 3041 Plant Biology and Genetic Engineering
A 4-credit lecture course that provides an introduction to plant development, genetics, physiology and biochemistry with emphasis on processes that can be manipulated or better understood through genetic engineering. The course is divided into three sections. The first section of the course discusses basic plant biology, development and genetics. The second part emphasizes gene structure, expression and cloning as well as methods for introducing foreign DNA into plant cells and regenerating fertile plants in tissue culture. During the third part of the course we discuss a variety of examples of genetically engineered traits, including: herbicide resistance; fruit ripening; pathogen and/or insect resistance; and the use of plants for production of industrial and pharmaceutical compounds. Friday discussion sections focus on critical reading of the primary literature related to the material covered in lecture. Prerequisites: Biol 2960 and Biol 2970.
Credit 4 units. A&S : NS A&S : IQ, NSM BU : SCI FA : NSM

L41 Biol 3058 Physiological Control Systems
Systems physiology with emphasis on human physiology. Prerequisites: Biol 2960 and Chem 112A.
Credit 2 units. A&S : NS A&S : IQ, NSM

L41 Biol 307A Human Variation
Same as Anthro 307A
Credit 3 units. A&S : NS, SD, QA A&S : IQ, NSM, AN, SD BU : SCI FA : NSM

L41 Biol 308 Physiological Control Systems
A lecture/laboratory course designed to provide an integrative framework for how vertebrate form and function evolved. Weekly lectures emphasize development and the relationship between the structural and functional design of organ systems, the importance of these relationships in maintaining homeostasis while providing opportunity for adaptation, and examples of how vertebrate organ systems communicate to accomplish functional and physiological integration. 1.5 hour lecture and five hours lab each week. Prerequisite: Biol 2970.
Credit 4 units. A&S : NS A&S : IQ, NSM BU : SCI

L41 Biol 310 Vertebrate Structure Laboratory
An overview of mammalian endocrine systems with an emphasis on human physiology and development. The interplay between systemic, local cell and tissue interactions as well as the cell and molecular events associated with hormone action are discussed. Examples of endocrine evolution and pathological conditions related to endocrine imbalances also are included. Prerequisite: Biol 2970.
Credit 3 units. A&S : NS A&S : IQ, NSM BU : SCI FA : NSM

L41 Biol 3151 Endocrinology
L41 Biol 3182 History of the Life Sciences in the 20th Century
This course explores the vast changes that the life sciences underwent between 1890 and 2000, from a largely descriptive and qualitative science to a highly experimental and quantitative science. Topics include the rejection of Haecckelian morphology; the rise of experimental embryology; the rediscovery of Mendel and development of the Mendelian-chromosome theory; the new “ecology” of the Chicago school; the introduction of feedback and control systems in physiology; the synthesis of Mendelism and Darwinism; the rise of biochemistry and molecular biology; and the genomic revolution. In each topic, biological ideas are placed in their historical and social contexts. Prerequisites: at least a high school or, preferably, college-level introductory course in biology and/or permission of the instructor.
Credit 3 units. A&S : NS A&S : IQ, NSM

L41 Biol 3183 A History of Genetics in the 20th Century
After a brief survey of pre-20th century theories of heredity, this course examines the work of Gregor Mendel and its rediscovery in 1900, as well as its expansion as an interfild theory in combination with the chromosome theory, which was pioneered beginning in 1910 by T.H. Morgan at Columbia and R.A. Emerson at Cornell and which led to the expansion of classical genetics up to World War II. The beginnings of biochemical and molecular genetics in the 1920s and 1930s developed rapidly after the war with the double-helix theory of DNA and the rise of molecular genetics. The course ends with examination of the Human Genome Project (Initiative) and the ramifications of genetic biotechnology. Throughout, emphasis is placed not only on the technical and theoretical developments comprising genetics as an epistemic field, but also on the economic, social, political and philosophical interconnections between genetics and society. Agriculture, medicine and the ideology of social control (including such movements as eugenics and Nazi race hygiene) both influenced and were influenced by genetics and played an integral part in the construction of the science itself. Readings are drawn from the primary and secondary literature. There are mid-term and final exams as well as periodic student reports. Prerequisite: Biol 2960 and Biol 2970.
Credit 3 units. A&S : NS A&S : IQ, NSM

L41 Biol 3184 Topics in American Literature: Ascendancy of Biology
Same as L14 E Lit 423. Same as E Lit 423
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD FA : Lit

L41 Biol 3191 Molecular Mechanisms in Development
One of the most exciting areas of modern biology is the study of embryonic development. The use of genetic engineering/recombinant DNA technology has revolutionized the way in which questions are asked and answered in this rapidly
advancing field. Recent studies in model systems such as Drosophila, nematode and Xenopus (among others) have provided new insights into the molecular mechanisms utilized to establish cellular identities and generate the pattern of differentiation critical to multicellular organisms. Information being gained and experimental tools being developed in these model systems are leading to important advances in our understanding of developmental mechanisms used in all organisms, including mammals. This course provides an up-to-date and in-depth view of ongoing research in selected areas of developmental biology. Topics are introduced by lectures, but substantial class time is devoted to discussion. Reading assignments from the current scientific literature highlight the experimental approaches being used. How information from model systems is being applied to mammalian embryos is discussed. Enrollment limited to encourage discussion. Prerequisite: Biol 2970. Credit 3 units. A&S : NS, WI A&S : IQ, NSM, WI BU : SCI FA : NSM

L41 Biol 324 Human Genetics

Broad coverage of the role of genetics in medicine, with a focus on the application of genomic technologies to the understanding of human disease. Areas covered include the identification of human disease genes, modern cytogenetics, risk assessment in pedigrees, biochemical genetics, imprinting, mitochondrial genetics, gene therapy, complex inheritance, assisted reproduction, prenatal diagnosis, immunity, cancer and pharmacogenetics. The profound ethical and legal considerations raised by modern genetic technologies also are discussed. Credit 3 units. A&S : NS A&S : IQ, NSM BU : SCI

L41 Biol 3262 Medicinal Botany

Medicinal Botany is the study of plants having medical applications. Plants provide the molecular basis of many pharmaceuticals, as direct compounds or molecular blueprints. Modern science blurs the traditional distinction between nutrition and medicine. This class provides an interface between botany, traditional medicinal plant use and Western medicine. It examines curative as well as potentially harmful impacts on human health of plants with medicinal and psychoactive properties. Special attention is given to utilization of medicinal plants in traditional cultures, as well as in codified alternative medicinal systems (e.g. Ayurveda, Chinese Medicine) and in our Western culture. The class uses a seminar format to examine current knowledge of medicinal plants throughout the world, including a short introduction to plant taxonomy and ethnobotanical research methods. Grading is based on two short papers, one long paper and an in-class presentation of material from the long paper. Prerequisites: Biol 2970 or Anthro 150 and 160. Credit 3 units. A&S : NS A&S : IQ, NSM

L41 Biol 328 Principles in Human Physiology

This course is designed to provide students with an understanding of the function, regulation and integration of the major organ systems of the body. Course content includes neural and hormonal homeostatic mechanisms, and study of the circulatory, respiratory, digestive, urinary, musculoskeletal, nervous, endocrine, immune and reproductive organ systems. Mechanisms of exercise physiology are integrated throughout the course. Prerequisite: Biol 3058 or equivalent. Credit 4 units. A&S : NS A&S : IQ, NSM BU : SCI FA : NSM

L41 Biol 334 Cell Biology

Eukaryotic cell structure and function viewed from the perspective of modern cell biology. Lectures cover such topics as membrane transport; endocytosis and secretion; intracellular trafficking; hormones and signal transduction; extracellular matrix and tissue formation; cytoskeleton and motility; and cell cycle, apoptosis and the cellular basis of disease. Prerequisite: Biol 2970. Credit 3 units. A&S : NS A&S : IQ, NSM BU : SCI FA : NSM

L41 Biol 3371 Eukaryotic Genomes

An advanced exploration of the structure and function of DNA within the eukaryotic nucleus. Lecture and discussion cover topics of chromatin and chromosome structure, control of gene transcription, RNA processing, and DNA replication and repair. The relevance of these topics to the genetic basis of human disease is discussed. Throughout, the experimental data that shape our current understanding are emphasized. Course grades based on exams, problem sets and short papers. Lecture three hours per week plus required discussion section meeting every other week. Prerequisites: Biol 2970, Chem 251 (may be taken concurrently). Offered every other fall in even-numbered years. Credit 4 units. A&S : NS A&S : IQ, NSM BU : SCI FA : NSM

L41 Biol 3411 Principles of the Nervous System

The basic anatomical, physiological and chemical organization of the nervous system; how nerve cells communicate with each other, the ionic basis of nerve signals, the function and properties of chemical agents in the nervous system, the development of neural circuitry, and how neurons interact to produce behavior. Prerequisites: Biol 2960, Biol 2970 and Biol 3058 recommended or Psych 3401 and permission of instructor. Credit 3 units. A&S : NS A&S : IQ, NSM BU : SCI FA : NSM

L41 Biol 3421 Introduction to Neuroethology

The neural mechanisms of animal behavior from an evolutionary and ecological perspective. Topics include: contributions of model systems to understanding fundamental properties of nervous system structure and function; electrical signals of sensory cells, neurons and muscle; neural processing of...
sensory input; neural control of behavioral output; anatomy and physiology of sensory and motor systems; learning and memory; evolution of neural circuits. Prerequisite: one of the following courses: Biol 3058, Biol 3411 or Psych 3401.
Credit 3 units.  A&S : NS  A&S : IQ, NSM  BU : SCI  FA : NSM

L41 Biol 3422 Genes, Brains and Behavior
Genetic studies of physiological systems underlying animal behavior, including the genetic basis for normal and abnormal behaviors in animals and humans. Topics include: history of behavioral genetics; the ongoing debate about "nature vs. nurture"; contributions of genetic model systems including the nematode Caenorhabditis elegans, the fruit fly Drosophila melanogaster, zebrafish, the mouse Mus musculus and other animal models; molecular mechanisms underlying the evolution of behavioral phenotypes; the emerging role of epigenetics in regulating nervous-system functions and behavior; the use of genetic and genomic analyses in studies of human behavior and psychiatric disorders. Prerequisite: Biol 2970.
Credit 3 units.  A&S : NS  A&S : IQ, NSM

L41 Biol 346A The Darwinian Revolution
Examines the scientific, economic, social and political background to the development of evolutionary theory in Europe and the United States from 1750 through the end of the 20th century. How were naturalistic theories of the origin of species crafted out of economic and social metaphors? Why has Darwin's work generated such controversy for 150 years? What is the consensus on Darwinian theory today? The first part of the course focuses on the historical and philosophical development of ideas about evolution, natural selection and heredity, including the strong arguments mounted against Darwinian theory through the first two decades of the 20th century. The second part of the course deals with the development of evolutionary theory as it was integrated with Mendelian genetics (as population genetics), ecology and eventually molecular biology in the period after 1930. The course concludes with an examination of several controversies that have greatly affected the course of evolutionary theory; the conflict between evolution and Christian fundamentalism, the concept of punctuated equilibrium, sociobiology, mass extinctions and the extinction of dinosaurs, and the origin of life. Emphasis is on understanding the process of science as practiced in evolutionary biology. No prerequisites. Credit 3 units.  A&S : NS  A&S : IQ, NSM

L41 Biol 348 Emerging Infectious Diseases
The questions of why new diseases are continuing to appear, and why old diseases are re-emerging, are addressed in detail. Particular focus is on the role played by the natural environment in these processes; how disease risk can be enhanced by environmental change is a pervasive theme. Examples include Lyme disease, ehrlichiosis, E.coli 0157:H7 and Salmonella, as well as diseases caused by West Nile, hanta and polio viruses. Prerequisites: Biol 2960 and Biol 2970.
Credit 2 units.  A&S : NS  A&S : IQ, NSM

L41 Biol 349 Microbiology
This 4-credit lecture course focuses on the molecular biology of bacteria, archaea and viruses. Topics include: the bacterial cell cycle, gene regulation, stress response, cell-cell communication, viral and bacterial pathogenesis, microbial ecology, and metabolic diversity. Friday tutorials stress analysis of the primary literature with an emphasis on current research related to material covered in lecture. Prerequisites: Biol 2960 and 2970, or permission of instructor.
Credit 4 units.  A&S : NS  A&S : IQ, NSM  FA : NSM

L41 Biol 3491 Microbiology Laboratory
After introducing students to the basics of bacterial growth and maintenance, this laboratory class employs genetics, cell biology and genomics to explore various aspects of bacterial physiology, identification, gene structure and mutational analysis of physiological pathways. Prerequisite: Biol 349 required; may be taken concurrently. One-hour lecture and five hours of laboratory per week. Fulfills the upper-level laboratory requirement for the Biology major.
Credit 3 units.  A&S : NS  A&S : IQ, NSM  FA : NSM

L41 Biol 3492 Laboratory Experiments with Eukaryotic Microbes
This research-intensive course provides an introduction to diverse molecular and cell biology techniques used in model experimental organisms to explore fundamental biological questions. Experiments are performed using selected fungi and protozoans commonly used in major research efforts. Emphasis is placed on choosing the appropriate organism for the question posed using the most current technologies. Each semester, one cellular process is studied in detail and original research is carried out. Prerequisites: Biol 2960 and 2970 and permission of instructor-contact early to ensure enrollment. One hour of lecture and six hours of laboratory a week. Fulfills the upper-level laboratory requirement for the Biology major. Enrollment limited to 12.
Credit 3 units.  A&S : NS, WI  A&S : IQ, NSM, WI

L41 Biol 3501 Evolution
A general survey of organic evolution covering both micro and macroevolution. Topics include natural selection, adaptation, evolution of pathogens, formation of species and phylogeny. Prerequisite: Biol 2970.
Credit 4 units.  A&S : NS  A&S : IQ, NSM  BU : SCI  FA : NSM

L41 Biol 360 Biophysics Laboratory
Same as L31 Physics 360.
Same as Physics 360
Credit 3 units.  A&S : NS  A&S : IQ, NSM, AN

L41 Biol 372 Behavioral Ecology
This course examines animal behavior from an evolutionary perspective and explores the relationships between animal behavior, ecology and evolution. Topics include foraging behavior, mating systems, sexual selection, predator-prey relationships, cooperation and altruism, competition, and parental care. Prerequisite: Biol 2970 or permission of instructor. Credit 3 units. A&S : NS  A&S : IQ, NSM  FA : NSM

L41 Biol 374 Drugs, Brain and Behavior
This course reviews information pertaining both to medications used to treat psychiatric disorders and to psychoactive drugs of abuse. By learning principles of pharmacology and mechanisms of action of these agents, students develop an enhanced knowledge of the brain mechanisms underlying abnormal human behavior. Enrollment limited to 40. Prerequisite: Psych 354 or 3401 or 344. Same as Psych 374
Credit 3 units.  A&S : NS  A&S : IQ, NSM  BU : SCI

L41 Biol 381 Introduction to Ecology
This course explores the science of ecology, including factors that control the distribution and population dynamics of organisms, the structure and function of biological communities, how energy and nutrients flow across ecosystems, and what principles govern ecological responses to global climatic and other environmental changes. The class format includes lectures, discussions and small group exercises. Assignments include quantitative data analysis, ecological modeling and scientific writing.
Credit 3 units.  A&S : NS  A&S : IQ, NSM

L41 Biol 387 Undergraduate Teaching
Exceptional undergraduates serve as teaching assistants for laboratory and/or discussion sections in departmental courses. Normally 2 or 3 units are given per semester, subject to the approval of the instructor and the department. Credit may not be counted toward fulfilling the biology major; application form in Department of Biology Student Affairs office. Prerequisite: permission of instructor. Credit/no credit only.
Credit -3 unit.  A&S : NS  A&S : IQ, NSM

L41 Biol 393 Practical Skills in Environmental Biology Research
Same as L82 EnSt 393.
Same as EnSt 393
Credit 2 units.  A&S : NS  A&S : IQ, NSM

L41 Biol 4023 How Plants Work: Physiology, Growth and Metabolism
This course introduces students to the fundamentals of how plants grow, metabolize and respond to their environment. Topics covered include the conversion of light energy into chemical energy through photosynthesis and carbon fixation, nitrogen assimilation, water and mineral uptake and transport, source-sink relationships and long-distance transport of carbon and nitrogen, cell growth and expansion, hormone physiology and physiological responses to a changing environment. Prerequisite: Biol 2970 or permission of instructors.
Credit 3 units.  A&S : NS  A&S : IQ, NSM

L41 Biol 4028 From Seed to Senescence: The Genetics, Development and Cell Biology of Plants
This course introduces students to the unique features of plant cells, plant genomes and plant development, and examines the many significant ways in which plants differ from animals. Major topics include how plant stem cells continuously give rise to leaves and flowers (unlike animals, where organs are pre-formed during embryogenesis), and how plants reproduce without a dedicated germline (animals set aside germ cells early in development). A number of mutants that are defective in important developmental transitions are discussed, some of which are the basis for familiar fruit and vegetable crops. Also covered are the genetic and genomic methods used to generate and to analyze plant mutants, and recent technical advances that have furthered our understanding of plant growth and development. Reading of primary literature and computer-based exploration of online genomics tools are parts of the course. Prerequisite: Biol 2970 or permission of Dr. Haswell.
Credit 3 units.  A&S : NS  A&S : IQ, NSM

L41 Biol 4030 Biological Clocks
Biological clocks are the endogenous oscillators that coordinate physiological and behavioral rhythms in nearly all organisms. This course examines how these rhythms are generated and regulated. The material includes molecular, cellular and systems physiology and the relevance of biological timing to ecology and health in everything from protozoans to plants to people.
Credit 3 units.  A&S : NS  A&S : IQ, NSM
L41 Biol 404 Laboratory of Neurophysiology
Neurophysiology is the study of living neurons. Students record electrical activity of cells to learn principles of the nervous system including sensory transduction and coding, intercellular communication and motor control. The course meets for eight hours each week. Students may leave the lab for up to two hours. Prerequisites: Biol 3411 or Psych 4411, and permission of instructor. Biol 3411 may be taken concurrently.
Credit 4 units.  A&S : NS, WI  A&S : IQ, NSM, WI  FA : NSM

L41 Biol 4071 Developmental Biology
An introduction to the molecular and cell biology and biomechanics of animal development. The course is divided into thirds, which cover (1) an introduction to the major cell-cell signaling systems used during development and their study in model organisms, (2) molecular studies of early vertebrate development, and (3) application of the principles of solid mechanics to understanding events in tissue and organ morphogenesis including gastrulation, cardiac looping and brain folding. Prerequisites: Biol 2970 Principles of Biology II and Math 132 Calculus II.
Credit 3 units.  A&S : NS  A&S : IQ, NSM

L41 Biol 4181 Population Genetics
An introduction to the basic principles of population and ecological genetics. Mechanisms of microevolutionary processes; integrated ecological and genetic approach to study the adaptive nature of the evolutionary process. Prerequisite: Biol 2970.
Credit 3 units.  A&S : NS  A&S : IQ, NSM  FA : NSM

L41 Biol 4182 Macroevolution
An advanced introduction to the study of macroevolutionary patterns and processes with emphasis on the systematic methodology employed. Topics: theories of classification, phylogenetic reconstruction, testing of historical hypotheses, hierarchy theory, adaptation, extinction, speciation, developmental mechanisms of organismal evolution, biogeography. Prerequisite: permission of instructor.
Credit 3 units.  A&S : NS  A&S : IQ, NSM  FA : NSM

L41 Biol 4183 Molecular Evolution
A rigorous introduction to the study of evolution at the molecular level. Topics include the origin, amount, distribution and significance of molecular genetic variation within species, and use of molecular data in systematics and in testing macroevolutionary hypotheses. Prerequisite: Biol 2970 or permission of instructor.
Credit 3 units.  A&S : NS  A&S : IQ, NSM  FA : NSM

L41 Biol 419 Community Ecology
Basic principles of community ecology, including species interactions, spatial and temporal patterns of biodiversity, and ecosystem functioning. Analytical theory, statistical patterns and experimental approaches are emphasized. Intended for students wanting a rigorous overview of ecological principles. Prerequisites: at least one of the following courses: Biol 3501, 372, 381, 4170, 4193, EnSt 370 or permission of instructor.
Credit 3 units.  A&S : NS  A&S : IQ, NSM  FA : NSM

L41 Biol 4191 Biology Field Course in Ecology
An introduction to the study of organisms in relation to their environment, this field course focuses on the application of methods and techniques commonly used in ecological studies. Lectures focus on taxonomy, natural history, wildlife-habitat relations, hypothesis testing, experimental design and research techniques. Field trips to local sites are made to conduct ecological studies at the level of organisms, populations and communities. Lab time is used to process samples, collate and analyze data. Prerequisites: Biol 381 or a comparable course with permission of the instructor.
Credit 2 units.  A&S : NS  FA : NSM

L41 Biol 4193 Experimental Ecology Laboratory
Design and interpretation of ecological experiments, with an emphasis on hypothesis testing, sampling methodology and data analyses. Sessions address fundamental ecological questions and include field, greenhouse and laboratory (microcosm) studies on a variety of taxa and ecosystems. Generally work is done before dark (5 to 6 p.m.), although occasionally goes as late as 7 p.m. Includes occasional required Saturday field trips to local sites (e.g., forests, wetlands, prairies, streams) for in-depth study. Assignments are primarily several written assignments, including final projects and in-class participation. Fulfills the upper-level laboratory requirement for the Biology major. One hour of lecture and four hours of laboratory per week. Prerequisites: permission of instructor and at least one of the following: Biol 381 Introduction to Ecology, Biol 372 Behavioral Ecology, EnSt 370 Biological Conservation, Biol 4170 Population Ecology, Biol 419 Community Ecology or Biol 3501 Evolution. Credit is not awarded for both Biol 4191 and 4193. Enrollment is limited to 15 students.
Credit 4 units.  A&S : NS, WI  A&S : IQ, NSM, WI

L41 Biol 4202 Evolutionary Genetics
Same as L48 Anthro 4202.
Same as Anthro 4202
Credit 3 units.  A&S : NS  A&S : IQ, NSM  FA : NSM

L41 Biol 4213 Plants and American People: Past and Present
Same as L48 Anthro 4213.
Same as Anthro 4213
L41 Biol 424 Immunology
Basic molecular and cellular aspects of the vertebrate immune system with emphasis upon the interrelationships of nonspecific and specific host defense against disease, the nature of immunological specificity and its underlying molecular biology. Includes complement systems, immunochemistry and immunoassay, systems, the nature of cellular activation and effector generation, immunodeficiency, tolerance, tissue transplantation, hypersensitivity, immune regulation and specific diseases illustrative of the successes and failures of the immune system. Prerequisites: Biol 2970 and Chem 252. Credit 4 units. A&S : NS A&S : IQ, NSM

L41 Biol 4241 Immunology Laboratory
The Immunology Laboratory introduces students to a variety of common, broadly useful immunological techniques and then allow each student to employ most of the learned techniques in addressing a current research question. Experiments employ mouse cells in vitro and emphasize quantitative analysis of the data. Prerequisites: Biol 424 and permission of instructor. Credit 3 units. A&S : NS A&S : IQ, NSM

L41 Biol 427 Problem-Based Learning in Biomedical Sciences
Groups of five to eight students are presented with medical case studies that are then researched and discussed under faculty guidance. Students take major responsibility for their own learning within their team. Enrollment limited to 30 students. Prerequisites: Biol 3050 and some experience in molecular biology. A biology or science background is required. Credit 3 units. A&S : NS, WI A&S : IQ, NSM, WI FA : SSP

L41 Biol 430 Electron Microscopy of Cellular Structures and Processes
This course is designed to give the student skills in using transmission electron microscopy (TEM) to assess cell structure in biological samples, so that they can determine structure-function relationships by integrating biochemistry, physiology and molecular biology with ultrastructure. The course emphasizes thin section transmission electron microscopy but ancillary subjects include immunogold affinity labeling, electron tomography, negative staining, elemental analysis and cryo-EM analysis of macromolecular complexes. The goals of the course are to provide a fundamental understanding of theory and operation of a transmission electron microscope, hands-on experience in biological specimen preparation, and competence for independent operation of the Danforth Center’s TEM. Prerequisites: Biol 2970 and permission of instructor. Credit 4 units. A&S : NS A&S : IQ, NSM

L41 Biol 4331 Algae: Cell Biology and Molecular Evolution
Algae are ubiquitous and highly diverse photosynthetic organisms: they are prokaryotic (cyanobacteria) and eukaryotic, unicellular and multicellular, and central to soil, fresh water and marine ecosystems. This course considers their molecular taxonomy and evolution, specific lineage adaptations (e.g. silicon in diatoms), life cycles, cell cycle and cell-division mechanisms, light and nutrient acquisition, storage products, cell and cell-wall organization, ecological habitats and symbioses (e.g. lichens), and commercial applications (e.g. carotene, omega-3 fatty acids and other nutraceuticals; biodiesel). A course for upper-level biology and bioengineering undergraduates and graduate students. T/Th 3:30–5:30 p.m. until spring break, when a second course, Biol 4830, is highly recommended as a sequel. Assigned readings of research literature pertaining to each lecture topic; final take-home exam covering lecture and reading material. Prerequisite: Biol 334 or Biol 4810 or instructor's permission. Credit 2 units. A&S : NS A&S : IQ, NSM

L41 Biol 4342 Research Explorations in Genomics
A collaborative laboratory investigation of a problem in genomics, involving generation of a large data set (either genomic sequence or microarray analysis of gene expression) and computer analysis of the data. Class meets at the WU Genome Sequencing Center during the first half of the semester and in the Biology Department the second half of the semester. Prerequisites: Biol 297A, Chem 111/112 and Chem 151/152 and permission of the instructor. While Biol 3371 or Biol 437 and some familiarity with computers would be advantageous, this is NOT required. Fulfills the upper-level laboratory requirement for the Biology major. Credit 4 units. A&S : NS A&S : IQ, NSM

L41 Biol 434W Research Explorations in Genomics (Writing-Intensive)
Content equivalent to Biol 4342. Students electing the writing option are required to revise each of three papers (on finishing of their fosmid; gene finding in a human/chip comparison; and annotating their fosmid) at least once. Credit 4 units. A&S : NS, WI A&S : IQ, NSM, WI

L41 Biol 437 Laboratory on DNA Manipulation
This course provides investigation-driven research on experimental manipulation of DNA and RNA molecules. This includes the construction, isolation and analysis of plasmids, RNA, PCR products and DNA sequencing. Molecular cloning (genetic engineering), gene knockouts (mutants), RNA isolation, RT-PCR and microarray projects are performed. Prerequisites: Biol 2960 and Biol 2970. One hour of lecture and eight hours of laboratory each week. This course fulfills the upper-level laboratory requirement for the Biology major. Enrollment is limited to 12. A laboratory fee is required for students who are not full-time Washington University undergraduates.
L41 Biol 450W Topics in the History of Eugenics
This is a research-based seminar that explores the history of eugenics both in the United States and abroad, roughly in the period 1890–1960. The seminar begins with reading of some of the seminal works in the history of eugenics coupled with a discussion of historiographical problems associated with this topic. The second part of the seminar is devoted to reading primary sources on various topics (race-crossing, family pedigrees, inheritance of specific traits such as criminality, feeblemindedness, manic depression, pauperism, etc.). The third part of the course examines the transformation of eugenics in the population control movement of the 1950s and 1960s. Students give class reports on various readings and prepare four short papers (five to seven pages) as part of the writing-intensive requirement. Emphasis is on both the biological content and social/economic/political context of eugenics work in the first half of the 20th century.
Credit 4 units. A&S : NS, A&S : IQ, NSM, FA : NSM

L41 Biol 451 General Biochemistry
A study of structure-function relationships as applied to carbohydrates, proteins and lipids; intermediary metabolism of principal cellular components; and general aspects of regulation. Prerequisites: Biol 2970 and Chem 252 and permission of department. Recommended for students who have achieved grades of B or better in the prerequisites. Students may not receive credit for both Biol 4801 and Biol 451. Small class.
Credit 4 units. A&S : NS, A&S : IQ, NSM, WI

L41 Biol 4520 Protein Function in Model Cellular Systems
The goal of this 3-credit laboratory course is to train students in the scientific method. Throughout the course, they study a protein involved in a cellular process. Students, working in small groups, use bioinformatics to identify this protein in a number of species, then use this information to hypothesize which residues of the protein are important for its function. Over the course of the semester, students test their hypotheses in two model systems for studying cellular function — the unicellular eukaryote Saccharomyces cerevisiae and the multicellular eukaryote Physcomitrella patens. The weekly lecture gives students the background necessary to understand and perform their experiments, including information on a variety of bioinformatics tools, phylogeny, protein structure, molecular techniques, cell biology and microscopy. In addition, students use primary literature to understand the role their assigned protein plays in their cellular process. Prerequisites: Biol 2960 and Biol 2970.
Credit 3 units. A&S : NS, A&S : IQ, NSM

L41 Biol 4522 Laboratory in Protein Analysis, Proteomics and Protein Structure
In this laboratory course, students learn principles and methods of protein quantitation, protein purification, assessment of purity using SDS-polyacrylamide gel electrophoresis, separation of complex protein mixtures by 2-dimensional gel electrophoresis, definition of units of enzymatic activity, and identification of proteins using antibodies and/or mass spectrometry. The final part of the course introduces students to concepts of structural biology including protein crystallization, X-ray crystallography and computer modeling of protein structures. Fulfills the upper-level laboratory requirement for the Biology major.
Prerequisites: Chem 252 and either Biol 451 or Biol 4501/Chem 456. Permission of instructor required. Limit: eight students. Eight hours of laboratory/lecture per week.
Credit 3 units. A&S : NS, A&S : IQ, NSM, FA : NSM

L41 Biol 4580 Principles of Human Anatomy and Development
Same as L48 Anthro 4581.
Same as Anthro 4581
Credit 3 units. A&S : NS, A&S : IQ, NSM, FA : NSM

L41 Biol 4810 General Biochemistry I
Same as L07 Chem 481.
Same as Chem 481
Credit 3 units. A&S : NS, A&S : IQ, NSM

L41 Biol 4820 General Biochemistry II
Continuation of General Biochemistry I. Topics include carbohydrate, lipid and amino acid metabolism, signal transduction, transport across membranes, DNA replication and repair, transcription and translation, molecular motors, mechanisms of drug action and natural products biosynthesis. Prerequisite: Chem 481 or Biol 481.
Credit 3 units. A&S : NS, A&S : IQ, NSM

L41 Biol 4830 Bioenergy
A broad overview of the flow of energy, captured from sunlight during photosynthesis, in biological systems and current approaches to utilize the metabolic potentials of microbes and plants to produce biofuels and other valuable chemical products. An overall emphasis is placed on the use of large-scale genomic, transcriptomic and metabolomic datasets in biochemistry. The topics covered include photosynthesis; central metabolism; structure and degradation of plant lignocellulose; and microbial production of liquid alcohol, biodiesel, hydrogen and other advanced fuels. Course meets during the second half of the spring semester. Prerequisite: Biol 4810 or permission of instructor.
Credit 2 units. A&S : NS, A&S : IQ, NSM
**L41 Biol 4831 Green Machines: Plant Physiology, Growth and Bioenergy**

This course introduces students to the fundamentals of plant physiology and biochemistry and provides a broad overview of the flow of energy captured from sunlight during photosynthesis, in plants and microbes. The first half of the course focuses on the biochemical, cellular and physiological processes regulating how plants grow, metabolize and respond to their environment. Topics covered include water and mineral uptake and transport; source-sink relationships; long-distance transport of carbon and nitrogen; cell growth and expansion; physiological responses to changes in the environment; and interactions with other organisms. The second half of the course covers photosynthesis and bioenergetics and explores current approaches for utilizing the metabolic potentials of plants and microbes to produce biofuels and other valuable chemical products. An overall emphasis is placed on the use of large-scale genomic, transcriptomic and metabolomic datasets in biochemistry. The topics covered also include central metabolism, structure and degradation of plant lignocellulose, and microbial production of liquid alcohol, biodiesel, hydrogen and other advanced fuels. **Note:** Students interested primarily in the material covered in the second half of the course, should enroll in Biol 4830 (offered during the second half of the spring semester). Because this class includes the material of Biol 4830, a student may not receive separate credit for this class and for Biol 4830. **Prerequisite:** Biol 4810 or permission of instructor. **Credit** 4 units. A&S : NS A&S : IQ, NSM

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**L41 Biol 487 Undergraduate Teaching**

Exceptional undergraduates serve as teaching assistants for laboratory and/or discussion sections in departmental courses. Normally 2 or 3 units are given per semester, subject to the approval of the instructor and the department. Credit may not be counted toward fulfilling the biology major; application form in Department of Biology Student Affairs office. **Prerequisite:** permission of instructor. **Credit/no credit only.** Credit -3 unit. A&S : NS FA : NSM

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**L41 Biol 488 Undergraduate Teaching**

Exceptional undergraduates serve as teaching assistants for laboratory and/or discussion sections in departmental courses. Normally 2 or 3 units are given per semester, subject to the approval of the instructor and the department. Credit may not be counted toward fulfilling the biology major; application form in Department of Biology Student Affairs office. **Prerequisite:** permission of instructor. Credit/no credit only. **Credit** -3 unit. A&S : NS

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**L41 Biol 493 Seminar in Advanced Biology**

In special cases, credit may be given for individual study. Topics of study and credit must be arranged with a faculty sponsor and approved by the department.

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**Center for the Humanities**

The Center for the Humanities offers a 15-credit minor in Children’s Studies. In the Children’s Studies Minor, students will learn about children and childhood while drawing on the expertise of departments and programs from across Arts & Sciences. Children’s Studies minors will develop a sophisticated interdisciplinary understanding of childhood and the issues surrounding the treatment and status of children throughout history.

The minor combines social science courses that measure and analyze how children mature and how institutions have affected children with courses in the humanities that examine how children are portrayed and constructed in art, literature and film. Thus, a minor in Children’s Studies will expose students to an interconnected set of ideas about children as objects and subjects in a variety of essential disciplines. This minor would be especially attractive to students in Education, Psychology, English, History and American Culture Studies, and to students whose career plans include child-oriented specialties such as family law or pediatric medicine.

The Children’s Studies minor will:

- supplement students’ majors,
- enhance the standard liberal arts education with interdisciplinary instruction in the theory, research and practices of children and childhood,
- facilitate the exploration of professional careers related to children, and
- promote research collaboration for faculty and students to strengthen the academic study of children.

Students who minor in Children’s Studies also will receive special invitations to symposia, lectures and other events related to the minor sponsored by the Center for the Humanities.

**Contact Person:** Wendy Love Anderson
**Phone:** 314/935-9523
**E-mail:** andersonwl@wustl.edu
**Departmental website:** [http://cenhum.artsci.wustl.edu](http://cenhum.artsci.wustl.edu)

**Director**

Gerald Early
Merle Kling Professor of Modern Letters
PhD, Cornell University
(English, African and African-American Studies)
The Center for the Humanities does not offer a major. Please see the Minors page for information about the Center’s Minor in Children’s Studies (p. 250).
The Minor in Children’s Studies

Units required: 15

Required courses:

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>CFH 300a</td>
<td>Interdisciplinary Introduction to Children’s Studies</td>
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Core courses (minimum of two required):

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<tr>
<td>CFH 100B</td>
<td>Introduction to Psychology</td>
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<tr>
<td>CFH 321</td>
<td>Developmental Psychology</td>
<td>3</td>
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<tr>
<td>CFH 334</td>
<td>History of Golden Age of Children’s Literature</td>
<td>3</td>
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<tr>
<td>CFH 313A</td>
<td>Education Childhood and Society</td>
<td>3</td>
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Elective courses including:

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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>CFH 3195</td>
<td>Abnormal Child Psychology</td>
<td>3</td>
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<tr>
<td>CFH 301C</td>
<td>The American School</td>
<td>3</td>
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<tr>
<td>CFH 381</td>
<td>Banned Books</td>
<td>3</td>
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<tr>
<td>CFH 341</td>
<td>Children and Childhood in World Religions</td>
<td>3</td>
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<tr>
<td>CFH 151</td>
<td>Children, Childhood and Play in China: Freshman Seminar</td>
<td>3</td>
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<tr>
<td>CFH 3270</td>
<td>Comics, Graphic Novels and Sequential Art</td>
<td>3</td>
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<tr>
<td>CFH 461B</td>
<td>The Construction and Experience of Black Adolescence</td>
<td>3</td>
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<tr>
<td>CFH 431</td>
<td>The Craft of Fiction (when taught as Voices of Childhood)</td>
<td>3</td>
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<tr>
<td>CFH 408</td>
<td>Education and Psychology of Exceptional Children</td>
<td>3</td>
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<tr>
<td>AFAS 4608</td>
<td>Education of Black Children and Youth in the United States</td>
<td>3</td>
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<tr>
<td>CFH 304</td>
<td>Educational Psychology</td>
<td>3</td>
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<tr>
<td>CFH 4052</td>
<td>Educational Psychology: Focus on Teaching and Learning</td>
<td>4</td>
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<tr>
<td>Film 121</td>
<td>Freshman Seminar: Youth Culture and Visual Media</td>
<td>3</td>
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<tr>
<td>CFH 481</td>
<td>History of Education in the United States</td>
<td>3</td>
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<tr>
<td>CFH 4280</td>
<td>History of Urban Schooling in the United States</td>
<td>3</td>
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<tr>
<td>Educ 337</td>
<td>Play and Development</td>
<td>3</td>
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<tr>
<td>CFH 325</td>
<td>Psychology of Adolescence</td>
<td>3</td>
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<tr>
<td>CFH 416</td>
<td>Rediscovering the Child Interdisciplinary Workshops in an Urban Elementary School</td>
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<tr>
<td>CFH 453B</td>
<td>Sociology of Education</td>
<td>3</td>
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<tr>
<td>CFH 4681</td>
<td>Teaching Reading in the Elementary School</td>
<td>3</td>
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<tr>
<td>E Lit 316W</td>
<td>Topics in American Literature (when taught as Girls’ Fiction)</td>
<td>3</td>
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<tr>
<td>Comp Lit 385</td>
<td>Topics in Comparative Literature (when taught as Narratives of Childhood)</td>
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<tr>
<td>E Lit 313</td>
<td>Topics in English and American Literature (when taught as History of the Boy’s Book)</td>
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These new 2012 courses also will count as electives:

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<tr>
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<tbody>
<tr>
<td>CFH 314</td>
<td>Children’s Literature Since World War II: From E.B. White to J.K. Rowling</td>
<td>3</td>
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<tr>
<td>CFH 316F</td>
<td>Rediscovering the Child: Interdisciplinary Workshops in an Urban Middle School</td>
<td>3</td>
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<tr>
<td>CFH 336</td>
<td>The Cultural History of the American Teenager</td>
<td>3</td>
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<tr>
<td>CFH 337</td>
<td>Children and Censorship: What We Permit Children to Read and Why</td>
<td>3</td>
</tr>
<tr>
<td>CFH 342</td>
<td>Childhood, Culture and Religion in Medieval Europe</td>
<td>3</td>
</tr>
</tbody>
</table>

The most up-to-date list of approved electives is located on the Children’s Studies Minor website.

Additional Information

Other courses not on this list may be used to fulfill the requirements of the minor, but they must be approved in advance by the student’s minor adviser. Only one 100-level course can be counted toward the minor. Under Arts & Sciences policy, students are allowed to count up to 3 credits of this minor toward a major or another minor.

A brochure providing more information about the minor is available at the Center for the Humanities.

Center for the Humanities

L56 CFH 101 Freshman Seminar: The Humanities: What They Are, Where They Are Going, and Why They Still Matter

This course presents a historical and cultural examination of the humanities that examines their past and future place in American universities. How did the humanities develop? Why do we have a degree called the Ph.D.? What is the canon? Why do some people think the humanities are in trouble at the university today? Should we teach comic books and television shows in college courses? Are the humanities still relevant? During the course of the semester, we engage in the debates that currently surround the future of the humanities, and we consider the value of a liberal arts education in today’s marketplace.
We read a variety of texts that speak to the aforementioned questions and that re-evaluate what it means to be a humanist in the 21st century. Possible readings include works by Louis Menand, Martha Nussbaum, Jacques Barzun and William James, novels by Saul Bellow and Philip Roth, and selections from the autobiographies of such noted humanists as Angela Davis, Norman Podhoretz, Richard Rodriguez and Barack Obama. Prerequisite: first-year standing.
Credit 3 units. A&S : TH A&S : IQ, HUM

L56 CFH 125 Undergraduate Humanities Organization Internship
This internship with the Center for the Humanities exposes students to different aspects of managing non-profit organizations with a humanities focus. Interns will have one area of focus which may include assisting with event planning, PR and marketing, publications (including a monthly newsletter and a literary review), or research. They may also be assigned to other tasks as needed. PREREQUISITE: Interview by Center for the Humanities staff. Must be taken pass/fail. For more information please contact the Center’s Academic Coordinator, Wendy Anderson, at 935-9523 or andersonwl@wustl.edu.
Credit -3 unit.

L56 CFH 150 Rattle and Hum: Reading Music in Literature
This course presents an overview of novels and autobiographies, some written by musicians, that deal with the meaning of music and music making as a core theme. Moving from classical music to contemporary hip-hop, the seminar covers a variety of musical genres and considers the ways in which these different forms have been depicted in literature. How is music described in literature? Can music be understood metaphorically? How does the life story of a musician differ from that of other creative artists, or does it? Do we romanticize the musician and the making of music? Has the presentation of the musician in literature and film changed over time, from jazz to rock to hip-hop? In addition to the novels and memoirs we read, we also consider a range of films, some famous, some not, that deal with music or the lives of musicians, including Jailhouse Rock and 8 Mile. (None of these films are the standard Hollywood or Broadway musical.) Readings range from Tolstoy’s The Kreutzer Sonata to John A. Williams’ Clifford’s Blues, from Loretta Lynn’s Coal Miner’s Daughter to Bob Dylan’s Chronicles, Volume 1.
Credit 3 units. A&S : LA A&S : IQ, HUM

L56 CFH 201 Bridging The Gap: The Scholar as Leader and Activist
What does it mean to be a scholar? What do scholars and leaders have in common? This sophomore seminar explores these questions by exposing students to different ways of thinking, presenting them with different views and models of scholarship, teaching them the skills that scholars and leaders
### Arts & Sciences

have in common, and giving them opportunities to directly apply these skills to their own research and leadership experiences. Students also learn about different opportunities on campus that allow them to integrate scholarship and leadership in meaningful ways. The class is discussion based and highly interactive. Enrollment is restricted to sophomores. Credit 2 units. A&S : TH A&S : IQ, HUM

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Units</th>
<th>A&amp;S Requirements</th>
<th>HUM</th>
<th>LCD</th>
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<tbody>
<tr>
<td>L56 CFH 300a</td>
<td>Interdisciplinary Introduction to Children’s Studies</td>
<td>3</td>
<td>A&amp;S : SS A&amp;S : IQ, SSC</td>
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<tr>
<td>L56 CFH 300C</td>
<td>The American School</td>
<td>3</td>
<td>A&amp;S : SS A&amp;S : IQ, SSC</td>
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<tr>
<td>L56 CFH 304</td>
<td>Educational Psychology</td>
<td>3</td>
<td>A&amp;S : SS A&amp;S : IQ, SSC</td>
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<td></td>
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<tr>
<td>L56 CFH 312</td>
<td>Topics in English and American Literature</td>
<td>3</td>
<td>A&amp;S : SS A&amp;S : IQ, SSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L56 CFH 313A</td>
<td>Education Childhood and Society</td>
<td>3</td>
<td>A&amp;S : SS A&amp;S : IQ, SSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L56 CFH 314</td>
<td>Topics in English and American Literature</td>
<td>3</td>
<td>A&amp;S : SS A&amp;S : IQ, SSC</td>
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</tr>
<tr>
<td>L56 CFH 316F</td>
<td>Rediscovering the Child: Interdisciplinary Workshops in an Urban Middle School</td>
<td>3</td>
<td>A&amp;S : SS A&amp;S : IQ, SSC</td>
<td></td>
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</tbody>
</table>

### L56 CFH 321 Developmental Psychology
Same as Psych 321
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

### L56 CFH 322 Limited War: Korea and Vietnam
The Korean War (1950–1953), fought to stalemate, and the Vietnam War (1959–1975), fought to U.S. defeat, were the first major “limited” wars for the United States: wars meant neither to mobilize the civilian population for all-out combat with a mortal foe nor to use the full arsenal of military options available. The mixed legacy of both these conflicts has challenged the efficacy and goals of subsequent “limited” wars for the United States to this day. This course provides an historical and political overview of the Korean and Vietnam Wars as background for intensive examination of the fiction, memoir and films produced by both American and Asian participants in and witnesses to the two conflicts. This course meets the Arts & Sciences Cultural Diversity requirement. Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

### L56 CFH 323 Children and War
This course considers 20th-century representations of war in American children’s literature. Our scope stretches from the run-up to World War II in the 1930s through the current conflicts in Iraq and Afghanistan. This period produced texts that debated not only the role of war in childhood development but also the role of the child in war’s development. Genres include picture and comic books, career and adventure fiction, science fiction, and childhood memoir. Credit 3 units. EN : H

### L56 CFH 325 Psychology of Adolescence
Same as Psych 325
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

### L56 CFH 327 Comics, Graphic Novels and Sequential Art
Same as AMCS 3270
Credit 3 units. A&S : LA A&S : IQ, HUM

### L56 CFH 331 Topics in Holocaust Studies: Children in the Shadow of the Swastika
Same as German 331
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD BU : HUM FA : Lit, SSP

L56 CFH 334 History of Golden Age of Children's Literature
Same as E Lit 334
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L56 CFH 336 The Cultural History of the American Teenager
This course explores the recent history of the teenager in the United States, from the rise of teen culture in the 1950s to the current state of adolescence in the new century. Why have so many novels and films memorialized adolescence? How has the period of development been portrayed in books and film? How have depictions and attitudes toward teen culture changed over the past 50 years? We begin with J.D. Salinger's classic novel of adolescence alienation, *The Catcher in the Rye*, a book that in many ways helped initiate the rise of the youth movement in the 1950s and '60s. From there, we read a series of novels and historical studies that trace the changes in teen culture that have occurred over the past half century. Our class also considers a few films, such as *Rebel Without a Cause* and *Dazed and Confused*, which have helped shape our conception of the American teenager. Ultimately, we question what these depictions of teen culture can tell us about larger trends and concerns in American life. Readings include Judy Blume's *Forever*, Stephanie Meyer's *Twilight* and Colson Whitehead's *Sag Harbor*.
Credit 3 units. A&S : TH A&S : IQ, HUM

L56 CFH 341 Children and Childhood in World Religions
This course investigates the roles children play in some of the world's major religious traditions and how those traditions construct their concepts of childhood. From child disciples to child martyrs, from the miraculous childhoods of religious founders to the rites marking childhood's end, and from divine commandments involving fertility to those mandating celibacy, we explore a wide range of different religions' teachings about children and childhood. We combine primary and secondary sources including written texts, movies/video and web-based content in order to learn more about the complex relationships between children and the religious traditions of Judaism, Christianity, Islam, Hinduism, Buddhism and Confucianism.
Credit 3 units. A&S : TH A&S : IQ, HUM

L56 CFH 342 Childhood, Culture and Religion in Medieval Europe
From child saints to child scholars and from child crusaders to child casualties, the experience of childhood varied widely throughout the European Middle Ages. This course explores how medieval Jews, Christians and Muslims developed some parallel and some very much divergent concepts of childhood, childrearing and the proper cultural roles for children in their respective societies. Our readings combine primary and secondary sources from multiple perspectives and multiple regions of Europe, including a few weeks on the history and cultural legacy of the so-called Children's Crusade of 1312. We conclude with a brief survey of medieval childhood and its stereotypes as seen through contemporary children's books and TV shows. This course fulfills the Cultural Diversity requirement for Arts & Sciences.
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L56 CFH 381 Banned Books
Same as E Lit 381
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH FA : Lit

L56 CFH 401 Writing for Children and Young Adults
Same as E Comp 401
Credit 3 units. A&S : LA

L56 CFH 4052 Educational Psychology: Focus on Teaching and Learning
Crosslisting with L12 4052 beginning in SP11. Same as Educ 4052
Credit 4 units. A&S : SS A&S : IQ, SSC FA : SSP

L56 CFH 408 Education and Psychology of Exceptional Children
Crosslisting with L12 408 beginning SP11. Same as Educ 408
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA, HUM FA : SSP

L56 CFH 4280 History of Urban Schooling in the United States
Same as Educ 4280
Credit 3 units. A&S : TH A&S : IQ, HUM

L56 CFH 431 The Craft of Fiction
Crosslist with L13 431 as "Voices of Childhood," beginning SP11. Same as E Comp 431
Credit 3 units. A&S : LA A&S : IQ, HUM

L56 CFH 453B Sociology of Education
Crosslisting for L12 453B beginning SP11. Same as Educ 453B
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD BU : BA, ETH, HUM, IS FA : SSP
**Chemistry**

If you are interested in discovering insights into nature and exploring new ways to meet the needs of our technological society and new methods for creating novel compounds and useful materials, chemistry is an excellent major to pursue.

Chemistry is a multifaceted science that extends into biology, medicine, physics, mathematics, business and commerce. Studying chemistry provides the opportunity to explore the structure and constitution of the microworlds of atoms and molecules, the chemical and physical transformations that occur, and the principles that govern these changes.

Our program provides a strong foundation in the core areas of chemistry: organic, physical, inorganic, nuclear, theoretical. Special emphases in the department include such emerging interdisciplinary fields as organometallic, bioorganic, biophysical, macromolecular, polymer, environmental and materials chemistry. The department has close research ties with the departments of Physics; Earth and Planetary Sciences; Biology; Biomedical Engineering; Energy, Environmental and Chemical Engineering; Mechanical Engineering and Materials Science; and with departments at the Washington University School of Medicine.

As an undergraduate major in chemistry, you study chemistry with renowned scientists, who are teacher-scholars dedicated to your learning experience. The department is small, and it has world-class instruments and facilities, which allow you to receive individualized instruction and to participate in cutting-edge science. You work closely with a faculty member to design and carry out an original research project. You also may participate in interdisciplinary research at the School of Medicine or the School of Engineering & Applied Science. Research internships at local companies also can be arranged.

A variety of creative and productive careers are available to you with a degree in chemistry. You may pursue a career in chemistry or such related professions as biochemistry, medicine and chemical engineering. Most students continue in graduate or medical school, and some go on to business or law school. Positions in government, industry and education are available.

**Chair**

William E. Buhro  
George E. Pake Professor of Arts & Sciences  
PhD, University of California–Los Angeles

**Endowed Professors**

Joseph J. H. Ackerman  
William Greenleaf Eliot Professor  
PhD, Colorado State University

Robert E. Blankenship  
Lucille P. Markey Distinguished Professor of Arts & Sciences  
PhD, University of California–Berkeley

Edward S. Macias  
Barbara and David Thomas Distinguished Professor in Arts & Sciences; Provost and Executive Vice Chancellor for Academic Affairs  
PhD, Massachusetts Institute of Technology

Jacob Schaefer  
Charles Allen Thomas Professor  
PhD, University of Minnesota

**Professors**

Peter P. Gaspar  
PhD, Yale University

Michael L. Gross  
PhD, University of Minnesota

J. Dewey Holten  
PhD, University of Washington

T. Tom Lin  
PhD, University of Pennsylvania

Ronald A. Lovett  
PhD, University of Rochester

Kevin D. Moeller  
PhD, University of California–Santa Barbara

Demetrios G. Sarantites  
PhD, Massachusetts Institute of Technology

Lee G. Sobotka

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L56 CFH 461B The Construction and Experience of Black Adolescence  
Same as AFAS 461B  
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L56 CFH 4681 Teaching Reading in the Elementary School  
Crosslisting for L12 4681 beginning SP11.  
Same as Educ 4681  
Credit 3 units. A&S : LA A&S : IQ, HUM FA : SSP

L56 CFH 481 History of Education in the United States  
Same as Educ 481  
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : SSP
The Major in Chemistry

Total units required: 54-62

Required courses: To prepare for a major in chemistry, you will take:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chem 111A</td>
<td>General Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>Chem 112A</td>
<td>General Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>Chem 151</td>
<td>General Chemistry Laboratory I</td>
<td>2</td>
</tr>
<tr>
<td>Chem 152</td>
<td>General Chemistry Laboratory II</td>
<td>2</td>
</tr>
<tr>
<td>Chem 261</td>
<td>Organic Chemistry I with Lab</td>
<td>4</td>
</tr>
<tr>
<td>Chem 262</td>
<td>Organic Chemistry II with Lab</td>
<td>4</td>
</tr>
<tr>
<td>Physics 117A</td>
<td>General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>or Physics 197</td>
<td>Physics I</td>
<td></td>
</tr>
<tr>
<td>Physics 118A</td>
<td>General Physics II</td>
<td>4</td>
</tr>
<tr>
<td>or Physics 198</td>
<td>Physics II</td>
<td></td>
</tr>
<tr>
<td>Math 131</td>
<td>Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>Math 132</td>
<td>Calculus II</td>
<td>3</td>
</tr>
<tr>
<td>Math 233</td>
<td>Calculus III</td>
<td>3</td>
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</table>

To major in chemistry, you must take a minimum of 18 units in advanced courses in chemistry or biochemistry, among which must be included:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chem 401</td>
<td>Physical Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>Chem 402</td>
<td>Physical Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>Chem 461</td>
<td>Inorganic Chemistry</td>
<td>3</td>
</tr>
</tbody>
</table>

plus 9 units in chemistry at the 300 level or above (not all in the same chemistry subdiscipline and not including Chem 490 Introduction to Research or Chem 495 Advanced Undergraduate Research in Chemistry).

At least 3 of these 9 advanced units must be in a laboratory course, chosen from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Chem 358</td>
<td>Organic Chemistry Laboratory II</td>
<td>4</td>
</tr>
<tr>
<td>Chem 435</td>
<td>Nuclear and Radiochemistry Lab</td>
<td>3</td>
</tr>
<tr>
<td>Chem 445</td>
<td>Instrumental Methods: Physical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>Chem 470</td>
<td>Inorganic Chemistry Laboratory</td>
<td>3</td>
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</tbody>
</table>

Also, Physics 217 Introduction to Quantum Physics and additional mathematics courses are recommended. Chem 181 Freshman Seminar in Chemistry, a seminar to introduce first-year students to research activities in the department, is optional. A working knowledge of computer programming and a foreign language, such as German or Russian, is encouraged but not required.

You have the advantage of planning your course program with your adviser in accordance with your interests. Some graduate courses also are available to you as a senior.

The Major with Concentration in Biochemistry

As a chemistry major with a concentration in biochemistry, you should add Biol 2960 Principles of Biology I and Biol 2970 Principles of Biology II as prerequisites to the major and specify a minimum of 18 units in advanced courses in biology and chemistry, among which must be included:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Biol 334</td>
<td>Cell Biology</td>
<td>3</td>
</tr>
<tr>
<td>or Biol 349</td>
<td>Microbiology</td>
<td></td>
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<tr>
<td>Chem 481</td>
<td>General Biochemistry I</td>
<td>3</td>
</tr>
<tr>
<td>Chem 401</td>
<td>Physical Chemistry I</td>
<td>3</td>
</tr>
</tbody>
</table>
Chem 402  Physical Chemistry II  3
Chem 461  Inorganic Chemistry  3

and at least one advanced lab chosen from:
Chem 358  Organic Chemistry Laboratory II  4
Chem 435  Nuclear and Radiochemistry Lab  3
Chem 445  Instrumental Methods: Physical Chemistry  3
Chem 470  Inorganic Chemistry Laboratory  3
Biol 437  Laboratory on DNA Manipulation  4
Biol 4522  Laboratory in Protein Analysis, Proteomics and Protein Structure  3

Additional Information

Senior Honors for the major in Chemistry: To qualify for honors, you must complete a minimum of 21 units in advanced courses in chemistry or biochemistry, among which must be included Chem 401 Physical Chemistry I, Chem 402 Physical Chemistry II, Chem 461 Inorganic Chemistry, two additional advanced courses in chemistry, and two additional laboratories: one synthetic laboratory course (either Chem 358 Organic Chemistry Laboratory II or Chem 470 Inorganic Chemistry Laboratory) and one physical chemistry laboratory course (Chem 435 Nuclear and Radiochemistry Lab or Chem 445 Instrumental Methods: Physical Chemistry). Neither Chem 490 Introduction to Research nor Chem 495 Advanced Undergraduate Research in Chemistry can be used to satisfy the advanced laboratory requirements but Chem 495 can be used to satisfy an elective.

Senior Honors for the major in Chemistry with Concentration in Biochemistry: To qualify for honors, you must complete a minimum of 21 units in advanced courses and have one laboratory course in advanced chemistry or biology chosen from Chem 358 Organic Chemistry Laboratory II, Chem 435 Nuclear and Radiochemistry Lab, Chem 445 Instrumental Methods: Physical Chemistry, Chem 470 Inorganic Chemistry Laboratory, Biol 437 Laboratory on DNA Manipulation, or Biol 4522 Laboratory in Protein Analysis, Proteomics and Protein Structure, and both biochemistry courses, Chem 481 General Biochemistry I and Chem 482 General Biochemistry II.

The Minor in Chemistry

Units required: 27 in chemistry; 18 in math and physics

Required courses:
Chem 111A  General Chemistry I  3
Chem 112A  General Chemistry II  3
Chem 151  General Chemistry Laboratory I  2
Chem 152  General Chemistry Laboratory II  2
Chem 261  Organic Chemistry I with Lab  4
Chem 262  Organic Chemistry II with Lab  4
Math 131  Calculus I  3
Math 132  Calculus II  3
Math 233  Calculus III  3
Physics 117A  General Physics I  4
or Physics 197  Physics I  4
Physics 118A  General Physics II  4
or Physics 198  Physics II  4

Elective courses:
9 units of Chemistry encompassing three courses in at least two subdisciplines. Courses must be 300 level or above, but Chem 490 Introduction to Research is specifically excluded.

Chemistry

L07 Chem 111A General Chemistry I
Systematic treatment of fundamental chemical principles and their applications. Particular reference to the concept of energy and its uses, gas laws, kinetic molecular theory, atomic and molecular structure, chemical bonding, and the periodic classification of the elements. Prerequisites: two years of high school algebra and one of high school chemistry, or permission of instructor.
Credit 3 units. A&S : NS, QA A&S : IQ, NSM, AN BU : SCI FA : NSM

L07 Chem 112A General Chemistry II
Introduction to the principles of chemical equilibrium and to ionic solutions. Topics: ionic equilibria, galvanic cells, elementary chemical thermodynamics and kinetics, and molecular structure of coordination compounds. Three lecture hours and a problem-solving subsection hour. Sign-up for subsections is conducted during the first two weeks of the semester. Prerequisite: Chem 111A or permission of instructor.
Credit 3 units. A&S : NS, QA A&S : IQ, NSM, AN BU : SCI FA : NSM

L07 Chem 151 General Chemistry Laboratory I
This course provides an introduction into basic laboratory techniques, the experimental method, and the presentation of scientific data, as well as direct experience with chemical principles and the properties and reactions of substances. The topics and experiments in this course complement the material covered in the Chem 111A lecture course. Students attend one four-hour laboratory session and one one-hour laboratory lecture every other week. Prerequisite: concurrent enrollment in Chem 111A or permission of the instructor.
Credit 2 units. A&S : NS A&S : IQ, NSM FA : NSM

L07 Chem 152 General Chemistry Laboratory II
This course provides an introduction to basic laboratory techniques, the experimental method, and the presentation
of scientific data as well as direct experience with chemical principles and the properties and reactions of substances. The topics and experiments in this course complement the material covered in the Chem 112A lecture course. Students attend one four-hour laboratory session and one one-hour laboratory lecture every other week. Prerequisite: concurrent enrollment in Chem 112A or permission of the instructor.
Credit 2 units. A&S : NS A&S : IQ, NSM FA : NSM

L07 Chem 181 Freshman Seminar in Chemistry
A weekly lecture by a chemistry faculty member or other scientist from academia or industry on the lecturer’s current research activities. The goal is to provide students with a sampling of current research activities dealing with fundamental an applied problems in science and society that are being approached from a chemical point of view. Students see how fundamental chemical principles can be obtained from experiment and theory and used to both better understand and make better the world we live in. Each week a different scientist presents a lecture or offers an additional activity. Intended primarily for freshman who anticipate majoring in science, but interested upperclass students also should find the lectures interesting and simulating. Students are expected to attend all lectures and associated activities during the semester. Enrollment is limited. Credit/no credit only.
Credit 1 unit. A&S : NS A&S : IQ, NSM FA : NSM

L07 Chem 261 Organic Chemistry I with Lab
The first part of a two-semester survey of organic chemistry. The course includes an introduction to organic structures, reactions and reaction mechanisms. The laboratory meets on alternate weeks and include an introduction to laboratory methods in organic chemistry, including separation and methods of purification of organic compounds. Prerequisites: Chem 112A, Chem 152.
Credit 4 units. A&S : NS A&S : IQ, NSM

L07 Chem 262 Organic Chemistry II with Lab
A course covering certain areas of organic chemistry in more detail than the prerequisite course, with special emphasis on the mechanisms and the synthetic applications of organic reactions and on the organic chemistry of biological compounds. The laboratory meets on alternate weeks and include organic synthesis and spectroscopic techniques. Required course for chemistry majors. Prerequisite: Chem 261.
Credit 4 units. A&S : NS A&S : IQ, NSM

L07 Chem 290 Freshman and Sophomore Research
Introduction to laboratory research for first- and second-year students. Students work under supervision of a faculty sponsor. Prerequisite: permission of the sponsor and the Department of Chemistry. Credit/no credit only.

L07 Chem 299 Chemical Laboratory Safety
An overview of current laboratory safety, regulatory, and compliance practices. Safety and compliance issues that impact chemical, biological, and materials research will be covered through a series of lectures, demonstrations, activities, and laboratory exercises.
Credit 0.5 units. A&S : NS FA : NSM

L07 Chem 358 Organic Chemistry Laboratory II
Initially, problem solving in organic chemistry is emphasized through an introduction to the methods of qualitative organic analysis, including the use of chromatographic and spectroscopic techniques. Each student then selects an independent synthetic project to perform. Prerequisite: Chem 262. Six laboratory hours per week. Lectures held three hours a week for the first half of the semester.
Credit 4 units. A&S : NS, WI A&S : IQ, NSM, WI FA : NSM

L07 Chem 400 Physical Science in 12 Problems
Exercises related to general chemistry, classical mechanics, quantum mechanics, statistical mechanics, thermodynamics and kinetics, are solved with numerical software. Each exercise is accompanied by a lecture, a software template solving a problem and a related take-home problem. The software allows us to focus on, and treat in a transparent fashion, physical problems without the unworliday idealizations and contrivances found in textbooks. Prerequisites: Chem 111A Chemistry I, concurrent enrollment with Chem 401 and prior or concurrent enrollment in Physics 117A Physics I.
Credit 1 unit. A&S : NS A&S : IQ, NSM

L07 Chem 401 Physical Chemistry I
Introduction to quantum chemistry (with applications to elementary spectroscopy) and kinetics. Prerequisites: Chem 111A–112A, Math 233; prior completion of Physics 117A and 118A is strongly encouraged (but concurrent enrollment in Physics 117A is accepted); or permission of instructor. Required course for all Chemistry majors.
Credit 3 units. A&S : NS A&S : IQ, NSM BU : SCI FA : NSM

L07 Chem 402 Physical Chemistry II
Introduction to chemical thermodynamics, statistical mechanics and transport phenomena. Required course for all Chemistry majors. Prerequisites: Chem 111A–112A, Chem 401, Math 233, prior completion of Physics 117 and 118 is strongly encouraged (but prior completion of Physics 117 and concurrent enrollment in Physics 118 are accepted); or permission of instructor.
Credit 3 units. A&S : NS A&S : IQ, NSM BU : SCI FA : NSM

L07 Chem 435 Nuclear and Radiochemistry Lab
Application of radiochemical techniques to problems in chemistry, physics and nuclear medicine. Prerequisites: 3 units of physical chemistry and permission of instructor. One lecture hour and five hours of laboratory a week. Credit 3 units. A&S : NS A&S : IQ, NSM FA : NSM

L07 Chem 436 Radioactivity and Its Applications
Introduction to the production and decay of radioactive nuclides, the structure and properties of nuclei, and the applications of nuclear and radiochemical techniques to current scientific problems. Prerequisites: one year each of chemistry, mathematics and physics. Credit 3 units. A&S : NS A&S : IQ, NSM FA : NSM

L07 Chem 437 Radioactivity and Radiation Safety
The following topics are discussed: (a) general properties of nuclei; (b) laws of radioactive decay; (c) interaction of radiation with matter; (d) radiation detectors; (e) radiation dosimetry; (f) biological effects of radiation exposure; (g) radiation safety, safety test, regulations; (h) basics of radioisotope production. Credit 1 unit. A&S : NS A&S : IQ, NSM

L07 Chem 445 Instrumental Methods: Physical Chemistry
A course providing direct hands-on experience with the principles of physical chemistry (thermodynamics, quantum, kinetics) and associated experimental methods and instrumentation, including optical, infrared, and nuclear and electron spin resonance, electrochemistry, calorimetry, laser kinetics, and basic electronics. Prerequisite: Chem 401 or concurrent enrollment in Chem 402. Credit 3 units. A&S : NS, WI A&S : IQ, NSM, WI FA : NSM

L07 Chem 451 Organic Chemistry III
A lecture course that builds on the material in Chem 261 and 262, covering in more detail certain topics in those courses while also introducing new topics. A transition to graduate-level study in organic chemistry; recommended for chemistry, biochemistry and biology majors. Prerequisite: Chem 262. Credit 3 units. A&S : NS A&S : IQ, NSM FA : NSM

L07 Chem 453 Bioorganic Chemistry
The focus of this course in an overview of modern medicinal chemistry from the selection of a therapeutic target through the FDA-approval process. Each aspect is exemplified by examples of drugs currently in clinical use or in late-stage development. One aspect of particular interest to synthetic chemists is the underlying development chemistry that often determines the competitive success of a product. Topics covered include peptidomimetic HIV protease inhibitors, topoisomerase inhibitors, HMGCoA-reductase inhibitors (Lipitor, etc.), receptor tyrosine-kinase inhibitors (Gleevec, etc.), a synthetic mimetic of superoxide dismutase, and several others depending on the interests of the participants. Students are responsible for presenting to the class the synthetic routes developed for the discovery and commercialization of these drugs focusing on development chemistry. Prerequisite: Chem 262. Credit 3 units. A&S : NS A&S : IQ, NSM FA : NSM

L07 Chem 458 Chemical Reaction Mechanism Journal Club
This seminar meets for one hour each week. During the meetings, student participants are responsible for presenting topics from the current literature. The format of the presentation varies from informal talks to student-authored problem sets. Attendance at meetings is strongly recommended for all students who are currently taking the organic cumulative examinations. Prerequisite: Chem 262. Credit 1 unit. A&S : NS A&S : IQ, NSM FA : NSM

L07 Chem 459 Organometallic Chemistry
Survey of organometallic compounds with discussion of their synthesis, structure, spectroscopy and reactivity. Prerequisite: Chem 252. Credit 3 units. A&S : NS A&S : IQ, NSM FA : NSM

L07 Chem 461 Inorganic Chemistry
Introduction to modern inorganic chemistry; emphasis on relation of structure and bonding to the chemical and physical properties of compounds. Prerequisite: Chem 401 or permission of instructor. Credit 3 units. A&S : NS A&S : IQ, NSM FA : NSM

L07 Chem 464 Inorganic Biochemistry
A class in biological chemistry that emphasizes the role of metals in electron transfer and enzymatic catalysis. After a brief survey of essential concepts from biology, coordination chemistry and spectroscopy, topics include: electron transfer systems; oxygen transport and activation; metal ion acquisition, transport and homeostasis; enzymes catalyzing atom transfer reactions and radical-mediated processes. Prerequisites: Chem 252; Chem 461 recommended but not required. Credit 3 units. A&S : NS A&S : IQ, NSM FA : NSM

L07 Chem 465 Solid-State and Materials Chemistry
The course begins with basic crystallography and common inorganic structure types. With the aid of computer modeling, students learn to analyze, index and refine X-ray powder-diffraction data. Students are then taught to use phase diagrams to assess the compositions and microstructures of materials produced by various synthetic or processing methods. Crystal nucleation and growth, defects, and ion-conduction mechanisms are introduced. The course concludes with an analysis of the mechanical properties of materials from a chemistry perspective. What makes some materials strong, stiff and resistant to fracture? Prerequisites: Chem 111A-112A.
L07 Chem 470 Inorganic Chemistry Laboratory
A laboratory course emphasizing both the synthesis of inorganic compounds and the study of their physical properties. Laboratory exercises introduce novel synthetic techniques such as high-temperature synthesis and vacuum line manipulations. Compounds are spectroscopically characterized by UV-visible, gas-phase infrared, and multinuclear and dynamic NMR spectroscopy. Measurements of electrochemical behavior, magnetic susceptibility and electrical conductivity are performed. Prerequisite: Chem 461 or consent of the instructor. Credit 3 units. A&S : NS  A&S : IQ, NSM

L07 Chem 470W Inorganic Chemistry Laboratory — Writing Intensive
A laboratory course emphasizing both the synthesis of inorganic compounds and the study of their physical properties. Laboratory exercises introduce novel synthetic techniques such as high-temperature synthesis and vacuum line manipulations. Compounds are spectroscopically characterized by UV-visible, gas-phase infrared, and multinuclear and dynamic NMR spectroscopy. Measurements of electrochemical behavior, magnetic susceptibility and electrical conductivity are performed. Prerequisite: Chem 461 or consent of the instructor. This course satisfies the writing-intensive requirement. Credit 3 units. A&S : NS, WI  A&S : IQ, NSM, WI

L07 Chem 475 Chemical Biology
This course is an overview of Modern Medicinal Chemistry from the selection of a therapeutic target through the FDA approval process. Each aspect is exemplified by examples of drugs currently in clinical use, or in late-stage development. One aspect of particular interest to synthetic chemists is the underlying development chemistry that often determines the competitive success of a product. Topics covered include peptidomimetic HIV protease inhibitors, topoisomerase inhibitors, HMGCoA-reductase inhibitors (Lipitor, etc.), receptor tyrosine-kinase inhibitors (Gleevec, etc.), a synthetic mimetic of superoxide dismutase, and several others depending on the interests of the participants. Students are responsible for presenting to the class the synthetic routes developed for the discovery and commercialization of these drugs focusing on development chemistry. Prerequisite: Chem 262 or permission of the instructor. Credit 3 units. A&S : NS  A&S : IQ, NSM

L07 Chem 477 Modern Medicinal Chemistry
The focus of this course is an overview of Modern Medicinal Chemistry from the selection of a therapeutic target through the FDA approval process. Each aspect is exemplified by examples of drugs currently in clinical use, or in late-stage development. One aspect of particular interest to synthetic chemists is the underlying development chemistry that often determines the competitive success of a product. Topics covered include peptidomimetic HIV protease inhibitors, topoisomerase inhibitors, HMGCoA-reductase inhibitors (Lipitor, etc.), receptor tyrosine-kinase inhibitors (Gleevec, etc.), a synthetic mimetic of superoxide dismutase, and several others depending on the interests of the participants. Students are responsible for presenting to the class the synthetic routes developed for the discovery and commercialization of these drugs focusing on development chemistry. Prerequisite: Chem 262 or permission of the instructor. Credit 3 units. A&S : NS  A&S : IQ, NSM

L07 Chem 478 Molecular Modeling
A survey of a wide range of techniques and applications in molecular modeling and computational chemistry, including “ab initio” quantum mechanics, semi-empirical MO theory, molecular mechanics, molecular dynamics simulation, coarse-grained models, electrostatic methods and biomolecular structure prediction. In addition to traditional lectures, students gain hands-on experience with a variety of computer modeling programs, and are expected to complete an individual project in their particular area of interest. Prerequisites: previous course experience in physical chemistry at the level of Chem 401–402, or permission of the instructor. Some familiarity with computer basics (text editing, simple scripting and using the “command line” in either Linux, Windows or Mac OS X) is recommended. Credit 3 units. A&S : NS  A&S : IQ, NSM

L07 Chem 481 General Biochemistry I
Topics include the properties and structures of biomolecules, including amino acids, nucleotides, lipids, carbohydrates, proteins and nucleic acids. Additional topics include enzyme kinetics and mechanisms, membrane structure and properties, protein folding, an introduction to metabolism, oxidative phosphorylation, and photosynthesis. This course is the first semester of an integrated two-semester sequence. The second course is Chem 482. Prerequisites: Biol 2970, Chem 262. Credit 3 units. A&S : NS  A&S : IQ, NSM

L07 Chem 482 General Biochemistry II
Same as Biol 4820
Credit 3 units. A&S : NS  A&S : IQ, NSM

L07 Chem 490 Introduction to Research
Advanced laboratory work on a selected topic in chemistry. Prerequisite: permission of the department. Credit/No Credit only. If this course is to be submitted for Honors, the student must file the Honors form available at the chemistry department office before the end of junior year. Arrangements for registration should be completed during the preregistration period. Credit -6 unit. A&S : NS  A&S : IQ, NSM, FA : NSM

L07 Chem 495 Advanced Undergraduate Research in Chemistry
The student conducts research supervised by a chemistry department faculty member. At the end of the semester, the chemistry supervisor chairs a faculty committee to evaluate an oral public presentation and/or a concise written report,
and a letter grade is assigned. The committee members and completion requirements must be approved by the supervisor prior to registration. This course may provide a Capstone Experience but does not fulfill the Writing-Intensive requirement. The units earned may be applied as elective advanced credits toward a chemistry major with Latin honors eligibility. Course may be taken only once for credit. Prerequisite: Chem 490 and/or other advanced electives or research experience specified by the supervisor.

Credit 3 units.  A&S : NS  A&S : IQ, NSM

Chinese

The Department of East Asian Languages and Cultures offers a major and a minor in Chinese Language and Culture. As a major in Chinese, a student can expect to gain proficiency in the language, study the area’s literary and cultural landmarks, and gain familiarity with East Asian history and civilizations. All students majoring in Chinese normally must complete the fourth-level modern language course or its equivalent. They also must complete a prerequisite 200-level foundational course, at least one semester of relevant classical literary language, the historical survey of the relevant literature, and the EALC Senior Symposium. The department strongly encourages overseas study of Chinese language and culture. As majors, students are expected to maintain at least a B– average in all departmental courses.

Language Placement: Placement tests are required for all students entering our language programs, with the exception of those students who have had no previous knowledge of the language and are planning to enroll in the first semester of the first year of instruction. Students who test into second-year Chinese and satisfactorily complete (with a grade of B– or better) at least one semester of language study may petition for 3 units of retroactive credit; students who test into third year or above and satisfactorily complete (with a grade of B– or better) at least one semester of language study may petition for 6 units of retroactive credit. Credit is limited to 3 units for testing into second year and 6 units for testing into third year or above. Please note that students with native language proficiency as determined by the Chinese language section, as well as students who enroll in a course below their placement level, are ineligible for retroactive credit units. Students who misrepresent the extent of their background so as to gain entrance to a course at the elementary or intermediate level will be dropped from that course.

Phone: 314/935-4448
E-mail: ealc@artsci.wustl.edu
Departmental website: http://ealc.wustl.edu/

For a list of affiliated faculty, please see the Department of East Asian Languages and Cultures faculty (p. 310) page.

The Major in Chinese Language and Culture

Units required: 27 upper-level (300-level or above) units, no more than 12 of which may be language courses.

Prerequisites:
1. First and second-Level Modern Chinese or the equivalent
2. Chinese 227C Chinese Civilization

Requirements:
1. Chinese 427 Fourth-Level Modern Chinese I and Chinese 428 Fourth-Level Modern Chinese II or the equivalent
2. A minimum of one semester of Traditional Literary Chinese (Chinese 410 Introduction to Traditional Literary Chinese I or Chinese 411 Introduction to Literary Chinese II) or the equivalent. Chinese 410 can only be counted as a language course; Chinese 411 may be counted as either a language or a literature course.
3. Chinese 341 Literature of Early and Imperial China and Chinese 342 Literature of Modern and Contemporary China
4. Three additional upper-level courses in Chinese literature and/or culture
5. A capstone experience. Students may satisfy the capstone requirement in one of two ways, both of which require a presentation in the EALC Senior Symposium in the spring.
   • a) Successful completion of a senior honors thesis. This option, which also entitles the student to Latin Honors, requires a minimum of a 3.65 GPA. The thesis is researched and written over two semesters, for a total of 6 units, which are in addition to the 27 upper-level units required for the major.
   • b) Successful completion of an approved 400-level seminar course, to be taken in the senior year. (This course may be included among the three additional required upper-level courses for the major.)

Additional Information
1. Students must earn at least a B– in language courses in order to continue to the next level. They must also maintain at least a B– average in all required courses for the major. Students who do not meet this requirement may either repeat the course(s) in question or earn at least a B– in an approved equivalent course or courses (either during the summer or in a study abroad program).
2. Courses for the major may not be taken Credit/No Credit.
3. Normally, no more than 6 units of transfer or study-abroad non-language courses may be applied to the major.

4. Normally, no more than 3 units of Independent Study may be counted toward the required upper-level 27 units.

The Minor in Chinese Language and Culture

Units required: 18 units, no more than 12 of which may be in language.

Requirements:
• At least two years of modern Chinese or the equivalent
• At least 9 units must be 300-level or above
• And the following courses:

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<thead>
<tr>
<th>Code</th>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>Chinese 227C</td>
<td>Chinese Civilization (and)</td>
<td>3</td>
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<tr>
<td>Chinese 341</td>
<td>Literature of Early and Imperial China</td>
<td>3</td>
</tr>
<tr>
<td>or Chinese 342</td>
<td>Literature of Modern and Contemporary China</td>
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Additional Information
• Students must earn at least a B– in their language courses in order to continue to the next level. They must also maintain at least a B– average in all courses taken to fulfill the minor requirements. Students who do not meet this requirement may either repeat the course(s) in question or successfully complete an approved equivalent course or courses (either during the summer or in a study abroad program).
• Courses for the minor may not be taken Credit/No Credit.
• Normally, no more than 3 units of transfer or study-abroad nonlanguage courses may be applied to the minor.

Chinese

L04 Chinese 101D First-Level Modern Chinese I
Introduction to the modern spoken and written national language of China. Five regular hours and additional drill or laboratory sessions as assigned by instructor. Students with some previous Chinese language background must take placement examination.
Credit 5 units. A&S : LA A&S : IQ, LCD, LS BU : HUM

L04 Chinese 102D First-Level Modern Chinese II
Continuation of 101D. Prerequisite: grade of B– or better in 101D, or placement by examination. Five regular hours and additional drill or laboratory sessions as assigned by instructor.
Credit 5 units. A&S : LA A&S : IQ, LCD, LS BU : HUM

L04 Chinese 106 Beginning Chinese for Heritage Speakers I
This course is designed for students who have basic speaking and listening skills and some background in writing or reading. Three class hours plus one additional hour are required. Prerequisite: placement by examination.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : HUM

L04 Chinese 107 Beginning Chinese for Heritage Speakers II
Continuation of 106. Emphasis on improving basic reading and writing skills. Three class hours plus one additional hour are required. Prerequisite: grade of B– or better in Chinese 106 or placement by examination.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : HUM

L04 Chinese 118F Chinese Language Study Abroad at Fudan II (First-Year Level)
This course is taught at Fudan University in Shanghai, China. Not the same as Washington University courses Chinese 101D–102D. Students must receive a grade of B or better in order to earn any credit. Prerequisite: successful completion of Chinese 117F or placement by examination.
Credit 5 units. A&S : LA A&S : IQ, LCD, LS

L04 Chinese 151 Children, Childhood and Play in China: Freshman Seminar
In this course, we examine conceptions of children and childhood in Chinese history with a focus on the subject of children at play.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

L04 Chinese 180 Freshman Seminar in Religious Studies
Same as Re St 180
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH FA : SSP

L04 Chinese 206 Intermediate Chinese for Heritage Speakers I
Designed for students who have either completed Chinese 107 or who have basic speaking and listening skills and mastery of at least 300 written characters. Three class hours plus one additional drill hour. Prerequisite: grade of B– or better in Chinese 107, or placement by examination.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : HUM

L04 Chinese 207 Intermediate Chinese for Heritage Speakers II
Designed for students who have either completed Chinese 206 or who have basic speaking and listening skills and mastery of at least 800 written characters. Four class hours a week. Prerequisite: grade of B– or better in Chinese 206, or placement by examination.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : HUM
L04 Chinese 211 Second-Level Modern Chinese I
The standard second-year level of instruction in modern Chinese. Students learn both long and short forms of characters. Prerequisite: grade of B– or better in Chinese 102D or placement by examination. Five hours a week, plus drill and laboratory sessions as required by instructor. Credit 5 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L04 Chinese 212 Second-Level Modern Chinese II
The standard second-year level of instruction in modern Chinese. Students learn both long and short forms of characters. Prerequisite: grade of B– or better in Chinese 211 or placement by examination. Five hours a week, plus drill and laboratory sessions as required by instructor. Credit 5 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L04 Chinese 214F Chinese Language Study Abroad at Fudan II (Second-Year Level)
This course is taught at Fudan University in Shanghai, China. Not the same as Washington University courses Chinese 211–212. Students must receive a grade of B or better in Chinese 211 or placement by examination. Five hours a week, plus drill and laboratory sessions as required by instructor. Credit 5 units. A&S : LA A&S : IQ, LCD, LS

L04 Chinese 227C Chinese Civilization
An introduction to Chinese culture through selected topics that link various periods in China’s past with the present. Ongoing concerns include social stratification, political organization and the arts, gender relationships and the rationales for individual behavior, and the conceptions through which Chinese have identified their cultural heritage. Our readings include literary, philosophical and historical documents as well as cultural histories. Regular short writing assignments: take-home final. No prerequisites. Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD, SD BU : BA, IS

L04 Chinese 230 Topics in Chinese Literature and Culture
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD, SD BU : IS

L04 Chinese 301F Chinese Language Practicum for Beginning and Intermediate Levels at Fudan
This course is taught at Fudan University in Shanghai, China. This practicum is designed as a capstone language project that gives students an opportunity to comprehensively apply their language skills in an exploration of academic topics of their own interest. Credit 1 unit. A&S : LA A&S : IQ, LCD

L04 Chinese 303 The Taoist Tradition
Same as Re St 303 Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : ETH

L04 Chinese 3055 Contemporary Chinese Culture and Society
Same as Anthro 3055 Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD FA : SSP

L04 Chinese 306 Advanced Chinese for Heritage Speakers I
This course is designed for heritage students who have studied at least two years of Chinese (or equivalent) with grade B– or better to achieve greater proficiency in the oral and written use of the language through reading, listening, speaking and writing. Credit 3 units. A&S : LA A&S : IQ, LCD, LS

L04 Chinese 307 Advanced Chinese for Heritage Speakers II
Continuation of Chinese 306. Credit 3 units. A&S : LA A&S : IQ, LCD, LS

L04 Chinese 3162 Early Modern China
Same as History 3162 Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : IS

L04 Chinese 316C Modern China
Same as History 316C Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : IS FA : SSP

L04 Chinese 330 Topics in Chinese Literature and Culture
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : IS

L04 Chinese 3352 China's Urban Experience: Shanghai and Beyond
Same as East Asia 3352 Credit 3 units. A&S : TH A&S : IQ, HUM

L04 Chinese 341 Literature of Early and Imperial China
An introduction to important genres and themes of Chinese literature through the study of major writers. Brief lectures on the writers' personal, social, intellectual and historical contexts; most class time is devoted to student discussions of masterworks as an avenue for understanding Chinese culture during selected historical periods. Required for all Chinese majors, and recommended for all Japanese and East Asian Studies majors. No prerequisites; all readings available in English translation. Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD, SD BU : HUM FA : Lit

L04 Chinese 3415 Early Chinese Art: From Human Sacrifice to the Silk Road
Same as Art-Arch 3415
L04 Chinese 342 Literature of Modern and Contemporary China
An introduction to the major writers and works of Chinese literature from the turn of the 20th century to the present, including fiction, poetry and film. We look at these works in their relevant literary, sociopolitical and cultural contexts (including Western influences). Required for all Chinese majors, and recommended for all Japanese and East Asian Studies majors. No prerequisites; all readings in English translation.
Credit 3 units. A&S: TH, CD. A&S: IQ, HUM, LCD. EN: H

L04 Chinese 360 Third-Level Modern Chinese I
Emphasis on improving speaking, listening, reading and writing skills. Texts include Chinese newspapers and modern literary texts. Open to undergraduates only. Prerequisite: grade of B– or better in Chinese 212 or placement by examination.
Credit 5 units. A&S: LA. A&S: IQ, LCD, LS. BU: HUM, IS

L04 Chinese 361 Third-Level Modern Chinese II
Continuation of advanced work in reading Chinese newspapers and modern literary texts. Open to undergraduates only. Prerequisite: grade of B– or better in Chinese 360 or placement by examination.
Credit 5 units. A&S: LA. A&S: IQ, LCD, LS. BU: HUM, IS

L04 Chinese 363F Chinese Language Study Abroad at Fudan II (Third-Year Level)
This course is taught at Fudan University in Shanghai, China. Not the same as Washington University courses Chinese 360-361. Students must receive a grade of B or better in order to earn any credit. Prerequisite: successful completion of Chinese 359F or 362F with a minimum grade of B.
Credit 5 units. A&S: LA. A&S: IQ, LCD, LS. BU: HUM, IS

L04 Chinese 382 Writing Women of Imperial China
Women writers can be found throughout most of China’s imperial history, and from the 16th century on, there was an extraordinary number of women writing and publishing their poetry collections. Despite this fact, only a very few writings by women were included in the traditional literary canon and until recently, they were not considered worthy of scholarly attention. Fortunately, there is now a growing body of critical studies on, and translations of, these women writers. In this course, we explore the writings of Chinese women from the 1st to the early 20th centuries and discuss the changing historical and social contexts within which these women wrote and the obstacles of both genre and gender that had to be overcome in order to ensure that their voices were heard. Prerequisite: at least one course in Chinese literature or culture or instructor’s permission.
Credit 3 units. A&S: TH, WI. A&S: IQ, HUM, LCD, WI. BU: HUM

L04 Chinese 399 Undergraduate Independent Study
Prerequisite: permission of instructor and section head. No more than 6 units may be earned by a student.
Credit -6 unit.

L04 Chinese 4011 Popular Culture and Consumption in Modern China
Same as Anthro 4011
Credit 3 units. A&S: SS, CD, WI. A&S: IQ, SSC, LCD

L04 Chinese 402F Chinese Language Practicum for Advanced Language Levels at Fudan
This course is taught at Fudan University in Shanghai, China. This practicum is designed as a capstone language project that gives students an opportunity to comprehensively apply their language skills in an exploration of academic topics of their own interest.
Credit 1 unit. A&S: LA. A&S: IQ, LCD

L04 Chinese 403 Topics in East Asian Religion and Thought
Same as Re St 403
Credit 3 units. A&S: TH, CD. A&S: IQ, HUM

L04 Chinese 410 Introduction to Traditional Literary Chinese I
Selected readings in premodern Chinese texts. Required of all majors in Chinese and students in fields of specialization where knowledge of literary Chinese is normally expected. Prerequisite: grade of B– or better in Chinese 427 or instructor’s permission.
Credit 3 units. A&S: LA. A&S: IQ, LCD, LS. BU: HUM, IS. FA: Lit

L04 Chinese 411 Introduction to Literary Chinese II
Selected readings in premodern Chinese texts. Required of all majors in Chinese and students in fields of specialization where knowledge of literary Chinese is normally expected. Prerequisite: grade of B– or better in Chinese 410 or instructor’s permission.
Credit 3 units. A&S: LA. A&S: IQ, LCD, LS. BU: HUM, IS. FA: Lit

L04 Chinese 413 Advanced Composition in Chinese
This course is designed for students wishing to improve their ability to write letters, essays, reports and other types of compositions in Chinese. There are assigned readings both on the art of writing Chinese and of writing models, as well as regular take-home writing assignments. This course is conducted entirely in Chinese. Prerequisite: grade of B– or better in Chinese 428 or instructor’s permission.

L04 Chinese 414 Readings in Classical Chinese Philosophy
In this course we study Chinese philosophical texts from the classical period (ca. 6th to 3rd centuries BCE). We read selections from the Analects, the Mengzi, the Xunzi, the Zhuangzi, the Daodejing and the Hanfeizi, in addition to commentaries on these primary texts. The readings are in classical Chinese with occasional supplemental readings in English and modern Chinese. The aim of the course is to familiarize students with the language and grammar of Chinese philosophical texts, introduce students to the tradition of scholarly commentary, and explore a set of influential Chinese texts in the original language. Prerequisite: Chinese 411 or instructor’s permission.
Credit 3 units. A&S : LA A&S : IQ, LCD

L04 Chinese 416 Advanced Composition in Chinese II
This course is a continuation of Chinese 413. Students continue to work to improve their ability to write letters, essays, reports and other types of compositions in Chinese. This course is conducted entirely in Chinese.
Credit 3 units. A&S : LA A&S : IQ, LCD

L04 Chinese 427 Fourth-Level Modern Chinese I
Readings in advanced texts covering a wide variety of fields in social sciences and humanities. Prerequisite: grade of B– or better in Chinese 361 or 421, or placement by examination.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS

L04 Chinese 428 Fourth-Level Modern Chinese II
Readings in advanced texts covering a wide variety of fields in social sciences and humanities. Required of all students desiring subsequent tutorial assistance from the department. Prerequisite: grade of B– or better in Chinese 427 or placement by examination.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS

L04 Chinese 431F Chinese Language Study Abroad at Fudan II (Fourth-Year Level)
This course is taught at Fudan University in Shanghai, China. Not the same as Washington University courses Chinese 427-428. Students must receive a grade of B or better in order to earn any credit. Prerequisite: Successful completion of L04-430F with a minimum grade of B.
Credit 5 units. A&S : LA A&S : IQ, LCD, LS

L04 Chinese 449 Topics in Comparative Literature
Same as Comp Lit 449
Credit 3 units. A&S : TH A&S : IQ, HUM

L04 Chinese 460 Fifth-Level Modern Chinese I
This course is designed for advanced students wishing to improve their skills in conversation, reading and writing of letters, essays, reports and other types of compositions in Chinese. The reading material includes a variety of authentic texts, including newspapers, short stories and essays. This course is conducted entirely in Chinese. Required of all students desiring subsequent tutorial assistance from the department. Prerequisite: grade of B– or better in Chinese 428 or 411, by result of the placement examination, or by instructor’s permission.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS

L04 Chinese 461 Fifth-Level Modern Chinese II
This course is designed for advanced students wishing to improve their skills in conversation, reading and writing of letters, essays, reports and other types of compositions in Chinese. The reading material comprises various authentic texts, including newspapers, short stories and essays. This course is conducted entirely in Chinese. Prerequisite: grade of B– or better in Chinese 428 or 411, by result of the placement examination, or by instructor’s permission.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS

L04 Chinese 463 Legal and Business Chinese
An intensive exposure to legal and business texts in Chinese, with the aim of developing reading and speaking fluency in these areas and mastering the requisite specialized vocabulary. Of particular interest to students in the joint J.D./M.A. and dual M.B.A./M.A. programs, but open to all students with advanced proficiency in written and spoken Chinese. Prerequisite: Chinese 428 or instructor’s permission.
Credit 3 units. A&S : LA A&S : IQ, LCD BU : IS

L04 Chinese 4631 Business Chinese I
In the present globalization, China has been fertile ground for foreign joint business ventures, and this course focusing specifically on business Chinese attests to that fact. This course aims at teaching Chinese business communication using a series of case studies to involve and challenge the students as they refine their Mandarin Chinese language skills in a wide range of applied business contexts, from resolving contract disputes, to developing a business strategy, to establishing a franchise overseas. The course is designed to simulate real business environments where students interact with Chinese businesspeople in business settings and are motivated to achieve business goals. Prerequisite: grade of B– or better in Chinese 428 or instructor’s permission.
Credit 3 units. A&S : LA A&S : IQ, LCD

L04 Chinese 4632 Business Chinese II
Continuation of Business Chinese 4631. This course uses a series of case studies to involve and challenge students as they...
refine their Mandarin Chinese language skills in a wide range of applied business contexts.
Credit 3 units.  A&S : LA  A&S : IQ, LCD

L04 Chinese 466F Chinese Language Study Abroad at Fudan II (Fifth-Year Level)
This course is taught at Fudan University in Shanghai, China. Not the same as Washington University courses Chinese 460–461. Students must receive a grade of B or better in order to earn any credit. Prerequisite: successful completion of Chinese 427–428 or placement by examination.
Credit 5 units.  A&S : LA  A&S : IQ, LCD, LS

L04 Chinese 467 The Chinese Theater
Survey of the performance and literary traditions of the Chinese theater from their pre-Tang origins to the present day. The course focuses on three forms: 14th-century zaju plays, 16th- and 17th-century chuanqi plays, and recent films from China, Taiwan and Hong Kong. Background in either China studies or theater in other cultures recommended.
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD, SD  FA : AH

L04 Chinese 470 Readings in Chinese Literature
Selected literary masterpieces in Chinese, including examples of poetry and prose. All readings and discussion in Chinese. Open to both graduate and undergraduate students. Prerequisite: permission of instructor.
Credit 3 units.  A&S : TH  FA : Lit

L04 Chinese 4711 Topics in Religious Studies: Gender and Religion in China
Same as Re St 4711
Credit 3 units.  A&S : TH  A&S : IQ, HUM  FA : SSP

L04 Chinese 472 Topics in Asian Religious Thought 1
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L04 Chinese 476 Reading Seminar in Chinese Traditional Fiction
Extensive readings in major critical works in Chinese and English concerning fiction of imperial China, with emphasis on vernacular fiction of the Ming and Qing periods. Weekly discussions and short reading reports. Knowledge of Chinese language and literature normally required, but arrangements can be made for graduate students in such programs as East Asian Studies and Comparative Literature.
Credit 3 units.  A&S : TH  A&S : IQ, HUM, LCD  FA : Lit

L04 Chinese 477 Reading Seminar in Chinese Traditional Poetry

L04 Chinese 478 Reading Seminar in Chinese Traditional Theater and Drama
Credit 3 units.  A&S : TH  FA : Lit

L04 Chinese 479 Reading Seminar in Modern Chinese Literature
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD  BU : ETH  FA : Lit

L04 Chinese 480 Reading Seminar in Popular Literature and Culture
Credit 3 units.  A&S : TH  FA : Lit

L04 Chinese 481 Reading Seminar in Religion and Chinese Literature
Credit 3 units.  A&S : TH  A&S : IQ, HUM, LCD  FA : Lit

L04 Chinese 482 Reading Seminar in Gender and Chinese Literature
Prerequisite: Chinese 341 or instructor's permission.
Credit 3 units.  A&S : TH  A&S : IQ, HUM, LCD  FA : Lit

L04 Chinese 486 Independent Work for Senior Honors
This course is taken in the fall semester. Prerequisites: senior standing, eligibility for honors and permission of the department. Credit 3 units.

L04 Chinese 487 Independent Work for Senior Honors
This course is taken in the spring semester. Prerequisites: senior standing, eligibility for honors, and permission of the department. Credit 3 units.

L04 Chinese 489 Topics in Modern Chinese Literature
Prerequisite: permission of instructor.
Credit 3 units.  A&S : TH  A&S : IQ, HUM, LCD  FA : Lit

L04 Chinese 491 Topics in Chinese Literature and Culture
Credit 3 units.  A&S : SS  A&S : IQ, SSC, LCD

L04 Chinese 490 Topics in Chinese Literature and History
Prerequisite: permission of the department.
Credit 3 units.  A&S : TH  A&S : IQ, HUM, LCD  FA : Lit, SSP

L04 Chinese 498 Guided Readings in Chinese
Prerequisites: graduate standing and permission of the instructor and the graduate adviser. Course normally taken
successful completion of Chinese 428. May be repeated once for credit. 
Credit -3 unit. A&S : LA

Classics

Classics is the study of various aspects of the rich cultural heritage handed down by the ancient Greeks and Romans, extending beyond language, literature and history, and even beyond antiquity to a deeper understanding of later Western cultures. In addition to a substantial library collection of materials related to the ancient world, Washington University is also home to collections of Greek papyri and art and to the Wulfing Coin Collection. The Classics Department offers two options for students interested in studying Greek and Roman antiquity: the Classics major and the Ancient Studies major. The major in Classics focuses on study of the Latin and/or ancient Greek languages. The major in Ancient Studies is for students who want to explore the whole spectrum of the classical world with little or no work in the ancient languages.

Contact Person: Cathy Marler
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E-mail: classics@artsci.wustl.edu
Departmental website: http://classics.artsci.wustl.edu/

Chair and Endowed Professor

Timothy J. Moore
John and Penelope Biggs Distinguished Professor of Classics in Arts and Sciences
PhD, University of North Carolina at Chapel Hill

Endowed Professor

Susan I. Rotroff
Jarvis Thurston and Mona Van Duyn Professor in the Humanities
PhD, Princeton University

Professors

Robert D. Lamberton
PhD, Yale University

George M. Pepe
Professor
PhD, Princeton University

Associate Professor

Catherine Keane
PhD, University of Pennsylvania

Assistant Professors

Roshan Abraham
PhD, University of Pennsylvania

William S. Bubelis
PhD, University of Chicago

Ryan Platte
PhD, University of Washington

Lecturer

Caroline Bishop
PhD, University of Pennsylvania

Professors Emeriti

Carl W. Conrad
PhD, Harvard University

Kevin Herbert
PhD, Harvard University

Merritt Sale
PhD, Cornell University

The Major in Classics

Total units required: 24

Required courses:

A minimum of 24 credits, with at least 18 credits in advanced courses. The specific program will be determined by the student and the adviser, according to the student’s interests. Courses may be chosen from among Greek, Latin and Classics offerings, but all majors must include in their programs a minimum of 12 advanced credits in Greek or Latin, at least 6 of them at the 400 level. Those who are able to enter the program at the advanced level because of previous language study will normally take 15 or more advanced credits in language. Competence in more than one language, though strongly encouraged and necessary for those planning to go on to graduate study in Classics, is not required. Majors, especially those planning graduate work, should enter the Honors Program if time permits.

The Major in Ancient Studies

Total units required: 24

Required courses:

24 units drawn from courses in the Department of Classics and those in related departments. Of these, 18 units must be at the advanced level, including 6 units at the 400 level. Greek and Latin courses at the 102 level or above may be used in partial fulfillment of this requirement. In this major, you are encouraged to develop a certain depth in one special field of interest (e.g., literature, art, history or philosophy). Therefore, at least 9 of the 18 advanced units of the major should be taken in one such specific area.
Certain courses in related departments may be used in partial fulfillment of the requirements for a major in Classics or Ancient Studies, including:

- Art-Arch 331 Greek Art and Archaeology
- Art-Arch 334 Roman Art and Archaeology
- Art-Arch 437 Greek Sculpture
- Phil 451 Plato
- Phil 452 Aristotle

**Additional Information**

**Study Abroad:** Study abroad for a semester in Rome or Athens is an option many Classics majors select. Washington University is a member of the Intercollegiate Center for Classical Studies (ICCS) consortium, and many majors attend the one-semester ICCS program in Rome. A knowledge of Latin or Greek to at least the intermediate level is required for admission to the Rome program. Students interested in studying at the Intercollegiate Center in Rome should consult Professor Tim Moore. Students interested in the College Year in Athens Program should consult Professor Robert Lamberton.

**Senior Honors:** If you are planning to pursue graduate work, you should enter the honors program. To apply, you must have junior standing, an average of A– or better in courses numbered 300 or above in Greek and/or Latin (for Classics majors) or in Classics (for Ancient Studies majors), an overall GPA of 3.65 or above, and permission of the chair. A thesis of substantial nature and length is prepared and written under the direction of a member of the department, beginning in the fall semester of your senior year. A final draft is submitted to the director no later than February 1, a final copy to the full thesis committee before March break. Credit of 6 units is awarded upon presentation of an acceptable thesis.

**The Minor in Classics**

**Units required:** 15

**Required courses:**
- Greek 317C Introduction to Greek Literature and
- Greek 318C Introduction to Greek Literature
  or
- Latin 3171 Survey of Latin Literature: The Republic and
- Latin 3181 Survey of Latin Literature: The Empire

**Elective courses:**
- Three other adviser-approved courses (9 units) in Greek, Latin or Classics. These must include at least one Greek or Latin course at the 300 or 400 level. No more than one course may be at the 200 level, and Classics 225D may not be counted.

**The Minor in Ancient Studies**

**Units required:** 15

**Required courses:**
- At least two of the following:
  - Classics 341C Ancient History: The Roman Republic
  - Classics 342C Ancient History: The Roman Empire
  - Classics 345C Greek History: Archaic and Classical
  - Classics 346C Greek History: The Age of Alexander

**Elective courses:**
- You need three other courses in the culture of Greece and Rome, the selection to be mutually agreeable to the department adviser and to the student. No more than two courses may be at the 200 level. Classics 225D may not be counted.

**Classics**

**L08 Classics 116 Freshman Seminar: Magicians and Witches in Greco-Roman Literature**
This course examines the representation of “magicians” and “witches” in ancient Greek and Roman literature. The starting point is Apuleius’ *Metamorphoses* (or *The Golden Ass* as St. Augustine dubbed it), written in the 2nd Century CE. This work of narrative prose collects several tales of witches, magical transformations and religious revelation. From there, we examine other tales of magicians and witches, paying particular attention to the role of gender in these representations and the conflict between magic and religion. The goal is to understand how these representations function within their particular society, what anxieties they reveal, and how they relate to the archaeological evidence we have for these practices.

Credit 3 units.  A&S : TH    A&S : IQ , HUM    EN : H

**L08 Classics 200C World Archaeology**
Same as ARC 200C

Credit 3 units.  A&S : TH , CD    A&S : IQ , HUM , LCD    BU : IS    FA : SSP

**L08 Classics 225D Latin and Greek in Current English**
This course provides a study of the impact of Latin and Greek on the English language through intensive study of the Latin and Greek roots, prefixes and suffixes that are most commonly found in English technical and nontechnical vocabulary. Some attention also is paid to the linguistic principles by which these elements have entered the English language.

Credit 3 units.  A&S : LA    A&S : IQ , HUM    BU : HUM

**L08 Classics 228 Theater Culture Studies I: Antiquity to Medieval**
Same as Drama 228C

Credit 3 units.  A&S : TH    A&S : IQ , HUM    BU : HUM    FA : AH

**L08 Classics 235C The Greek Imagination**
An introduction to Greek culture with emphasis on Archaic and Classical ideas about man, the gods and the cosmos. Considerable attention also is given to the Athenian democracy, its institutions, festivals and arts. The course is designed to offer a broad and interdisciplinary view of the most memorable Greek achievements in literature, the visual arts, and social thought and practice.
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : HUM FA : SSP

L08 Classics 236C The Roman World
An introduction to the society and culture of the ancient Roman Republic and Empire, including national identity, moral and political thought, family, religion and entertainment. Emphasis on primary texts.
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : HUM FA : AH, Lit

L08 Classics 240 Not Members of This Club: Women and Slaves in the Greco-Roman World
Both the Athenian Democracy and the Roman Senatorial Oligarchy were societies in which political power was the exclusive property of free, citizen males. With very few exceptions, the astounding accomplishments of those societies were also the creations of free, citizen males. This course examines the lives of two disparate but comparable groups of outsiders within Greek and Roman society. The status, rights and accomplishments of Athenian and Roman women are explored and placed in the context of other premodern societies. Likewise, the institution of slavery in Greece and Rome is explored and compared with other slave-holding societies, ancient and modern.
Credit 3 units. A&S : SS, CD, SD A&S : IQ, SSC, LCD BU : BA FA : SSP

L08 Classics 3001 Writing Intensive in Ancient Studies
Same as Art-Arch 3001
Credit 3 units. A&S : TH, WI A&S : IQ, HUM, WI BU : HUM

L08 Classics 301C Greek Mythology
This course introduces students to the major myths of ancient Greek culture and the functions that those myths served in ancient society. The readings in the course come almost entirely from actual ancient texts (in translation) but students are encouraged to think beyond those texts to consider the broad and dynamic living mythological tradition in which the stories developed. The course also introduces students to the varied approaches through which such mythology has been studied, from ancient society’s own reflections on Greek mythology to recent academic theories.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : SSP

L08 Classics 3301 Homeric Archaeology
Same as Art-Arch 3301
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : IS FA : AH

L08 Classics 334 Roman Art and Archaeology
Same as Art-Arch 334
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : AH

L08 Classics 3361 Ancient Sanctuaries: The Archaeology of Sacred Space in the Ancient Mediterranean
Same as Art-Arch 336
Credit 3 units. A&S : TH, CD BU : HUM FA : AH

L08 Classics 341C Ancient History: The Roman Republic
From the legendary origins of the city through the establishment and collapse of its republican government. Emphasis on political history, imperialism, slavery, Greek culture and the Roman aristocracy.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM, IS FA : SSP

L08 Classics 342C Ancient History: The Roman Empire
From the establishment of the Augustan principate to the sack of Rome in 410. Emphasis on social and cultural history, including life in the provinces, slavery, the family, legal developments, the rise of Christianity, and the general question of Roman imperialism and its consequences.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM, IS FA : SSP

L08 Classics 345C Greek History: Archaic and Classical
From the so-called Dark Ages to the death of Socrates, a survey of the political, social, economic and military development of early Greece, with emphasis upon citizenship and political structure, religion and culture, and the complex relationships between Greeks and neighboring peoples.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : SSP

L08 Classics 346C Greek History: The Age of Alexander
From the death of Socrates until the foundation of the Roman Empire, Greece and the Ancient Near East underwent profound changes that still resonate today. This course surveys the political, social, economic and military developments of this period, especially Alexander the Great’s legacy.
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : HUM FA : SSP
L08 Classics 347C Ancient Philosophy
Same as Phil 347C
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH FA : SSP

L08 Classics 350 Greek Art and Archaeology
Same as Art-Arch 331
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : AH

L08 Classics 3582 Ancient Rome in Film and Fiction
Examines a group of novels starting with The Last Days of Pompeii (1834) and a group of films beginning with The Sign of the Cross (1936) to see how writers and filmmakers have conjured up an image of Roman excess and exoticism in line with their own artistic and cultural viewpoints. We read both popular successes such as Ben-Hur and “high art” such as Marius the Epicurean and see such commercial successes as The Robe and art house films such as Fellini’s Satyricon.
Credit 3 units. A&S : TH BU : HUM FA : AH, Lit

L08 Classics 371 The Ancient Family
Examination of the roles of the family in the ancient world through readings and discussions of primary sources (literature, legal texts, inscriptions, art) and recent scholarship. Topics include: demography; relationship between family and state; economic, social and religious roles of the family; roles of women, men, children and slaves; death and inheritance; marriage; children; family relationships; household space; comparisons with the modern family.
Credit 3 units. A&S : TH, SD, WI A&S : IQ, HUM, SD, WI BU : BA

L08 Classics 375 Topics in Classics
Study of one or more themes recurring in the traditions of Greek, Roman and European literature.
Credit 3 units. A&S : TH BU : HUM FA : SSP

L08 Classics 375W Writing about the Ancient World
Classics courses at the 300 level with enhanced requirements in writing may be taken under this designation as writing-intensive courses. Required: permission of instructor.
Credit 3 units. A&S : TH, WI A&S : IQ, HUM, WI

L08 Classics 3831 Magicians, Healers and Holy Men
Magic is perhaps not one of the first words one associates with Greco-Roman antiquity. Yet for most individuals living in the ancient Mediterranean, including philosophers, businessmen and politicians, magic was a part of everyday life. Casting spells, fashioning voodoo dolls, wearing amulets, ingesting potions and reading the stars are just some of the activities performed by individuals at every level of society. This course examines Greco-Roman, early Christian and Judaic “magical” practices.

L08 Classics 386 Old Jokes: Laughter in the Greco-Roman World
An exploration of the theory and practice of comedy in the Greco-Roman world. Readings include examples of iambic (mocking) poetry, comic theater, satiric verse and prose fiction, as well as philosophical discussions of the relationship of humor and laughter to human behavior and values. As comedy in all contexts engages and shapes cultural values just as much as “serious” literature does, its history and reception raise major social and aesthetic issues. Critical topics include: how ancient thinkers imagined comedy’s historical “birth,” how public comic performances may have encouraged either social cohesion or disruption, how communities defined “beneficial” and “offensive” humor, and how ancient elite writers and readers felt about the often lowbrow and obscene content of “classic” comic literature.
Combination of lectures and discussions.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : SSP

L08 Classics 389C The Ancient Novel
Many modern readers are familiar with the mythological and dramatic literature of Greco-Roman antiquity, but fewer are aware that the same cultures developed a tradition of prose fiction concerned with romance, human psychology and sexuality, exotic travel and adventure, and religious experience. The European tradition of extended fictional narrative begins with the Greeks, and their novels, along with Apuleius’ Golden Ass and Petronius’ Satyricon, had a formative influence on later narrative traditions. Students read and analyze all the surviving examples of the Greco-Roman novel, including some fragmentary works, with the goal of throwing light on the history and conventions of the genre, its appeal and its influence.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L08 Classics 391 History of Classical Political Thought: Justice, Virtue and the Soul
Same as Pol Sci 391
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA

L08 Classics 392E Greek and Roman Drama
Survey of the tragic and comic dramas produced in Ancient Greece and Rome. Study of the plays’ religious and civic
performance contexts, responses of the ancient audiences, and literary interpretations.
Credit 3 units. A&S : TH  A&S : IQ, HUM  BU : HUM  FA : Lit

L08 Classics 393 The Tragic Muse
Intensive study of the major tragic playwrights of Ancient Greece (Aeschylus, Sophocles and Euripides) and some of their imitators and critics in the western tradition. We consider tragedy’s origins, its literary elements and theory, its performance and religious contexts, and its social functions. Lectures with discussions.
Credit 3 units. A&S : TH  A&S : IQ, HUM  BU : HUM

L08 Classics 426 Ancient Athens
Athens was one of the great cities of antiquity. From lavishly decorated marble temples on the Acropolis, to public office buildings and inscriptions in the Agora (civic center), to the houses of the living and the monuments for the dead, the city has left a rich record of her material culture. These buildings and objects, together with an exceptionally large number of literary and historical texts, make it possible to paint a vivid picture of the ancient city. The course concentrates on the physical setting and monuments of Athens, as revealed by both archaeology and texts, and how they functioned within the context of Athenian civic and religious life. Prerequisite: Classics 345C, Classics 350 or permission of instructor.
Credit 3 units. A&S : TH, CD  A&S : IQ, HUM, LCD  BU : HUM  FA : AH

L08 Classics 427 Athenian Vase Painting
Same as Art-Arch 427
Credit 3 units. A&S : TH

L08 Classics 4321 Ancient Coins
Same as Art-Arch 4321
Credit 3 units. A&S : TH  FA : AH

L08 Classics 433 Greek Vase Painting
Same as Art-Arch 433
Credit 3 units. A&S : TH  FA : AH

L08 Classics 435 The Parthenon
Same as Art-Arch 435
Credit 3 units. A&S : TH  A&S : IQ, HUM  FA : AH

L08 Classics 4350 Hellenistic Philosophy
Same as Phil 4530
Credit 3 units. A&S : TH  A&S : IQ, HUM  FA : SSP

L08 Classics 437 Greek Sculpture
Same as Art-Arch 437
Credit 3 units. A&S : TH  A&S : IQ, HUM  FA : AH

L08 Classics 4371 Greek and Roman Pottery
Same as Art-Arch 4371
Credit 3 units. A&S : TH  FA : AH

L08 Classics 4375 Ancient Greek Sculpture in Context
Same as Art-Arch 4375
Credit 3 units. A&S : TH  A&S : IQ, HUM

L08 Classics 442 The Later Roman Empire: From Constantine to Justinian
Covers the period from ca. 300 through the reign of Justinian. Focus on legal developments and codification of law, social changes, rise of Christianity and fall of the Roman Empire in the west. Prerequisite: Classics 342C or permission of instructor.
Credit 3 units. A&S : TH  A&S : IQ, HUM

L08 Classics 443 The Age of Nero: Writing, Performance and Politics at the End of a Dynasty
This course examines the reign of Nero (54–68 CE) as a distinct and remarkable period of literary and artistic production in ancient Rome and its empire. We study the career of the emperor himself, learning about imperial politics and policies during his reign, his own artistic career (his “fiddling while Rome burned,” literary endeavors and notorious stage tour), and the violent end of his rule and dynasty. We examine the literature, philosophy, satire and other writings of the period, both those that take the emperor himself as their subject and those that treat other aspects of history, myth and culture from a “Neronian” perspective. We also examine art (both public and private), public entertainment (the amphitheater, the circus and the stage), and other cultural achievements and issues associated with the last Julio-Claudian emperor.
Credit 3 units. A&S : TH

L08 Classics 450 Topics in Classics
Study of one or more themes recurring in the traditions of Greek and Roman literature.
Same as Re St 479
Credit 3 units. A&S : TH, SD  A&S : IQ, HUM, SD

L08 Classics 450W Topics in Classics
Classics courses at the 400 level with enhanced requirements in writing may be taken under this designation as writing-intensive courses. Required: permission of instructor.
Credit 3 units. A&S : TH, WI  A&S : IQ, HUM, WI
L08 Classics 451 Plato
Same as Phil 451
Credit 3 units. A&S : TH A&S : IQ, HUM FA : SSP

L08 Classics 452 Aristotle
Same as Phil 452
Credit 3 units. A&S : TH A&S : IQ, HUM FA : SSP

L08 Classics 465 Topics in the History of Philosophy
Same as Phil 465
Credit 3 units. A&S : TH A&S : IQ, HUM

L08 Classics 476 Money, Exchange and Power: Economy and Society in the Ancient Mediterranean World
From chattel slavery, temple treasure and the moral effects of maritime commerce to the nature of the family and status of women, the economy of the ancient Greeks, Romans and others constitutes a particularly dynamic field in the study of ancient societies. This course engages directly with the evidence for the particular economic behaviors, patterns and institutions that lay behind the development of ancient Mediterranean societies, and also bridges a gap between cultural and social science approaches toward ancient society. We also explore the methodological challenges and implications of working with ancient evidence, as well as a variety of modern theoretical approaches and their implications. Prerequisites: Classics 345C and 346C or Classics 341C and 342C, or permission of instructor.
Credit 3 units. A&S : TH A&S : IQ, HUM

L08 Classics 493 Senior Project
Recommended for all majors in Classics or Ancient Studies who have not completed their college capstone experience in another major, or who are not satisfying this requirement by means of a Senior Honors Thesis in Classics, Greek or Latin. A structured research assignment or independent project under the supervision of one of the department’s faculty is required. Prerequisites: senior standing and permission of the chair of the department.
Credit 3 units.

L08 Classics 497 Study for Honors
Prerequisites: junior standing, grades averaging A– in courses numbered 300 or above in Classics, and permission of the department chair.
Credit 3 units.

L08 Classics 498 Study for Honors
Prerequisites: junior standing, grades averaging A– in courses numbered 300 or above in Classics, and permission of the department chair.
Credit 3 units.

Greek
For Greek courses, see the Greek (p. 411) page of this Bulletin.

Latin
For Latin courses, see the Latin (p. 522) page of this Bulletin.

Comparative Literature
Comparative Literature studies literature across national, cultural and linguistic boundaries. The broad perspective of Comparative Literature generates sustained critical thinking about what literature is and does; how literature relates to other fields and kinds of writing; how literary texts produce their complex webs of meaning; and the ethical valence of literature in a globalized world. Advanced knowledge of a foreign language is essential for understanding and appreciating a given literature and culture. Therefore, all majors study a foreign language and literature at an advanced level. Moreover, the study of works in translation, especially those originally written in non-European languages, facilitates cross-cultural comparisons and helps prepare students for a multilingual, pluralistic and global world. Comparison of literature to other arts, media and other modes of writing develops one’s understanding of literature and culture, as well as of technologies and aesthetic forms of mediation and transmission of world views, values and critiques.

Comparative Literature offers students:

• A high degree of flexibility in their course selection and in their chosen program.
• A rich array of courses spanning national, temporal or medial boundaries organized by genre (e.g., postmodern narrative, comedy, the novel, lyric poetry); cultural issues (e.g., exile, diaspora, cross-cultural encounters); themes (e.g., memory, love in the novel, mysticism in poetry); period (Romanticism, the Renaissance); and transnational region (e.g., Middle Eastern literature, African literature).
• Courses that instruct the student in the central practices, approaches and theories of the discipline: an entry-level course titled “World Literature,” a required introductory course on comparative methods, and courses on literature, literary theory and translation.
• Preparation for life in a global, multicultural and plurilingual world. The critical thinking developed in all of our courses can help students succeed in law and other professional schools. Many of our graduates have gone on to careers in secondary or higher education. With the help of our major

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and the semester or year abroad that we encourage, some graduates have gone into the Peace Corps and careers in international affairs.

**Comparative Literature and the Arts & Sciences Curriculum**

Comparative Literature offers freshman seminars, writing-intensive courses and various capstone experiences, including directed research, creative projects and internships appropriate to a student’s field.

**Phone:** 314/935-5170  
**E-mail:** complit@artsci.wustl.edu  
**Departmental website:** http://complit.artsci.wustl.edu/

**Director**  
**Lynne Tatlock**  
Hortense and Tobias Lewin Distinguished Professor in the Humanities  
PhD, Indiana University

**Endowed Professors**

- **Robert E. Hegel**  
  Liselotte Dieckmann Professor of Comparative Literature in Arts & Sciences and Professor of Chinese  
  PhD, Columbia University

- **Paul Michael Lützeler**  
  Rosa May Distinguished University Professor in the Humanities  
  PhD, Indiana University

- **Gerhild Scholz Williams**  
  Barbara Schaps Thomas and David M. Thomas Professor in the Humanities; Associate Vice Chancellor for Academic Affairs  
  PhD, University of Washington

**Professors**

- **Nancy E. Berg**  
  PhD, University of Pennsylvania

- **Robert K. Henke**  
  PhD, University of California–Berkeley

- **Fateme Keshavarz**  
  PhD, University of London

- **Lutz Koepnick**  
  PhD, Stanford University

- **Joseph Loewenstein**  
  PhD, Yale University

- **Stamos Metzidakis**  
  PhD, Columbia University

- **Stephan Schindler**  
  PhD, University of California–Irvine

**Associate Professors**

- **Harriet Stone**  
  PhD, Brown University

**Associate Professors**

- **Miriam Bailin**  
  PhD, University of California–Berkeley

- **Andrew Brown**  
  PhD, University of Virginia

- **Tilli Boon Cuillé**  
  PhD, University of Pennsylvania

- **Catherine Keane**  
  PhD, University of Pennsylvania

- **Marvin H. Marcus**  
  PhD, University of Michigan

- **Erin McGlothlin**  
  PhD, University of Virginia

- **Wolfram Schmidgen**  
  PhD, University of Chicago

**Assistant Professors**

- **J. Dillon Brown**  
  PhD, University of Pennsylvania

- **Ignacio Infante**  
  PhD, Rutgers University

- **Stephanie Kirk**  
  PhD, New York University

**Senior Lecturer**

- **Emma Kafalenos**  
  PhD, Washington University

**Lecturer**

- **Lionel Cuillé**  
  Doctorate, ENS Lettres et Sciences Humaines (Lyon)

**Professors Emeriti**

- **Milica Banjanin**  
  PhD, Washington University

- **William H. Gass**  
  David May Distinguished University Professor Emeritus in the Humanities  
  PhD, Cornell University

- **Naomi Lebowitz**  
  Hortense and Tobias Lewin Distinguished Professor Emerita in the Humanities  
  PhD, Washington University
The Major in Comparative Literature

Units required:
The major in Comparative Literature requires 30 units of course work.

Required courses:
- 21 units of Comparative Literature courses, including:
  - Comp Lit 204 Crossing Borders: An Introduction to Comparative Literature (3 units)
  - Comp Lit 211 World Literature (3 units)
- Five additional Comp Lit courses (15 units), including:
  - one 300- or 400-level course that devotes at least half of the semester to non-Western literature
  - one 400-level Comparative Literature home-based course
  - the remainder of the courses at the 300- or 400-level**
- 9 units advanced study (300-level or above) in a single language other than English.*

*Students studying Arabic, Chinese, Hebrew, Japanese, Korean or Russian may substitute for 3 of the 9 units a course in which the literature of the language they are studying is read in translation.

**With permission of the Director of Undergraduate Studies or Chair, for one of these courses a student may substitute two semesters of study of a second foreign language.

Honors courses (Comp Lit 497 Independent Work for Senior Honors and Comp Lit 498 Independent Work for Senior Honors) supplement the major and do not satisfy any of the above requirements.

The Minor in Comparative Literature

Units required: 18

Required courses:
- 6 units advanced study (300-level or above) in theoretical or historical courses in aesthetics, art history, dance, drama, film or music. (For students specializing in literature and music, Music 221 Music Theory III and Music 222 Music Theory IV will fulfill this requirement.)
- 9 units advanced study (300-level or above) in a single language other than English.*
- Students are required to complete four semesters of study (4–12 units) in an applied art form: music, fine arts, drama, dance, creative writing. These additional units need not be at the 300 or 400 level.

*Students studying Arabic, Chinese, Hebrew, Japanese, Korean or Russian may substitute for 3 of the 9 units a course in which the literature of the language they are studying is read in translation.

**With permission of the Director of Undergraduate Studies or Chair, for one of these courses a student may substitute two semesters of study of a second foreign language.

Honors courses (Comp Lit 497 Independent Work for Senior Honors and Comp Lit 498 Independent Work for Senior Honors) supplement the major and do not satisfy any of the above requirements.

Additional Information

Senior Honors: To be considered for honors, you must have a 3.65 GPA by the end of your sixth semester and you must be approved by either the Director of Comparative Literature or the Director of Undergraduate Studies to write a Senior Honors thesis.

The Minor in Comparative Arts

Units required: 18

Required courses:
- 6 units advanced study (300-level or above) in a language other than English.
- 12 units of courses in comparative literature, including at least 6 units at the 300 level or above. Six of these 12 units may be completed by any of the following courses:
  - Comp Lit 204 Crossing Borders: An Introduction to Comparative Literature
  - Comp Lit 211 World Literature
  - Comp Lit 213E Introduction to Comparative Arts:
  - Comp Lit 215C Introduction to Comparative Practice I

The Minor in Comparative Arts

Units required: 18
Required courses: 18 units of study at the 300 level or above, distributed as follows.

- 6 units of courses in a language other than English.
- 6 units of courses in comparative literature, including a course in comparative arts.
- 6 units in theoretical or historical courses in music, art history, drama, dance or aesthetics.

Comparative Literature

L16 Comp Lit 115 Freshman Seminar
A variety of topics in comparative literature, designed for first-year students — no special background is required — to be conducive to the investigation and discussion format of a seminar.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L16 Comp Lit 1511 The Birth of Venus
This course examines the art, politics and history of Renaissance Florence, Venice, Ferrara and Rome. We study how love, beauty, religion and politics were intertwined in these cities. We consider how the flourishing of the arts occurred along with the oppressive rule of the Church; why, for one out of two women in upper-class families, the choice was the convent rather than marriage; the rise of courtesan culture and pornography; conspicuous consumption; healing as a matter of faith and a matter of science. Professor Wallace presents the great artists who worked in these cities, including works by Donatello, Masaccio, Brunelleschi, Botticelli, Michelangelo, Leonardo and Vasari. Professor Stone examines Sarah Dunant's trilogy of best-selling historical novels: *The Birth of Venus*, set in Florence; *In the Company of the Courtesan*, set in Venice; and *Sacred Hearts*, set in Ferrara. Ms. Dunant, who is a visitor to the University during part of the semester, introduces the class to historical documents that she used in creating her novels. Guest lecturer Professor Monson (Music Department) explores connections between nuns who make both music and magic. Open to freshmen and sophomores only.
Credit 3 units. A&S : TH A&S : IQ, HUM

L16 Comp Lit 151C Freshman Seminar
Same as E Lit 151
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L16 Comp Lit 153 Laughter: From Aristotle to Seinfeld
Same as E Lit 153
Credit 3 units. A&S : TH A&S : IQ, HUM

L16 Comp Lit 200 Topics in Asian and Near Eastern Languages
Same as ANELL 200
Credit 3 units. A&S : TH, CD BU : BA, HUM, IS

L16 Comp Lit 201A Classical to Renaissance Literature
Same as Hum 201C
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L16 Comp Lit 204 Crossing Borders: An Introduction to Comparative Literature
An introduction to some of the ideas and practices of literary studies at the beginning of the 21st century. This course is designed for majors and prospective majors in comparative literature and comparative arts — and other students interested in reading literature from many parts of the world and exploring issues in literary studies including questions of epistemology and representation, the cultural biases of readers, semiotics, translation theory and Orientalism. Plays, novels and poems by writers including Euripides, Vergil, Racine, Rilke, Henry James, Borges, Mellah and Murakami, and closely related short excerpts by theorists from Aristotle to Bhabha. Prerequisite: sophomore standing or permission of the instructor.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L16 Comp Lit 2081 Freshman Seminar: The Chinese-American Experience
Same as ANELL 208
Credit 3 units. A&S : TH, SD BU : HUM

L16 Comp Lit 209 Scriptures and Cultural Traditions
Same as Hum 209
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : ETH

L16 Comp Lit 211 World Literature
This course teaches ways of reading literature across Eastern and Western cultures, introducing students to works of great imaginative power from many different regions of the world. The course focuses on a given historical period, such as the modern period or antiquity (the latter including Near Eastern as well as European texts). Organizing themes may include cultural translation, cross-cultural encounter (e.g., Orientalism), hybridity and displacement.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L16 Comp Lit 213E Introduction to Comparative Arts:
A variety of topics in comparative literature, designed for first-year students — no special background is required — to be conducive to the investigation and discussion format of a seminar.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit
L16 Comp Lit 2140 Cross-Currents I
Same as Hum 214
Credit 3 units. A&S : TH  A&S : IQ, HUM  BU : HUM

L16 Comp Lit 215C Introduction to Comparative Practice I
This course permits the close examination of a particular theme or question studied comparatively, that is, with a cross-cultural focus involving at least two national literatures. Topics are often interdisciplinary; they explore questions pertinent to literary study that also engage history, philosophy and/or the visual arts. Although the majority of works studied are texts, the course frequently pursues comparisons of texts and images (painting, photography, film). Requirements may include frequent short papers, response papers and/or exams. Credit 3 units. A&S : TH  A&S : IQ, HUM  BU : HUM

L16 Comp Lit 219C Topics in Comparative Literature
An examination of how life, suffering and hope are reflected in stories by major Israeli and Arab writers of the 20th century. Themes examined: war, sacrifice, modernity, the erosion of religious faith. Short stories by Ben Ner, Yehoshua, Agnon, Mahfouz, Idris, Habibi and others are discussed. Analysis focuses on differences and similarities in society, culture and national concerns. Credit 3 units. A&S : TH  A&S : IQ, HUM  BU : ETH  FA : Lit

L16 Comp Lit 255C Text and Tradition: The Emergence of the Modern Mind: Modern Literature
Same as Hum 205C
Credit 3 units. A&S : TH  A&S : IQ, HUM  BU : HUM  FA : SSP

L16 Comp Lit 260 Cityscapes
Uses literature to explore past urban societies. Credit 3 units. A&S : TH  A&S : IQ, HUM

L16 Comp Lit 300 Undergraduate Independent Study
Students pursue personalized projects not normally covered in standard courses at this level. Prerequisites: acceptance by an appropriate instructor of a proposed project and permission of the chair of the committee. Credit 3 units. FA : Lit

L16 Comp Lit 3055 Text and Music
Same as Music 3051
Credit 3 units. A&S : TH

L16 Comp Lit 306 Modern Jewish Writers
What is Jewish literature? While we begin with — and return to — the traditional question of definition, we take an unorthodox approach to the course. Reading beyond Bellow, Ozick and Wiesel, we look for enlightenment in unexpected places: Egypt, Latin America, Australia. Recent works by Philip Roth, Andre Aciman, Simone Zelitch and Terri-ann White are supplemented by guest lectures, film, short stories and significant essays. We focus on issues of language, memory and place. Background knowledge is not required, though it is warmly welcomed. Credit 3 units. A&S : TH  A&S : IQ, HUM  BU : HUM

L16 Comp Lit 3071 Caribbean Literature
Same as E Lit 3071
Credit 3 units. A&S : TH, CD  A&S : IQ, HUM, LCD

L16 Comp Lit 307A The Writing of the Indian Subcontinent
Same as E Lit 307
Credit 3 units. A&S : TH, CD  A&S : IQ, HUM, LCD  BU : HUM  FA : Lit

L16 Comp Lit 311A Topics in English and American Literature: International Modernism
Same as E Lit 311
Credit 3 units. A&S : TH  A&S : IQ, HUM  FA : Lit

L16 Comp Lit 3132 Romantic Revolutions in European Music and Culture
Same as Music 3132
Credit 3 units. A&S : TH

L16 Comp Lit 313E Introduction to Comparative Arts
Credit 3 units. A&S : TH  A&S : IQ, HUM  BU : HUM  FA : Lit

L16 Comp Lit 327 Gender and Literary History
Credit 3 units. A&S : TH  A&S : IQ, HUM

L16 Comp Lit 3270 The Medieval Stage
Medieval drama, which was performed in churches, monasteries, inns and marketplaces, was the pop culture of the Middle Ages. With a focus on major plays from medieval France, Germany, the Netherlands and England, this course uses an interdisciplinary approach to reconstruct how these plays were staged in their original settings. Additional topics include the architecture of theater spaces and stage types; the use of music in drama; the nature of acting, mimesis and performativity in the Middle Ages; and the importance of the “theater” of medieval art. Students end the class with a historically accurate performance of a medieval play. Credit 3 units. A&S : TH  BU : HUM
L16 Comp Lit 3301 Topics in Chinese Literature and Culture
Same as Chinese 330
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : IS

L16 Comp Lit 331C Tragedy
What is the relationship between freedom and luck? How do men and women respond to large forces beyond their control? Is character a struggle against outside events, or is it a submission to destiny? What happens when two ethical principles, taken absolutely, collide together? What is the nature of evil, and how does good respond to it? In ancient Greece, Renaissance England, 17th-century Europe, modern Europe and postcolonial Africa, the form of tragedy has grappled with these questions, generating both a rich body of imaginative literature and equally compelling philosophical reflections about tragedy. This course explores great works of tragic literature by authors such as Homer, Aeschylus, Sophocles, Shakespeare, Racine, Ibsen, Dostoevsky, Miller and Soyinka, and examines philosophers such as Plato, Aristotle, Hegel, Kierkegaard, Nietzsche, Weil and Arendt in order to explore the questions raised by tragedy. Credit 3 units. A&S : TH BU : HUM FA : Lit

L16 Comp Lit 332 Literature and Art
Credit 3 units. A&S : TH A&S : IQ, HUM

L16 Comp Lit 332C Comedy
This comparative course examines and enjoys the substances and forms of humor and comedy in different times and places. Some attention to jokes, gags and comics precedes a wide-ranging examination of literary comedy. A study of various plays and comic texts illuminates different forms of comedy, such as farce, satire, romantic comedy, comedy of manners, absurdist comedy and contemporary political comedy. Authors include Aristophanes, Plautus, Rabelais, Shakespeare, Molière, Fielding, Gogol, Wilde, Stoppard and Dario Fo. Credit 3 units. A&S : TH BU : HUM FA : Lit

L16 Comp Lit 334 Love in the Novel/Love of the Novel
Our focus is our own pleasure in reading. How do we assure that this pleasure survives into the next century now that the visual, the sound bite, the video clip permeate our lives? We attempt to answer this question by rediscovering one of the great love stories of all times, Leo Tolstoy’s Anna Karenina. Daniel Pennac’s Reads Like A Novel, a recent work about the pleasures of reading for pleasure, guides us as we isolate elements of Tolstoy’s story that compel us, that teach us about our own needs and desires as readers. The class considers novels whose love stories are molded by the characters’ own reading: Austen’s Northanger Abbey, Flaubert’s Madame Bovary (1856), Proust’s Swann In Love, Skarmet’s Burning Patience, Bernhard Schlink’s The Reader. Far from being immune to or eclipsed by history and politics, the pleasure of reading is shown to reflect the reader’s appreciation of the larger fabric of society, where passion is set against war, prostitution, mental illness, adultery and prejudice. Credit 3 units. A&S : TH BU : HUM FA : Lit

L16 Comp Lit 338C Postmodern Fiction and Graphic Novels
Genre as a comparative laboratory. A close examination of the nature, function and pleasures of given literary genres, such as epic or postmodern narrative. Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L16 Comp Lit 3405 History of World Cinema
Same as Film 340
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : HUM, IS FA : AH

L16 Comp Lit 3508 Introduction to South Asian Literature I
Same as Hindi 350
Credit 3 units. A&S : TH, CD BU : HUM

L16 Comp Lit 351 Issues in Comparative Literature
This course addresses current issues in Comparative Literature that relate to historical period, genre, theory, the metropole, etc. The specific topic varies from semester to semester. Credit 3 units. A&S : TH, WI A&S : IQ, HUM, WI

L16 Comp Lit 355C The Flowering of Islamic Literature 500–1200
Exploration of the multilingual (Arabic, Persian, Turkish) literary cultures of a civilization that stretched from Spain to India. Themes and genres include early court patronage, Bedouin odes, wine poetry, social satire, mystical poetry, national epic and the literature of love and romance. Comparisons to contemporaneous Hebrew and ancient and medieval Western literatures. Readings in English. Credit 3 units. A&S : TH, CD BU : HUM FA : Lit

L16 Comp Lit 358C Modern Near Eastern Literatures
Literary expressions of the struggle for love, self-realization and liberation. Romanticism, realism and the surreal. A comparative, team-taught approach to selected genres, authors or themes in two or more Near Eastern literatures (Arabic, Hebrew, Persian, Turkish) in English translation. Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L16 Comp Lit 360A Women and Contemporary European Cinema
Same as Hum 360
L16 Comp Lit 3631 Russian Literature and Opera: Transpositions and Transgressions
Same as IAS 363
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L16 Comp Lit 364 Literature and Ethics
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH

L16 Comp Lit 375 Topics in Comparative Literature I
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD FA : Lit

L16 Comp Lit 376 Topics in Comparative Literature II
Credit 3 units. A&S : TH A&S : IQ, HUM

L16 Comp Lit 3778 Comparative Studies in the Novel
This course introduces students to novels from a given period or from a geographical area, with attention to how novels are read and how they communicate.
Credit 3 units. A&S : TH FA : Lit

L16 Comp Lit 385 Topics in Comparative Literature
Topics in Comparative Literature. Subject matter varies from semester to semester.
Credit 3 units. A&S : TH A&S : IQ, HUM

L16 Comp Lit 386 The Literary 1960s: Years of Hope/Days of Rage
Taking its subtitle from the one used by Todd Gitlin for his monumental sociological study of the 1960s, this course focuses on the diverse and exciting literature of this often chaotic, always fascinating period. Readings include popular and influential books by Peter Weiss, Robbe-Grillet, Ken Kesey, Tom Wolfe, Germaine Greer, Eldridge Cleaver and Joan Didion. Attention is paid not only to important new artistic, political and social movements, as seen by these writers, but also to films and music of the time.
Credit 3 units. A&S : TH FA : Lit

L16 Comp Lit 389 Topics
Comparative study of a given question, theme or problem, such as eros or exile or cruelty.
Credit 3 units. A&S : TH FA : Lit

L16 Comp Lit 390 Lyrics of Mystical Love, East and West
How can mystical experience be put into words? How did the mystic poets, from various world traditions, attempt to express this inexpressible? How should we “read” and “interpret” these poetic images? This course deals with these and similar questions while examining key mystical/poetic concepts such as silence, union with the divine or human versus mystical love. The lyrics of the world-renowned mystic Rumi are used as the main text with frequent comparisons to the writings of other prominent figures such as St. John of the Cross, Yunus Emre, John Donne, Kabir and Meister Eckhart. All poems are read in English.
Credit 3 units. A&S : TH, CD, WI A&S : IQ, HUM, LCD FA : Lit

L16 Comp Lit 391C The Ancient Novel
Same as Classics 389C
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L16 Comp Lit 392 Literary Movements
This course compares authors of different national literatures by closely examining certain movements and periods, such as Renaissance humanism, romanticism and naturalism.
Credit 3 units. A&S

L16 Comp Lit 393 Literary Theory
Credit 3 units. A&S : TH A&S : IQ, HUM

L16 Comp Lit 394 Worldwide Translation: Language, Culture, Technology
This course considers the crucial role played by translation across the world today: from new technologies and digital media, to the global demands of professionals working in fields as diverse as literature, law, business, anthropology and health care. We begin by exploring the concept of translation as a mechanism of transmission between different languages by looking at works of literature, film and journalism. Our course examines how different cultures have historically required translation in their encounter with each other, studying how translation constitutes a necessary bridge both from a colonial and postcolonial point of view. We also analyze from practical and real-world perspectives whether concepts such as war, human rights, democracy or various deadly illnesses have the same meaning in different societies by considering the diverse frames of reference of linguists, lawyers, anthropologists and medical doctors across the world. Finally, we focus on translation from a technological perspective by examining various modes of transfer of information required for the functioning of digital media such as Google, Twitter or various Iphone applications. Readings include works by Robert McCrum, Talal Asad, Lawrence Venuti, Michael Cronin and Vicente Rafael among others.
Credit 3 units. A&S : LA A&S : IQ, HUM

L16 Comp Lit 396 Lyric Poetry
A study of the sounds, forms, devices, voices and pleasures of lyric poetry from international and comparative points of view. Attention to theories of lyric, formal devices and problems of
| Course Code   | Course Title                                                                 | Description                                                                                                                                                                                                 | Credits | Requirements
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<tr>
<td>L16 Comp Lit 402 Introduction to Comparative Literature</td>
<td>An introduction to the discipline and practice of Comparative Literature, this course explores the concepts most frequently discussed and the methods most successfully practiced. We study what texts reveal when they are examined cross-culturally. Students consider the various differences that emerge between texts when themes and genres are followed across more than one national literature. The course includes a short history of the discipline and recent debates about the nature and scope of the field. Topics discussed include genres and forms, influence and intertextuality, translation, world literature, exile and cross-cultural encounter.</td>
<td>3 units.</td>
<td>A&amp;S : TH, A&amp;S : IQ, HUM, FA : Lit</td>
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<td>L16 Comp Lit 406 Translation</td>
<td>This course looks at the practice and theory of literary translation. While the main focus is on the literary and linguistic processes involved in translating a text from one language to another, we spend much time exploring the cultural significance of translation in an increasingly interconnected world. Translation is one of the best ways to make the world accessible to us. Successful translation requires in-depth knowledge of the social and cultural conditions in which the original text is produced. It is equally important to be aware of the expectations of the readers who read the translated version. To balance these theoretical discussions with practical matters, we invite translators to the class to speak about their published works. The requirements include translation projects to add experience to the analysis carried out in class. Prerequisite: fluency in a language other than/in addition to English.</td>
<td>3 units.</td>
<td>A&amp;S : TH, A&amp;S : IQ, HUM</td>
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<td>L16 Comp Lit 409 Correlation Between East and West</td>
<td>Extensive comparative study of a period, topic, theme or genre in Chinese or Japanese literature with a body of texts from one or more European languages that serve to illuminate the literary similarities and cultural differences between the two. Texts vary, depending upon the interests of the instructor(s). All texts available in English translations as well as in the original languages.</td>
<td>3 units.</td>
<td>A&amp;S : TH, FA : Lit</td>
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<td>L16 Comp Lit 4099 The Modernist Revolution in the Arts</td>
<td>Same as Drama 409</td>
<td>3 units.</td>
<td>A&amp;S : LA, A&amp;S : IQ, HUM</td>
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<td>L16 Comp Lit 409C Place in Jewish and Islamic Traditions</td>
<td>Description will be updated by professor. Same as JNE 409</td>
<td>3 units.</td>
<td>A&amp;S : TH, CD, A&amp;S : IQ, HUM, LCD</td>
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<td>L16 Comp Lit 4111 Pastoral Literature</td>
<td>Same as Hum 4111</td>
<td>3 units.</td>
<td>A&amp;S : TH, A&amp;S : IQ, HUM</td>
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<td>L16 Comp Lit 419 Feminist Literary and Cultural Theory</td>
<td>Same as WGSS 419</td>
<td>3 units.</td>
<td>A&amp;S : TH, A&amp;S : IQ, HUM</td>
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<td>L16 Comp Lit 4204 Film Theory</td>
<td>Same as Film 420</td>
<td>3 units.</td>
<td>A&amp;S : TH, A&amp;S : IQ, HUM, FA : Lit</td>
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<tr>
<td>L16 Comp Lit 424 Senior Seminar</td>
<td>Intensive study of a comparative topic in a seminar situation.</td>
<td>3 units.</td>
<td>A&amp;S : TH</td>
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<tr>
<td>L16 Comp Lit 425 Seminar in Theater History</td>
<td>Study of particular topics of theater history, organized historically, such as a comparative course on Italian, English and France early-modern theater.</td>
<td>3 units.</td>
<td>A&amp;S : TH, A&amp;S : IQ, HUM, FA : Lit</td>
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<td>L16 Comp Lit 4252 Seminar in Comparative Literature: Transatlantic Poetics</td>
<td>This seminar explores how the flow and circulation of artistic forms between Europe, North America, Latin America and the Caribbean during the 20th century results in the creation and dissemination of radically innovative modes of artistic expression.</td>
<td>3 units.</td>
<td>A&amp;S : TH, A&amp;S : IQ, HUM</td>
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<td>L16 Comp Lit 430 Narrative Theory</td>
<td>Same as Drama 409</td>
<td>3 units.</td>
<td>A&amp;S : TH, A&amp;S : IQ, HUM</td>
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<tr>
<td>L16 Comp Lit 436 Seminar in Dramatic Theory</td>
<td>The course begins with Plato's critique of mimesis and Aristotle's defense, as we read The Poetics as a response to Plato. We take some of Aristotle's basic concepts, such as mimesis, plot, character and thought, and attempt to apply them to drama up to the present day. We also consider fundamental elements of both the dramatic text and the dramatic production, such as space, time, dialogue, narrative devices and perspective. Brecht's theory of “epic drama” forms the other conceptual pole in the course, opposing Aristotle. Besides these two theorists, other figures include Ben Jonson, Corneille, Dryden, Diderot,</td>
<td>3 units.</td>
<td>A&amp;S : TH, A&amp;S : IQ, HUM</td>
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Schiller, Hegel, Zola, Artaud and Grotowski. The course, then, has both chronological and thematic axes. Three papers and one oral presentation.
Credit 3 units.   A&S : TH   FA : Lit

L16 Comp Lit 438 Aesthetics
Credit 3 units.   A&S : TH   A&S : IQ, HUM   FA : AH, SSP

L16 Comp Lit 442 Literature of Catastrophe
Same as E Lit 441
Credit 3 units.   A&S : TH

L16 Comp Lit 449 Topics in Comparative Literature
Topics in Comparative Literature. Subject matter varies from semester to semester.
Credit 3 units.   A&S : TH   A&S : IQ, HUM

L16 Comp Lit 450C Junior Colloquium: Interdisciplinary Topics in the Humanities
Same as Hum 450
Credit 3 units.   A&S : TH, WI   A&S : IQ, HUM, WI

L16 Comp Lit 4690 Europe, An Imagined Community: Essays on Identity since 1750; Literature, Thought, Art, Politics
Same as IAS 422
Credit 3 units.   A&S : TH, CD   A&S : IQ, HUM, LCD   BU : BA

L16 Comp Lit 4901 Topics: Around Paris: Capital Lives
Credit 3 units.   A&S : TH   A&S : IQ, HUM

L16 Comp Lit 494 Seminar: Diverse Topics in Literature
This course may offer a variety of topics. Semester subtitle varies. In Fall 2008, it was offered as an in-depth study of the individual through autobiographies. At other times, it has been offered as a course on visual poetics from antiquity to the present. See department for further details.
Credit 3 units.   A&S : TH   A&S : IQ, HUM   BU : HUM

L16 Comp Lit 495 Seminar
Seminar in Comparative Literature Studies. Topics vary. See Course Listings for current semester’s offering.
Credit 3 units.   A&S : TH   A&S : IQ, HUM   FA : Lit

L16 Comp Lit 497 Independent Work for Senior Honors
One or more long papers on a topic chosen in conjunction with the adviser and an examination. A committee determines whether the student receives credit only or Honors.
Prerequisites: senior standing and permission of chair of the committee.
Credit 3 units.   FA : Lit

L16 Comp Lit 498 Independent Work for Senior Honors
Advanced work as indicated in C Lit 497. Prerequisites: senior standing and permission of chair of the committee.
Credit 3 units.   FA : Lit

Dance
You may select dance as a major through the Performing Arts Department. (p. 573) This course of study combines intensive studio work in technique and theory of modern dance, ballet and composition with seminars examining dance as a global phenomenon with forms reflecting culturally specific historical, aesthetic and anthropological features. The program also includes a broad range of courses such as stagecraft, music resources, improvisation, anatomy for dancers, pedagogy, dance therapy, musical theater dance, world dance forms, jazz and tap. You also may choose to minor in modern dance, ballet, or world music, dance and theater. The interdisciplinary minor in world music, dance and theater encourages students already interested in the performing arts to explore those outside Euroamerican traditions. A certificate program in somatic studies is offered through the University College division of Arts & Sciences.

When you study dance at Washington University, you learn from faculty members who have professional experience in addition to their academic degrees. You also have the opportunity to study with guest artists in residence who teach master classes and set choreography.

You may audition for the Washington University Dance Theatre, which holds annual auditions for students. If selected, you will appear in faculty- and guest artist-choreographed concerts in Edison Theatre. You also may participate in student choreography productions and drama productions. Each year, students have the opportunity to attend the regional American College Dance Conference to perform and take master classes.

Contact Person: Mary-Jean Cowell
Phone: 314/935-4474
E-mail: mjcowell@wustl.edu
Departmental website: http://pad.artsci.wustl.edu

For a list of affiliated faculty, please see the Performing Arts faculty (p. 574) page.
The Major in Dance

Total units required: 35–36

Prerequisites (8–9 units):
- WU dance course (2–3 units) or advanced placement in dance
- Dance 203 Composition I
- DramaEDance 212ED212E Introduction to Theater Production

Required courses (18 units):
- Dance 213 Improvisation I
- or Dance 310 Dance Improvisation II
- Dance 303 Composition II
- Dance 305Z Music Resources for Dance
- or Dance 312 Accompaniment Techniques for Dance
- and 6 units from:
  - Dance 301 Theory and Technique of Modern Dance III
  - Dance 3021 Theory and Technique of Modern Dance IV
  - Dance 321 Classical Ballet: Intermediate I
  - Dance 3221 Classical Ballet: Intermediate II
  - Dance 401 Theory and Technique of Modern Dance V
  - Dance 4021 Theory and Technique of Modern Dance VI
  - Dance 415 High Intermediate Ballet I
  - Dance 416 High Intermediate Ballet II
  - Dance 4281 Classical Ballet III
  - Dance 4291 Classical Ballet IV

Choose 6 units from among the following. Any of these courses may be taken as an elective if not taken in fulfillment of the requirement:
- Dance 315 Dance Spectrum
- Dance 316E From Romantic to Postmodern Dance
- Dance 340 Ballet as Ethnic Dance and Classical Art
- Dance 342 Critical Thinking in Western Theatrical Dance: Questioning Meets Creative Thinking and Collaboration

Elective courses (minimum of 9 units):
- Dance 300 Jazz Dance II
- Dance 305Z Music Resources for Dance
- Dance 311 Modern Dance and the African-American Legacy
- Dance 312 Accompaniment Techniques for Dance
- Dance 328 Contemporary Dance and the Michio Ito Method
- Dance 343 West African Music and Dance in Context
- Dance 404 Composition IV

Course
- UCollege Dance 305 Structured Improvisation for Dance
- UCollege Dance 314 Introduction to Labanotation
- UCollege Dance 328 Dance of West Africa
- UCollege Dance 335 Bharata Natyam as Movement Narrative
- UCollege Dance 363 Dunham Dance Technique
- UCollege Dance 411 Teaching Creative Movement to Children
- UCollege Dance 423 Dance/Movement Therapy
- UCollege Dance 430 Applied Anatomy for the Performer
- UCollege Dance 440 Curriculum and Instruction in Dance
- UCollege Dance 441 The Artist Teaching in the School
- UCollege Dance 454 Seminar in Arts Management

The dance major must take at least one upper-level course in both ballet and modern dance technique and theory. At least one of the following courses is strongly recommended: West African Dance, Classical Indian Dance, Dunham Technique, Musical Theater Dance, Jazz Dance.

Additional Information

Study Abroad: Study abroad opportunities for dance students include the summer program MADE in France, an innovative, five-week course integrating dance and design that meets
for two weeks in Paris, featuring museum outings and the viewing of dance performances, and then goes to the French countryside (Burgundy) for a three-week period of training and performance workshops coordinating dance and design. The program is taught by seasoned professors in dance and design from Washington University and Connecticut College, and enhanced by master classes with European artists. WU students can pursue dance studies abroad during the academic year at the University of Auckland, New Zealand; University of Ghana, Legon; and Roehampton University, London.

### The Minor in Ballet

**Total units required:** 15–18

**Required courses:**

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>Dance 203</td>
<td>Composition I</td>
<td>3</td>
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<td>AND 2-3 units modern dance technique, OR</td>
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<td></td>
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<tr>
<td>Dance 208</td>
<td>Composition and Technique</td>
<td>4</td>
</tr>
<tr>
<td>Dance 316E</td>
<td>From Romantic to Postmodern Dance (OR)</td>
<td>3</td>
</tr>
<tr>
<td>Dance 340</td>
<td>Ballet as Ethnic Dance and Classical Art</td>
<td>3</td>
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</tbody>
</table>

Choose 6 units from among the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dance 222</td>
<td>Fundamentals of Classical Ballet</td>
<td>2</td>
</tr>
<tr>
<td>Dance 321</td>
<td>Classical Ballet: Intermediate I</td>
<td>2</td>
</tr>
<tr>
<td>Dance 3221</td>
<td>Classical Ballet: Intermediate II</td>
<td>2</td>
</tr>
<tr>
<td>Dance 415</td>
<td>High Intermediate Ballet I</td>
<td>2</td>
</tr>
<tr>
<td>Dance 416</td>
<td>High Intermediate Ballet II</td>
<td>2</td>
</tr>
<tr>
<td>Dance 4281</td>
<td>Classical Ballet III</td>
<td>2</td>
</tr>
<tr>
<td>Dance 4291</td>
<td>Classical Ballet IV</td>
<td>2</td>
</tr>
</tbody>
</table>

Choose at least 2 units from among the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Dance 305Z</td>
<td>Music Resources for Dance</td>
<td>2</td>
</tr>
<tr>
<td>Dance 312</td>
<td>Accompaniment Techniques for Dance</td>
<td>2</td>
</tr>
<tr>
<td>Dance 315</td>
<td>Dance Spectrum</td>
<td>3</td>
</tr>
<tr>
<td>Dance 316E</td>
<td>From Romantic to Postmodern Dance</td>
<td>3</td>
</tr>
<tr>
<td>Dance 418</td>
<td>Variations in the Ballet</td>
<td>1</td>
</tr>
<tr>
<td>Dance 423</td>
<td>Pointe Technique</td>
<td>1</td>
</tr>
<tr>
<td>Dance 424</td>
<td>Pointe Technique</td>
<td>1</td>
</tr>
<tr>
<td>Dance 4281</td>
<td>Classical Ballet III (If not taken as part of required 6 units)</td>
<td>2</td>
</tr>
</tbody>
</table>

**Elective courses:** Choose 2–3 units from among the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>UCollege Dance</td>
<td>Topics in Dance: Dance Movement Therapy</td>
<td>2</td>
</tr>
<tr>
<td>423</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UCollege Dance</td>
<td>Applied Anatomy for the Performing Arts</td>
<td>2</td>
</tr>
<tr>
<td>430</td>
<td></td>
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</tr>
<tr>
<td>UCollege Dance</td>
<td>Curriculum and Instruction in Dance</td>
<td>3</td>
</tr>
<tr>
<td>440</td>
<td></td>
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</tr>
</tbody>
</table>

### The Minor in Modern Dance

**Total units required:** 16–17

**Required courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Dance 301</td>
<td>Theory and Technique of Modern Dance III</td>
<td>3</td>
</tr>
<tr>
<td>Dance 3021</td>
<td>Theory and Technique of Modern Dance IV</td>
<td>3</td>
</tr>
<tr>
<td>Dance 303</td>
<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td>Dance 316E</td>
<td>From Romantic to Postmodern Dance</td>
<td>3</td>
</tr>
</tbody>
</table>

And a ballet class at the level appropriate for the student; level to be determined.

### The Minor in World Music, Dance and Theater

For the World Music, Dance and Theater minor, see the Performing Arts (p. 575) page.

### Dance

**L29 Dance 104 Body Conditioning**

A complete body conditioning program designed to increase strength and flexibility. Uses some floor barre and Pilates-related floor exercises.

Credit -2 unit.

**L29 Dance 106E Introduction to Dance as a Contemporary Art Form**

Introduction to dance as a creative art form. Through practical work in the studio, students gain an understanding of the human body as an instrument of expression and of motion as the medium of dance. Technique, analysis and creative work. Not open to majors. May be repeated once for credit.

Credit 2 units. A&S : LA A&S : IQ, HUM BU : HUM FA : AH

**L29 Dance 111 Contemporary Dance for the Male Dancer**
For men who may have athletic or other physical and kinesthetic skills, but little to no formal dance training. This course is designed to meet the specific needs of the male body in its capacity for dynamic, aesthetic, expressive movement. Introduction to dance as a creative art form using the body as the instrument of expression and motion as the medium of dance. Technique, analysis and creative work. Credit 2 units. A&S : LA

L29 Dance 120 Yoga and Relaxation Techniques
Systematic introduction to the methods and theory of yoga as a means of stretching, strengthening, energizing and relaxing the body. Incorporates meditation, massage and other release techniques to help sharpen both body and mind. Students should wear comfortable clothing permitting freedom of movement and bring a mat or towel. Related readings assigned. Credit 1 unit.

L29 Dance 201E Theory and Technique of Modern Dance I
Fundamental theory and techniques of American modern dance. Studio work investigating the expressive potential of human movement and developing individual rhythmic and kinesthetic awareness, coordination and breadth of movement vocabulary. Related reading and video expand on theory embodied in the class work and give an historical overview of modern dance in the United States. Attention of two to three performances required. Prerequisite: some previous dance training or permission of instructor. Credit 3 units. A&S : LA A&S : IQ, HUM BU : HUM

L29 Dance 202 Theory and Technique of Modern Dance II
A course for students familiar with the basic concepts and technique of modern dance. Emphasis on expanding individual movement versatility with increasing difficulty of choreographic phrase materials. Related readings and videos, some focused on American postmodern dance. Attendance at two to three performances required. Prerequisite: Dance 201 or permission of the instructor. Credit 3 units. A&S : LA A&S : IQ, HUM BU : HUM

L29 Dance 203 Composition I
Finding personal movement and transforming it into dance. Through a series of class projects the formal elements of composition are introduced. Prerequisite: Dance 201 or permission of the instructor; concurrent registration in a technique class required. Credit -3 unit. A&S : LA A&S : IQ, HUM BU : HUM
L29 Dance 226 Tap Dance: Beginning
Instruction in basic tap steps and rhythms. Development of varied tap dance styles. Primarily a studio course with some assigned reading. No prerequisite dance training required.
Credit 2 units. A&S: LA A&S: IQ, HUM

L29 Dance 2340 Classical Dances of India
An introduction to the classical dance of South India in its cultural context. Students learn to appreciate the Bharata Natyam style and to perform its basic movements. May be repeated once for credit.
Credit 2 units. A&S: LA A&S: IQ, HUM

L29 Dance 257 Dance Theater Production
Experience in technical production. Required stage work includes two studio dance productions supervised by faculty. Prerequisite: Dance 212E.
Credit 1 unit. A&S: LA A&S: IQ, HUM BU: HUM

L29 Dance 272 Introduction to American Musical Theater
Same as Drama 272
Credit 3 units. A&S: LA A&S: IQ, HUM

L29 Dance 280 Hip-Hop Jazz
Hip-Hop Jazz and music video dance combine in this exciting, high-energy course. Students learn elements from each of these dance styles and focus on how they have been adapted into pop culture choreography. This course is designed for students with at least one year of dance training. It is expected that by the end of the course, students have a greater knowledge of dance and dance terminology and an increased ability to perform set choreography. Primarily a studio course; some related reading assigned.
Credit 2 units.

L29 Dance 296 Internship
Students may receive up to 3 units of credit for an approved internship with an organization where the primary objective is to obtain professional experience outside the classroom. Students must file a Learning Agreement with the Career Center, a faculty sponsor and the site supervisor. This must be approved by all three constituencies before proceeding. A final written project is agreed upon between the student and faculty sponsor before work begins, and is evaluated by the faculty sponsor at the end of the internship.
Credit: 3 units. A&S: LA

L29 Dance 297 Fundamentals of Jazz Dance
This course introduces the basic principles and vocabulary of traditional jazz dance as influenced by American social dances and its relationship to the rise in popularity of jazz music. Both are unique to America and are rooted in African-American and European-American culture. Prerequisite: one year of training in ballet technique or modern dance.
Credit 2 units. A&S: LA A&S: IQ, HUM BU: HUM

L29 Dance 300 Jazz Dance II
Intermediate-advanced work in jazz dance technique, including choreographic phrases emphasizing stylistic clarity and more complex rhythmic structure. Variable content; may be repeated once for credit in a subsequent semester. Preference given to students registering for the first time. Prerequisite: Dance 297 or permission of instructor.
Credit 2 units. A&S: LA A&S: IQ, HUM BU: HUM

L29 Dance 301 Theory and Technique of Modern Dance III
Technique and related concepts for the intermediate-level student. Greater emphasis on the ability to accurately replicate or individually interpret choreographic material. Related reading and video assignments on contemporary dance developments and attendance at two to three performances required. Variable content; may be repeated for credit in a subsequent semester. Prerequisites: Dance 202 and permission of the instructor.
Credit 3 units. A&S: LA A&S: IQ, HUM BU: HUM

L29 Dance 3021 Theory and Technique of Modern Dance IV
Continuation of Dance 301. Variable content; may be repeated for credit in a subsequent semester. Prerequisite: Dance 301 and permission of instructor.
Credit 3 units. A&S: LA A&S: IQ, HUM BU: HUM

L29 Dance 303 Composition II
A workshop for students with experience in choreography. Study of approaches to dance composition with related improvisation problems. Work outside of studio hours expected. Prerequisites: Dance 203 or 208 and permission of the instructor; concurrent registration in a technique course required.
Credit 3 units. A&S: LA A&S: IQ, HUM

L29 Dance 305Z Music Resources for Dance
Analysis of Western (Europe, America), world (Africa, India, Indonesia) and global popular musics. Emphasis on rhythm/form, style/genre, instrumentation and function/context. Basic music theory: notation, time signatures, subdivisions and polyrhythms. Major composers for dance (Lully, Tchaikovsky, Debussy, Ravel, Stravinsky, Cage, etc.). Introduction to percussion techniques for dance accompaniment using hand drums, drumset and hand-held instruments. Introduction to basic studio techniques including microphones, recording and editing equipment, and the use of synthesizer and drum machines. Prerequisites: for dance students at the intermediate or advanced level.
Credit 2 units. A&S: LA A&S: IQ, HUM BU: HUM
L29 Dance 3071 19th- and 20th-Century Costume Design and History II
Same as Drama 3071
Credit 3 units. A&S : TH A&S : IQ, HUM FA : AH

L29 Dance 307A Stage Costumes: Prehistoric to 1800
Basic presentation of costume design from conception through final renderings, development of drawing and painting techniques for the costume plate, and the history of stage costume in the principal periods and styles of drama from prehistoric periods through 1800.
Same as Drama 307
Credit 3 units. A&S : LA A&S : IQ, HUM FA : AH

L29 Dance 308 Dance Composition Projects
Choreography juried by dance faculty or supervised choreography on themes assigned by the instructor or formulated by the student and approved by the instructor. Prerequisite: minimum of one semester course work in composition or permission of the instructor.
Credit 3 units. A&S : LA A&S : IQ, HUM FA : AH

L29 Dance 309 Composition and Technique II
Continuing work in dance composition supported by two technique classes each week at the level appropriate to the individual student. Work on composition assignments outside of class are expected. Prerequisite: Dance 201, Dance 203 or permission of instructor.
Credit 4 units. A&S : LA A&S : IQ, HUM BU : HUM

L29 Dance 310 Dance Improvisation II
Continuation of Dance 213. Prerequisites: Dance 213 or permission of instructor; concurrent registration in a dance technique course at the 300 level or higher is required. May be repeated once for credit.
Credit 1 unit. A&S : LA A&S : IQ, HUM BU : HUM

L29 Dance 311 Modern Dance and the African-American Legacy
This course examines the works of several African-American choreographers and their contributions to the field of modern dance in America. These works, considered modern classics, depict important historical events and reveal cultural influences that people of African descent have impressed upon our society. Through the medium of dance aided by discussions, video and class reading assignments, the choreographers’ works are analyzed for form, content and social relevance. Studio work includes technique to support learning the repertory.
Prerequisite: one to two years training in modern, jazz or ballet.
Credit 2 units. A&S : LA A&S : IQ, HUM BU : HUM FA : AH

L29 Dance 312 Accompaniment Techniques for Dance
A wide variety of percussion instruments and techniques are studied to determine what makes effective dance accompaniment. The course includes: examples and discussion of dance musics from Western and non-Western cultures; basic notation of rhythm and form; demonstrations of musical styles and discussion of social contexts. Students have opportunities to assist in accompanying modern dance classes. Minimum of two to three hours a week of individual practice and/or listening to recordings expected.
Credit 2 units. A&S : LA A&S : IQ, HUM

L29 Dance 315 Dance Spectrum
Introductory consideration of dance as a human activity with culturally specific forms and functions. The course material is multicultural and organized both thematically and chronologically. Topics include: dance as ritual and art, dance and politics, dance as reflection and subversion of gender norms, classical Asian dance forms, and a brief overview of the development of Euro-American theatrical dancing, especially ballet and modern dance. Seminar format with emphasis on discussion based on reading and extensive video materials.
Credit 3 units. A&S : LA A&S : IQ, HUM BU : HUM

L29 Dance 316E From Romantic to Postmodern Dance
An overview of European and American theatre dance from the late 19th century to the present. Topics include: Isadora Duncan’s work as transition and revolution, Orientalism in early modern dance and the Diaghilev Ballets Russes, the “reconstruction” of the dancer’s body, gender issues in movement vocabulary, choreographic content and professional working conditions, the emergence of modernism and postmodernism in dance. Seminar format emphasizing discussion of reading and dance videos.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM

L29 Dance 319 Stage Lighting
Same as Drama 310
Credit 3 units. A&S : LA A&S : IQ, HUM BU : HUM

L29 Dance 321 Classical Ballet: Intermediate I
A course designed for those with a solid foundation in the fundamentals of ballet technique. Related reading and video assignments; attendance at one to two ballet performances. Variable content; may be repeated in a subsequent semester. Prerequisites: permission of the instructor and B+ or better in Dance 221 and 222.
Credit 2 units. A&S : LA A&S : IQ, HUM BU : HUM

L29 Dance 3221 Classical Ballet: Intermediate II
Special emphasis on the development of adagio, allegro and turn sequences. Variable content; may be repeated in a subsequent semester. Prerequisites: permission of instructor and B+ or better in Dance 221 and 222.

Credit 2 units. A&S : LA   A&S : IQ, HUM  BU : HUM

L29 Dance 323 Topics in Theater
Same as Drama 321
Credit 3 units. A&S : LA   A&S : IQ, HUM

L29 Dance 328 Contemporary Dance and the Michio Ito Method
Primarily a studio course of classes combining contemporary modern dance technique, some balletic barre work and instruction in the Michio Ito method. Inspired by elements in his own training at the Dalcroze Institute, Ito preceded Martha Graham in developing a systematized approach to modern dance that reflected the artist's individual aesthetic preferences and that played a role in his choreography. The course examines similarities and contrasts between contemporary modern dance training and the Ito method, which emphasizes development of musicality, coordination and performing presence. Some reading and video material and one final project with both written and movement components. Prerequisite: upper-level placement in instruction in the Michio Ito method. Inspired by elements in his own training at the Dalcroze Institute, Ito preceded Martha Graham in developing a systematized approach to modern dance that reflected the artist's individual aesthetic preferences and that played a role in his choreography. The course examines similarities and contrasts between contemporary modern dance training and the Ito method, which emphasizes development of musicality, coordination and performing presence. Some reading and video material and one final project with both written and movement components. Prerequisite: upper-level placement in

Credit 2 units. A&S : LA   A&S : IQ, HUM

L29 Dance 322 Mind-Body: Integral Practices
The mind and the body are not only connected, they are a fundamental unity, always functioning in a coordinated state. Whether we coordinate them well or badly is a choice we make, whether we are conscious of choosing or not. Many so-called “physical” exercises, activities and arts suffer from a lack of adequate skills of sensation, attention, perception and conscious control. Conversely, many so-called “mental” activities lack adequate awareness of the bodily underpinnings of thought. Like a person learning to play a musical instrument, one’s ability to coordinate the mental and physical aspects of Self toward one’s best personal potential is a skill requiring study of strategies and techniques for good practice in “being well.” Such ideas and methods are not “new age,” but can be traced back through more than a century in the work of investigators such as F.M. Alexander, progressive educator John Dewey, anthropologist Raymond Dart, and many others. Through direct experience and related readings, this class introduces students to “somatic,” or “integral” practices — activities that are inherently more effective at developing the aspects of Self in a coordinated and authentically holistic manner. We then learn to apply our understanding to all kinds of activities, both mental and physical, from chores to exercise, from arts to sports, from hobbies to vocations. Some kind of prior movement training (e.g., athletics, martial arts, dance, etc.) is preferable, but not required.

Credit 2 units. A&S : LA

L29 Dance 340 Ballet as Ethnic Dance and Classical Art
This course examines the origins and major developments in ballet theory, technique and production practice, emphasizing their relationship to concepts of ethnicity and classicism. Issues considered include: the influence of classic Greco-Roman theater on the themes, aesthetic ideals and theorization of ballet; analysis of ethnic content not only in thematic material but in ballet movement vocabulary and training process; the conscious reformulation in the United States of European ballet as an equally American art form; the expansion of Euro-American “classical ballet” in the work of Balanchine and Tudor; the appropriation of ballet by non-Western countries (such as China and Japan) and its impact on native dance genres; typical construction of the ballet dancer’s body and movement, including gender definition, in relationship to a specific ethnic community context. Seminar format with lectures, discussion and video materials. Three five- to seven-page papers and final. No prerequisites.

Credit 3 units. A&S : TH, SD, WI   A&S : IQ, HUM, SD, WI  BU : HUM

L29 Dance 324 Critical Thinking in Western Theatrical Dance: Questioning Meets Creative Thinking and Collaboration
This course is an introduction to the intersections of creative, collaboration and critical thinking in Western Theatrical Dance. The course includes a review of the literature on creativity, creative collaboration, the process of creating Western Theatrical Dance, and critical thinking. The course continues as an overview of these issues while presenting the intersection and interaction of these elements, which form the creative collaboration of Western Theatrical Dance. The students read from both texts and articles on creativity, creative collaboration, the process of creating Western Theatrical Dance in the 20th and 21st centuries, and critical thinking.

Credit 3 units. A&S : LA   A&S : IQ, HUM

L29 Dance 342 West African Music and Dance in Context
A West African dance course specifically focused on the Ivorian dance traditions of the Baule, Bete Dan, Lobi, Makinke and Senufo peoples. The course addresses the relationship between music and dance as well as their social and cultural significance. We include study of myths, art, costumes and masks as they relate to various dances and musics. A studio course with related reading material.

Credit 2 units. A&S : LA   A&S : IQ, HUM

L29 Dance 360 MADE in France I: Old Paris/New Europe
Students are introduced to the city’s rich artistic history as well as the world of contemporary movement arts in Europe.
through two weeks of dramaturgical field research in Paris. With a diversified sampling of performances, museum visits and discussions animated by program faculty, students experience hands-on the rich history Paris has on display. Museums visited include the Musée du Louvre, Musée de la Mode et du Costume, Musée d’Orsay, Centre Georges Pompidou, Musée des Arts et Métiers, Musée Cluny and the Rodin Museum. Museums and live performances serve as our main “books” for this intensive hands-on course. Museum visits and performances are supplemented by readings and assignments on a chosen theme and performance history; and regular seminars with the specific aim of investigating a variety of dramaturgical approaches that contemporary European directors employ when considering the use of objects, props, costume design, sound design, lighting design and movement. Additionally, students attend several contemporary dance theater performances.

Credit 3 units. A&S : LA A&S : IQ, HUM

L29 Dance 361 MADE in France II: Choreography and Construction Collaborations
Continuing upon the field research carried out in Paris, student work groups begin to concretize their creative projects at a rural retreat center for artists in Burgundy, France. Beginning with a day of intensive introduction to design and construction principles in accordance with the program theme, the design faculty helps students prepare for the “Imagination Fair” presentations that mark the midpoint and serve to launch each group’s creative process collaboration in Mélisey. After these presentations, students get to work on realizing their choreography and construction projects: the collaborative creation of dances (solos, duos and trios) using a variety of found objects, props, costumes and/or instruments created by dancers and designers for the final production. Each year, in addition to the U.S. teaching faculty, a number of European artists active in their profession offer valuable master classes that coincide with the program theme and help prepare students for their final projects. Work hours are interspersed with French-language meals during which students are encouraged to speak French with the host family and with their peers and teachers. Additional field trips are organized to introduce students to the rich cultural and agricultural heritage of the Burgundy region.

Prerequisites: Dance 360 Made in France I: Old Paris/New Europe.

Credit 3 units. A&S : LA A&S : IQ, HUM

L29 Dance 372 Advanced American Musical Theatre
This course focuses on developing the acting, singing and dancing techniques required for performing in musical theater. The student develops group pieces and participates in scenes that explore character within a musical theater context. The class culminates in a workshop performance. Prerequisite: Drama 221 and permission of instructor, by audition.

Same as Drama 372

Credit 3 units. A&S : LA A&S : IQ, HUM

L29 Dance 400 Dance Production Projects
Students may receive credit for work on special dance-related production projects conceived by students and supervised by faculty. Contracts must be signed by the student, faculty supervisor, and the coordinator of Dance 400 before work on the project commences. Students should register for this course after work is completed. Prerequisite: permission of the dance faculty. Credit to be determined in each case.

Credit -3 unit. A&S : LA A&S : IQ, HUM

L29 Dance 401 Theory and Technique of Modern Dance V
Emphasis on versatility in movement vocabulary and on more complex and intensive technical work with discussion of theory inherent in the studio work. Related reading and projects. Variable content: may be repeated for credit in a subsequent semester. Prerequisite: Dance 302 or permission of the instructor. Students with class conflicts may, with the permission of the instructor, enroll for 2 rather than 3 units.

Credit -3 unit. A&S : LA A&S : IQ, HUM

L29 Dance 4021 Theory and Technique of Modern Dance VI
Continuation of Dance 401 with emphasis on more complex and intensive technical work. Variable content; may be repeated for credit in a subsequent semester. Prerequisites: Dance 401 and permission of the instructor. Students with class conflicts may, with the permission of the instructor, enroll for 2 rather than 3 units.

Credit -3 unit. A&S : LA A&S : IQ, HUM

L29 Dance 404 Composition IV
The exploration of choreographic problems in small and large groups. Prerequisite: completion of Dance 303, senior standing or permission of instructor. Previous or concurrent registration in Dance 401 or 4021 recommended.

Credit -3 unit.

L29 Dance 4041 Composition III
The exploration of choreographic problems for small and large groups. Prerequisite: senior standing or permission of instructor. Previous or concurrent registration in Dance 401 or 4021 recommended.

Credit -3 unit.

L29 Dance 414 Advanced Stage Lighting
Same as Drama 410

Credit 3 units. A&S : LA A&S : IQ, HUM

L29 Dance 415 High Intermediate Ballet I
A course designed as preparation for the advanced level. Emphasis on vocabulary review and individual technique assessment, including placement, movement quality and musicality. Related readings and video assignments; attendance at and critical analysis of one to two ballet performances. Variable content; may be repeated in a subsequent semester. Prerequisites: B+ or better in Dance 221, 222, 321, 322 and/or permission of instructor. Credit 2 units. A&S : LA A&S : IQ, HUM

L29 Dance 416 High Intermediate Ballet II
A course designed for the high intermediate dancer in preparation for Dance 4281/429. Emphasis on placement, movement quality and musicality. Related readings and projects supplement the classical vocabulary. Prerequisites: B+ or better in Dance 221, 222, 321, 322 and/or permission of instructor. Credit 2 units. A&S : LA A&S : IQ, HUM

L29 Dance 418 Variations in the Ballet
Introduces classical choreography within various ballets. Prerequisites: Dance 321 or 4281 with some pointe training, and permission of instructor. Credit 1 unit. A&S : LA A&S : IQ, HUM

L29 Dance 423 Pointe Technique
Designed for dancers with a basic foundation in pointe work. Variable content; may be repeated for credit in a subsequent semester. Prerequisites: concurrent registration in Dance 321 or 4281 and B+ or better in Dance 221, 222, 321, 322 and/or permission of instructor. Credit 1 unit. A&S : LA A&S : IQ, HUM

L29 Dance 424 Pointe Technique
Designed for dancers with a basic foundation in pointe work. Prerequisites: concurrent registration in Dance 321, 322, 4281 or 4291, and permission of instructor. Credit 1 unit. A&S : LA A&S : IQ, HUM

L29 Dance 4234 Performing Knowledge: Arts Integration Pedagogy in Theory and Practice
Same as Drama 4234
Credit 3 units. A&S : LA A&S : IQ, HUM

L29 Dance 4241 Classical Ballet IV
A course designed for dancers with a solid foundation in beginning and intermediate ballet technique. Variable content; may be repeated for credit in a subsequent semester. Prerequisites: permission of instructor and B+ or better in Dance 3221 and 416. Credit 2 units. A&S : LA A&S : IQ, HUM

L29 Dance 457 Dance Repertory
Under the direction of an experienced choreographer, students rehearse and perfect repertory concert dances. All students perform or understudy the choreographies. May be repeated for credit. Enrollment by audition. Prerequisite: concurrent registration in a technique class required. Credit 1 unit. A&S : LA A&S : IQ, HUM

L29 Dance 458 Dance Repertory
Under the direction of an experienced choreographer, students rehearse and perfect repertory concert dances. May be repeated once for credit. Enrollment by audition. Concurrent registration in a technique class is required. Credit 1 unit. A&S : LA A&S : IQ, HUM

L29 Dance 478 The Eye of the Mask: A Multicultural History of the Theater through Mask Making and Design
Same as Drama 478
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM

L29 Dance 479 Fundamentals of Sound Design
Same as Drama 479
Credit 3 units. A&S : LA A&S : IQ, HUM

L29 Dance 493 Senior Project
Specialized project in a selected area in dance. The student works individually under the supervision of a faculty member. Prerequisite: permission of the coordinator of the Dance Division. Credit 3 unit.

L29 Dance 499 Study for Honors
An honors thesis or performance and thesis project designed by the student, and supervised and assessed by a faculty committee. Prerequisites: senior standing; grade point average of 3.5 and 3.5 in dance classes; and permission of the coordinator of the dance division. Credit 6 unit.
Drama

You may select drama as a major through the Performing Arts Department (p. 573). This major combines the historical, cultural and literary study of theater and performance with a full array of courses regarding theatrical production, including acting, directing, performance art, design (set, costume, lighting, sound) and playwriting. The Performing Arts Department strongly believes in the mutually beneficial relationship between the study and the practice of theater. A major in drama provides an academically rigorous course of study — with a strong grounding in theater history, dramatic literature, performance studies and dramatic theory — that also develops students’ knowledge of theater by means of practice.

The rigorous three-semester Theater Culture Studies sequence provides a solid background in history, literature and performance, and students take an additional three courses in theater and performance studies. Within theater arts, students with their advisers may design their own course of study or be guided by diverse “paths” of study in acting, directing, playwriting or design. Our theater arts courses, regularly drawing from exemplars such as Shakespeare, Chekhov and Beckett, are based on a liberal arts, rather than a conservatory model.

**Contact Person:** Rob Henke  
**Phone:** 314/935-9336  
**E-mail:** rhenke@wustl.edu  
**Departmental website:** http://pad.artsci.wustl.edu

For a list of affiliated faculty, please see the Performing Arts faculty (p. 574) page.

The Major in Drama

**Total units required:** 39. The major requires six courses in theater/performance studies and seven courses in theater arts.

**Theater and Performance Studies:** A minimum of six theater and performance studies courses must be taken for the major. The specific requirements are:

- Three courses, taken in order, in the Theater Culture Studies sequence:
  - Drama 228C: Theater Culture Studies I: Antiquity to Renaissance 3
  - Drama 229C: Theater Culture Studies II: From Renaissance to Romanticism 3
  - Drama 365C: Theater Culture Studies III: Melodrama to Modernism 3

- Two electives, including courses in non-Western/minority theater, theory and performance studies. It is strongly recommended that one of these two courses be a writing-intensive course taken in the junior year.

- A 400-level senior seminar, culminating in a major research project. This normally will be taken in the fall semester of the senior year.

**Theater Arts:** Seven courses required.

- Drama 212E: Introduction to Theater Production 3

All majors must take one of the following:

- Drama 240E: Acting I 3
- Drama 307: Stage Costumes: Prehistoric to 1800 3
- Drama 310: Stage Lighting 3
- Drama 311M: Scene Design 3

For the five remaining courses students may choose from four suggested pathways, or with the help of an adviser, students may develop their own pathway within the major:

**Directing Path**

- Drama 227: Playwriting 3
- (See also: E Comp 224 Playwriting) 3
- Drama 341: Acting II 3
- Drama 343: Fundamentals of Directing 3
- Drama 403: Dramaturgical Workshop 3
- Drama 444: Directing II: Coaching the Actor 3

**Acting Path**

- Drama 314: Voice-Speech Laboratory 3
- Drama 341: Acting II 3
- Drama 342: Acting III 3
- Drama 343: Fundamentals of Directing 3
- Drama 440: Acting IV 3

**Playwriting Path**

- Drama 227: Playwriting 3
- (See also E Comp 224 Playwriting) 3
- Drama 343: Fundamentals of Directing 3
- Drama 403: Dramaturgical Workshop 3
- Drama 473: Advanced Playwriting 3
- Drama 4990: Independent Work (OR) 6
- Drama 4995: Literature, Theory, Criticism 3

**Design Path**

A second Introduction to Design course  
Two electives
Drama 343  Fundamentals of Directing (OR Drama 360  The Creative Impulse)  3

Additional Information
Students who declared a major before November 5, 2009, are responsible for completing the previous set of requirements. Please contact the department.

Study Abroad: Since 1991, the Performing Arts Department and Globe Education (London) have been running a national summer program held at Shakespeare’s Globe in London. This four-week program includes a 3-unit course on the textual, historical and cultural study of Shakespeare; a 3-unit course on acting Shakespeare (with particular attention to acting on the Globe stage); master classes taught by Globe personnel; play going in London and Stratford; and more.

The Minor in Drama
Units required: 18
Required courses:
Drama 212E  Introduction to Theater Production  3
6 units from the Theater Culture Studies Sequence:
Drama 228C  Theater Culture Studies I: Antiquity to Renaissance  3
Drama 229C  Theater Culture Studies II: From Renaissance to Romanticism  3
Drama 365C  Theater Culture Studies III: Melodrama to Modernism  3

Elective courses:
At least 9 credit units at the 300 level or above in areas of dramatic literature, technical theater or performance. No more than 3 units may be production credits.

The Minor in World Music, Dance and Theater
For the World Music, Dance and Theater minor, see the Performing Arts (p. 575) page.

Drama
L15 Drama 115 Freshman Seminar: What is Art?
Great works of literature, cinema, painting, drama, music and dance provide us with new, provocative and sometimes completely unexpected methods of perceiving reality. In this Freshman Seminar, we examine the meanings of art by looking at works that have radically altered or challenged the ways in which people saw the world around them — along with works that are doing the same today. In addition to analyzing texts in a classroom setting, this course also incorporates meetings with artists and directors practicing their crafts, and attendance at theatrical performances and museums both on and off campus. Credit 3 units.  A&S : LA  A&S : IQ, HUM

L15 Drama 200 Theater Projects
Independent study. Students may contract with a faculty supervisor for credit for their work on theatrical productions or research. Contracts must be signed by the student, the faculty supervisor and the coordinator of Drama 200 before the student’s work on the project commences. Credit and grade option are determined in each case. Credit -3 unit.

L15 Drama 2001 Acting
Independent study. Credit -3 unit.

L15 Drama 2002 Directing
Independent study. Credit -3 unit.

L15 Drama 2003 Technical Theater
Independent study. Credit -3 unit.

L15 Drama 2004 Voice, Speech
Independent study. Credit -3 unit.

L15 Drama 2005 Literature, Theory, Criticism
Independent study. Credit -3 unit.

L15 Drama 212E Introduction to Theater Production
An introductory study of the major elements involved with mounting a theatrical production. Utilizing guest speakers in both theater arts and theater studies, the course addresses such topics as scenic, costume, lighting and sound design; production management and procedures; and the history and culture of theatrical space and design. Students are required to serve as a crew member on one departmental production and attend productions of the Edison Theatre Ovations series and the Performing Arts Department. Credit 3 units.  A&S : LA  A&S : IQ, HUM  BU : HUM

L15 Drama 214 Public Speaking: Embodied Communication
The ability to speak well and to communicate effectively in the public forum is an essential skill for all students. This course aims to offer a comprehensive and wide-ranging approach to developing the skills of the contemporary speaker. While
acknowledging and utilizing traditional approaches to public speaking, this course expands its reach to include applicable techniques from the world of the Performing Arts — especially theater and dance. The course does not intend to train the student as a dancer or actor, but it maintains that the successful speaker would do well to harness some of the transferable skills sets from these disciplines. The speaker, like the performer, must stand before an audience with an objective to communicate something well. Both should be dedicated advocates for the message. They share the common ground of requiring a strong voice for a sure delivery of the material, and an expressive physicality willing to fully embody and serve the message.

Credit 3 units. A&S : LA A&S : IQ, HUM

L15 Drama 223 Cross-Cultural Women Playwrights

This course provides an introductory survey of the work of African-American, Caribbean-American, Asian-American and Native American women playwrights. We explore the playwrights' strategies for creating work that is by turns beautiful, fascinating, humorous, moving and occasionally terrifying as they chart for contemporary theater the intersection of race and gender in performative terms. Playwrights addressed include Adrienne Kennedy, Ntozake Shange, Suzan-Lori Parks, Anna Deavere Smith, Diana Son, Jessica Hagedorn, Cherie Moraga, Wakako Yamauchi, Migdalia Cruz, Spiderwoman Theatre, Marga Gomez and Velina Hasu Houston.

Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : BA FA : AH, Lit

L15 Drama 227 Playwriting

An introductory course in playwriting. Limited to eight students.
Prerequisite: Writing 1 and permission of the instructor.
Same as E Comp 224

Credit 3 units. A&S : LA A&S : IQ, HUM BU : HUM

L15 Drama 228C Theater Culture Studies I: Antiquity to Renaissance

Required of the drama major. An examination of ancient, medieval and Renaissance theater and performance. Close reading of dramatic texts written by such authors as Aeschylus, Sophocles, Euripides, Aristophanes, Plautus, Marlowe, Shakespeare and Jonson, with attention also given to the collaborative theaters of the medieval period (the Corpus Christi play) and the Italian Renaissance. In tandem with the close study of dramatic literature, we study theater history (playing spaces, costumes, actors, etc.) and performance (ritual, performances of everyday life, etc.) from antiquity to the Renaissance.

Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : AH

L15 Drama 229C Theater Culture Studies II: From Renaissance to Romanticism

The second course in an interdisciplinary, three-semester sequence that examines Western and non-Western dramatic literature and theater history from its known origins to the present. Students engage plays, treatises, architecture and other primary sources along with select secondary literature on this important period in the formation of theatrical modernism. Course covers theaters of the Baroque, the Spanish Golden Age, the French neoclassical period, the English restoration, 18th-century middle-class drama, the German Romantic period and Edo Japan.

Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : AH

L15 Drama 230 Topics in Theater

Explores a variety of special interest topics in theater not included in the Theater Culture Studies sequence. Consult the Course Listings.

Credit 3 units. A&S : LA

L15 Drama 239 Performance and Culture

What does putting on a play have to do with having a wedding? What's the difference between St. Louis sports fans and primates and the St. Louis Zoo? What does the "Mr. WashU" pageant say about the Washington University community? How is a dance concert like a Native American Pow Wow? In this course we explore the vocabulary and concepts of performance studies to address these and other questions. We bring the vital lens of performance to focus on an array of cultural activities through readings, field trips and activities. Three short essays, a mid-term and a take-home final are required.

Credit 3 units. A&S : LA A&S : IQ, HUM BU : BA

L15 Drama 240E Acting I

This course offers an opportunity to investigate the nature of the theater by way of performance. Students study a variety of theatrical texts in the most direct and experiential way, by acting in them. The course is designed for those who want to understand the interpretive work of the actor. Students are introduced to the practical work of building a character for the stage, and they also gain an understanding of how dramatic texts work both on the page and on the stage. Textual analysis, movement work and vocal production skills are developed using monologues, scene work and activities. These skills also should provide significant benefits outside the confines of the class itself, in the professional and personal lives of the students taking this class.

Credit 3 units. A&S : LA A&S : IQ, HUM BU : HUM

L15 Drama 250 Topics in Stage Movement

This is a rotating topics course on movement for actors.

Credit 3 units. A&S : LA A&S : IQ, HUM

L15 Drama 2503 Introduction to Performance Art
The focus of this course is on the history, theory and practice of performance art and performance theater. The class engages in exercises that generate text, movement, sound and performance scores. Students create original performances that incorporate contemporary critical concepts. Performance production is supplemented by readings and videos that introduce the history and theory of experimental performance and work by specific performance artists.

Credit 3 units. A&S : LA A&S : IQ, HUM BU : HUM

L15 Drama 257 Dance Theater Production
Experience in technical production. Required stage work includes two studio dance productions. Prerequisite: Dance 212E.
Same as Dance 257
Credit 1 unit. A&S : LA A&S : IQ, HUM BU : HUM

L15 Drama 272 Introduction to American Musical Theater
Students are taught basic interpretation of musical theater repertoire. The student learns to analyze and perform songs with regard to melody and musical form. Acting techniques are developed through lyric interpretation. Students also are introduced to basic audition practice and etiquette. Prerequisite: permission of instructor. $25 lab fee.
Credit 3 units. A&S : LA A&S : IQ, HUM

L15 Drama 295 Portfolio Review
This course is intended as a one-hour credit to meet every Friday for two contact hours. While the main focus of this course is to dedicate time to learning and preparing a solid professional portfolio, resume and web page, this class also trains the students how to interact and conduct themselves through the interview process. We review numerous résumés from industry professionals, develop our own, develop both physical and digital portfolios consisting of students’ academic and professional work, and culminate in building a strong and evocative web page. Upon completion, the student has a solid understanding of the theater job market and be ready to face the world.
Credit 1 unit. A&S : LA A&S : IQ, HUM

L15 Drama 296 Internship
Students may receive up to 3 units of credit for an approved internship with an organization where the primary objective is to obtain professional experience outside the classroom. Students must file a Learning Agreement with the Career Center, a faculty sponsor and the site supervisor. This must be approved by all three constituencies before proceeding. A final written project is agreed upon between the student and faculty sponsor before work begins, and is evaluated by the faculty sponsor at the end of the internship.
Credit -3 unit.

L15 Drama 300 Production Practicum
Practicum experience in technical theater. Available positions include stage manager; publicist; assistant designer for costumes, scenery or lighting; or crew head of props, sound and makeup design.
Credit -2 unit.

L15 Drama 301 History of African-American Theater
Same as AFAS 301
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : HUM FA : AH

L15 Drama 304 Makeup for the Stage
Introduction to techniques for the alteration of the face through makeup to create convincing illusions of character. Individualized selection and personal application of makeup appropriate to the actor’s face. Students are required to purchase a makeup kit.
Credit 2 units. A&S : LA A&S : IQ, HUM

L15 Drama 307 Stage Costumes: Prehistoric to 1800
Basic presentation of costume design from conception through final renderings, development of drawing and painting techniques for the costume plate, and the history of stage costume in the principal periods and styles of drama from prehistoric periods through 1800.
Credit 3 units. A&S : LA A&S : IQ, HUM

L15 Drama 3071 19th- and 20th-Century Costume Design and History II
Basic presentation of costume design from initial conception through final renderings. Development of drawing and painting techniques on design projects taken from plays set in the 19th and 20th centuries. History of costume and fashion silhouette is illuminated through slide and video presentation of primary and secondary source materials.
Credit 3 units. A&S : TH A&S : IQ, HUM FA : AH

L15 Drama 309 Stage Technology
Practical study of technical theater procedures and scene shop; production techniques. Course outline includes lectures, demonstrations of equipment, production assignments and research-oriented project work. Prerequisite: Drama 212E or permission of instructor.
Credit 3 units. A&S : LA

L15 Drama 310 Stage Lighting
This course places an emphasis in the aesthetic practice of lighting design through the understanding of technology as it relates to time and space. Early on the student learns how to properly use and apply designer’s tools and then through reading, research and experimentation explore the limitless
boundaries of color and texture. This culminates in a stage
design in collaboration with directing or dance class. Upon
completion of the course, the student is able to speak eloquently
on design theory and be able to move on to further design study
in Drama 410 Advanced Lighting Design.
Credit 3 units. A&S : LA A&S : IQ, HUM BU : HUM

L15 Drama 311M Scene Design
An introduction to the process of scene design, as it relates to
aesthetics, dramatic literature, collaboration and production.
Projects involve design conceptualization, documentation,
graphics and realization. Prerequisite: Drama 212E or
permission of instructor.
Credit 3 units. A&S : LA A&S : IQ, HUM

L15 Drama 314 Voice-Speech Laboratory
Fundamentals of speech for the stage focusing on breath
support, resonance, articulation and speech as an expression of
an individual’s needs. The course includes an introduction to
stage dialects. Preference given to majors.
Credit 3 units. A&S : LA A&S : IQ, HUM

L15 Drama 3201 Concepts in Theater Architecture and
Performance Space
Can a cloakroom or a stairwell become a theater? How do site
and placement affect the meaning potential of performance?
How does contemporary environmental staging conjure a
world different from that of the modern box set, the baroque
perspective stage or Shakespeare’s Globe? We engage such
questions by drawing on theory, history and hands-on creation
to examine historical, actual and potential performance spaces.
Readings in architectural and dramatic theory, theater history,
performance studies and philosophy provide both a critical
descriptive vocabulary and a conceptual repertoire for use
in creative class assignments — both informing students’
investigations of actual theaters or other performance —
ready spaces and provoking their creation of experimental
performance spaces. Readings cover semiotic, materialist and
situationist approaches to space, as well as concepts including
site specificity, space vs. place, framing, perspective, miniature,
the door, the curtain, the cloakroom and the monument.
Credit 3 units. A&S : TH A&S : IQ, HUM

L15 Drama 321 Topics in Theater
Explores a variety of special interest topics in theater. Consult
the Course Listings.
Credit 3 units. A&S : LA A&S : IQ, HUM

L15 Drama 3221 Traditions of Italian Theater
Same as Ital 322
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD BU : HUM

L15 Drama 323 Topics in American Drama
A rotating topics course on various subjects relating to the
history and theatrical practice of modern American drama.
Credit 3 units. A&S : TH BU : HUM

L15 Drama 3301 Performing Gender
This course investigates an array of contemporary performances
to explore manifestations of and challenges to gender norms
in American culture. An initial reading of crucial performance
theories by Judith Butler, Jill Dolan and others help set the stage
for our examination of a diverse collection of contemporary texts,
including plays, solo performances, stand-up and pop culture
phenomenon. We raise questions about feminist performance
strategies, butch/femme performance, camp, cross-dressing,
feminist spectatorship, multimedia performances and the
representation of lesbian desire. Prerequisite: Any 100-level
Women, Gender, and Sexuality Studies course.
Same as WGSS 3401
Credit 3 units. A&S : LA, SD A&S : IQ, HUM, SD BU : BA

L15 Drama 331C Tragedy
What is the relationship between freedom and luck? How do
men and women respond to large forces beyond their control? Is
character a struggle against outside events, or is it a submission
to destiny? What happens when two ethical principles, taken
absolutely, collide together? What is the nature of evil, and
how does good respond to it? In ancient Greece, Renaissance
England, 17th-century Europe, modern Europe and postcolonial
Africa, the form of tragedy has grappled with these questions,
generating both a rich body of imaginative literature and equally
compelling philosophical reflections about tragedy. This course
explores great works of tragic literature by authors such as
Homer, Aeschylus, Sophocles, Shakespeare, Racine, Ibsen,
Dostoevsky, Miller and Soyinka, and examines philosophers
such as Plato, Aristotle, Hegel, Kierkegaard, Nietzsche, Weil and
Arendt in order to explore the questions raised by tragedy.
Same as Comp Lit 331C
Credit 3 units. A&S : LA, SD A&S : IQ, HUM, SD BU : BA

L15 Drama 332 Comedy
An exploration of the theory and practice of comedy in the
Greco-Roman world. Readings include examples of iambic
(mocking) poetry, comic theater, satiric verse and prose fiction,
as well as philosophical discussions of the relationship of humor
and laughter to human behavior and values. As comedy in all
contexts engages and shapes cultural values just as much as
“serious” literature does, its history and reception raise major
L15 Drama 338 Physical Theater: An Exploration of Viewpoints and Suzuki Training
In this course students study two very different but complementary styles of movement training. Developed by the Saratoga International Theatre Institute, this method of actor training combines the improvisational exploration of time and space through "Viewpoints" with the rigid structure and physical demands of the Suzuki method. This combined approach is designed to develop heightened awareness and acute focus in the performer. In addition, it fosters greater impulsiveness and freedom in the moment while maintaining discipline and control. Students gain flexibility and strength and enhance their creative potential by balancing these seemingly opposing methods. Prerequisite: Drama 341 Acting II Fundamentals of Movement or Dance 106E Introduction to Dance as a Contemporary Art Form. Credit 3 units. A&S : LA

L15 Drama 340 Topics in Stage Movement
Exploration of a variety of theatrical and movement concepts with emphasis on process rather than product. Concentrates on developing the expressive flexibility of the body and linking the imaginative impulse with physical movement. Preliminary work in relaxation and efficient self-use. Prerequisite: Drama 240E or permission of instructor. Credit 3 units. A&S : LA

L15 Drama 341 Acting II
Fundamental scene study using texts with emphasis on integration of voice and body and the playing of actions. Students are encouraged to precede this course with Drama 207C. Prerequisite: Drama 240E. Preference given to majors. Credit 3 units. A&S : LA

L15 Drama 342 Acting III
Emphasis on characterization while working with a diversity of playwriting styles. Prerequisites: Drama 341, either Drama 207C or 208C, and permission of instructor. Credit 3 units. A&S : LA

L15 Drama 343 Fundamentals of Directing
The process of play directing from the selection of a script through production. Prerequisites: Drama 212E and 240E and permission of instructor. Preference given to Drama majors. Credit 3 units. A&S : LA

L15 Drama 347 Shakespeare Globe Program: Acting
This Acting Shakespeare course is paired with Drama 3472 as part of a four-week summer intensive program held at the Shakespeare’s Globe Education Centre in London. This course, as well as the companion Text and History course (Drama 3472), is taught by a Washington University faculty member, and the program also draws heavily on British theater professionals and educators from Globe Education, who teach a set of short courses on movement, voice, textual analysis, historical context, monologue performance and stage combat. Frequent access to the Globe stage allows actors to work in a spatial configuration very similar to that once used by Shakespeare's company itself. The course culminates with performances of scenes and monologues on the Globe stage. Application process must initiate through the Performing Arts Department office. Credit 3 units. A&S : LA

L15 Drama 3473 Shakespeare and Early Modern Performance
Paired with Drama 347 Shakespeare Globe Program: Acting, this course uses the resources of London and the Globe Theatre as departure points for an examination of Shakespearean performance in its historical and cultural context. We pay close attention to the dramatic text: meter, style, metaphorical language, dramatic composition, rhetoric, genre, etc. We
consider such topics as Shakespeare’s playing spaces, the actor-audience relationship in the Globe Theatre, acting, movement, original rehearsal practices, the boy actor, costumes, sound, music, props and the culture of the Bankside (bear-baiting, taverns, violence, prostitution, etc.).

Credit 3 units.  A&S : TH  A&S : IQ, HUM

L15 Drama 3491 Media Cultures
Same as Film 349
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : BA

L15 Drama 361 Stage Management
A practical approach to the study of theater stage management focusing on organizational and communication skills. Workshops, lectures and discussion; guest speakers and field trips covering the pre-production, rehearsal and performance periods; labor relations/performing arts unions; career opportunities; and supporting the vision of the artistic team.

Prerequisites: Drama 212E and Drama 240E.
Credit 3 units.  A&S : LA

L15 Drama 365C Theater Culture Studies III: Melodrama to Modernism
The third of three historical survey courses in theater and performance studies, this course traces the origins of the modern theater. Beginning with Romanticism’s self-conscious break with the past, we study the rise of bourgeois melodrama with its intensely emotional rendering of character and spectacular visual effects. We consider how those effects were made possible by advances in industrial stage technology that reproduced the everyday world with unprecedented realism, and how playwrights responded to those technologies by calling for the theater to become either a “total work of art” that plunged its spectators into a mythical realm, or a petri dish that analytically explored them in relation to the history of Western culture. From Friedrich Nietzsche’s The Birth of Tragedy to Walter Benjamin’s thesis on the Trauerspiel to Emile Zola’s Manifesto on Naturalism in the theater, we start by considering when modern drama begins and what constitutes its defining features. With such provisional definitions in place, we then engage the responses of fellow modernists such as Richard Wagner, William Archer, T.S. Eliot, Bertolt Brecht, Georg Lukacs and Theodor Adorno. We also consider whether so-called postmodern drama has broken with the modern period to introduce something altogether new, and how recent debates concerning interculturalism, the ideology of form and performance invite new ways of understanding the cultural function of modern drama and its legacy in our own historical moment.

Credit 3 units.  A&S : LA, WI  A&S : IQ, HUM, WI

L15 Drama 372 Advanced American Musical Theater
A performance-oriented course that explores the black experience through acting, directing and playwriting. Students do short performances during the semester. They also are required to attend three to five plays. Each student must participate in a final performance in lieu of a written final examination.

Same as AFAS 302
Credit 3 units.  A&S : LA, SD  A&S : IQ, HUM, SD

L15 Drama 373 Issues in Theater and Performance Studies
Explores a variety of special interest topics in theater and performance studies. Consult the Course Listings.
Credit 3 units.  A&S : LA  A&S : IQ, HUM

L15 Drama 374 Theories of Modern Drama
What makes modern drama “modern”? How does it differ from the drama of other cultural movements? When does the modern period begin? This course takes up such fundamental questions in order to examine not only the influential plays that have come to define the “canon” of modern drama, but the various theories that have been proposed as a way of understanding them in relation to the history of Western culture. From Friedrich Nietzsche’s The Birth of Tragedy to Walter Benjamin’s thesis on the Trauerspiel to Emile Zola’s Manifesto on Naturalism in the theater, we start by considering when modern drama begins and what constitutes its defining features. With such provisional definitions in place, we then engage the responses of fellow modernists such as Richard Wagner, William Archer, T.S. Eliot, Bertolt Brecht, Georg Lukacs and Theodor Adorno. We also consider whether so-called postmodern drama has broken with the modern period to introduce something altogether new, and how recent debates concerning interculturalism, the ideology of form and performance invite new ways of understanding the cultural function of modern drama and its legacy in our own historical moment.

Credit 3 units.  A&S : LA  A&S : IQ, HUM

L15 Drama 379 Expressionism in Theater and Film
Credit 3 units.  A&S : LA
This course is designed as an advanced introduction to the aesthetic movement of Expressionism as it appeared in Germany and the United States in the media of theater and film. Characterized by stylized settings that “ex-press” the internal spiritual/emotional/psychological state of its central character, Expressionism is usually discussed as a reaction to Realism, given its overt symbolism, telegraphic diction and episodic action. Beginning with a brief general introduction to the movement (including its manifestation in the visual arts), we consider its cultural, political and critical history, while exploring more recent scholarly investigations into the significance of its performance dimensions.

Credit 3 units.   A&S : TH   A&S : IQ , HUM

L15 Drama 381 MADE in France I: Old Paris/New Europe
Same as Dance 360
Credit 3 units.   A&S : LA   A&S : IQ , HUM

L15 Drama 382 MADE in France II: Choreography and Construction Collaborations
Same as Dance 361
Credit 3 units.   A&S : LA   A&S : IQ , HUM

L15 Drama 392E Greek and Roman Drama
Same as Classics 392E
Credit 3 units.   A&S : TH   A&S : IQ , HUM   BU : HUM   FA : Lit

L15 Drama 393 The Tragic Muse
Intensive study of the major tragic playwrights of Ancient Greece (Aeschylus, Sophocles and Euripides) and some of their imitators and critics in the Western tradition. We consider tragedy’s origins, its literary elements and theory, its performance and religious contexts, and its social functions. Lectures with discussions.
Same as Classics 393
Credit 3 units.   A&S : TH   A&S : IQ , HUM   BU : HUM

L15 Drama 3950 American Musical Film
Film musicals were crucial to the success of the American film industry from the dawn of sound film in the early 1920s to the demise of the studio system in the late 1950s. This course examines the American film musical from a variety of aesthetic, critical and historical perspectives, with particular attention to how the genre interacted with popular music and dance and the major political and social trends of the ’30s, ’40s and ’50s. Required screening time: 2 p.m. Friday.
Same as Film 359
Credit 3 units.   A&S : LA   A&S : IQ , HUM   BU : HUM

L15 Drama 395C Shakespeare
Introductory course emphasizing critical interpretation. Representative plays are studied in detail.
Same as E Lit 395C
Credit 3 units.   A&S : TH   A&S : IQ , HUM   BU : HUM   FA : Lit

L15 Drama 400 Theatrical Rendering for Scenery
An exploration of media and rendering techniques used for presentation of design ideas in scenery. A variety of stage sets, still lifes and figure drawing are rendered during a two-hour studio format with some additional studio time required. Materials provided by students.
Credit 3 units.   A&S : LA

L15 Drama 4001 Computer-Assisted Design for the Theater
This course is an in-depth study of how computers can assist designers in drafting and rendering processes. Primary study is focused on the program Vectorworks. We fully explore the use of this program in development of scenic and lighting design projects from basic line drawings to fully rendered 3-D images. Other programs covered are Autocad, Google Sketch Up, AG132, Photoshop CS3 and some lighting design previzualization software. Projects are centered on theatrical applications and based on students’ imaginations.
Credit 3 units.   A&S : LA   A&S : IQ , HUM

L15 Drama 4010 Israeli Drama
Same as MHBR 4010
Credit 3 units.   A&S : LA , WI   A&S : IQ , LCD , WI   BU : HUM , IS

L15 Drama 4020 Dramaturgical Workshop
A laboratory course that investigates dramaturgy from four vantage points: New Play Dramaturgy, Institutional Dramaturgy, Dramaturgy of Classics and Dramaturgical Approaches to Nontraditional and Devised Theater. This is a “hands-on” course where student dramaturges not only pursue the study of dramaturgy, but work actively and collaboratively with playwrights, actors and each other. Prerequisite: Drama 343.
Credit 3 units.   A&S : LA   A&S : IQ , HUM

L15 Drama 403 Black and White in American Drama
This course addresses the complex issue of race in America through the 19th and 20th centuries as dramatized by American playwrights, black and white. Authors include Countee Cullen, Lillian Hellman, Eugene O’Neill, Jean Toomer, Langston Hughes and Arthur Miller. Prerequisites: junior standing, two 300-level courses or better.
Same as E Lit 403
Credit 3 units.   A&S : TH   FA : Lit
L15 Drama 404 Topics for Writers: Beckett
*Waiting for Godot, Happy Days, Krapp’s Last Tape:* These are but three of Samuel Beckett’s revolutionary texts for theater. The complete canon of plays are examined for structure and compositional elements. Students undertake exercises in dramatic composition and perform a chamber presentation of *Endgame.* Course is intended for writers with some experience of the dramatic form. Intending students MUST interview with instructor Nov. 12–14.
Credit 3 units. A&S : LA A&S : IQ, HUM

L15 Drama 4081 Theater for Social Change
Drawing upon the principles and teachings of Brazilian director Augusto Boal, students explore ways of effecting positive social change in a theatrical context. Students study the aesthetic of Boal’s *Theatre of the Oppressed* and learn various games and exercises designed to mine issues of social (in)justice. Using Boal’s techniques of “image” and “forum” theater, students then create and perform plays focused on these issues. This public performance is an interactive event offered for and with the university community. No prior performance training or experience is required for this course.
Credit 3 units. A&S : LA A&S : IQ, HUM

L15 Drama 409 The Modernist Revolution in the Arts
What is/ was Modernism? How did this worldwide phenomenon impact the arts in every genre and medium from the turn of the 20th century to the present? Do we still live in the age of Modernism, or should we consider ours a new, Postmodern age? This course examines these and other questions as they relate to the theater, prose, poetry and the visual arts. Our investigation focuses on most of the major literary and artistic movements, including Naturalism, Impressionism, Symbolism, Surrealism and Expressionism. We examine literary manifestoes that help to illuminate the periods under discussion, as well as look at individual works themselves. Central to our approach in the course is an interdisciplinary perspective. Among the luminaries whose work is considered are Ibsen, Strindberg, Chekhov, Hemingway, Dali, Picasso, Stravinsky, Artaud, Kafka and Beckett.
Credit 3 units. A&S : LA A&S : IQ, HUM

L15 Drama 410 Advanced Stage Lighting
An advanced-level continuation of Drama 310. Emphasis is placed on design aesthetics and their application in a laboratory setting. Students explore color theory, lightboard programming and design analyses as well as execute a variety of finished projects. These projects cover a wide range of production styles and performance venues. Prerequisite: permission of instructor.
Credit 3 units. A&S : LA A&S : IQ, HUM

L15 Drama 411 Lighting Technology
Lighting Technology is an extremely hands-on approach to learning how the top industry designers create major shows and concerts with the most state-of-the-art equipment. We spend a considerable amount of time learning how to use and program robotic/moving lights, LED fixtures and video integration for use in drama, dance, musical and concert settings. The student gains intensive training in the use and programming of the ETC Express, ETC Ion and GrandMA 2 Light consoles with a full range of Vari*Lite robotic fixtures. In addition, the student receives training in Isadora, a very powerful video design program. Due to the amount of programming time required outside of class, this is a 4-credit lab course. Prerequisites: Drama 212 and Drama 310.
Credit 4 units. A&S : LA A&S : IQ, HUM

L15 Drama 412 Advanced Practicum in Technical Theater
Independent Study. Intensive practical experience in scenic design building and painting; lighting design and installation; costume design, coordination and construction; makeup; and audio production. Prerequisites: Drama 212E, credits on at least two productions, and permission of staff.
Credit -3 unit. A&S : LA

L15 Drama 413 Costume Rendering and Design
An exploration of media and rendering techniques used in producing an effective costume design. Basic figure drawing, proportion, color, concepts, exaggeration and period style. Drawing and painting materials are provided by student.
Credit 3 units. A&S : LA A&S : IQ, HUM

L15 Drama 414 Period Style and Design History
Examination of period styles as they relate to theatrical design and history. Study of architecture, furniture and props from Greek to contemporary periods. Prerequisite: Drama 212E.
Credit 3 units. A&S : TH A&S : IQ, HUM FA : AH

L15 Drama 421 Costume Construction and Design
Practical techniques in theatrical costume construction, including patternmaking, cutting and draping, and execution of design concepts. Research and design projects culminate in finished period garments and related accessories. Topics explored
include corsetry and foundation garments, millinery, mask making, and dyeing and painting. Prerequisite: Drama 307 or permission of instructor. Credit 3 units. A&S : LA A&S : IQ, HUM

L15 Drama 422A Film Stardom, Performance and Fan Culture
This course focuses the Hollywood star system. We explore stars in relation to celebrity and consumerism, especially how “stardom” is created by a system that seeks to create effects in film viewers whether conceived as audiences, fans or spectators. We examine the performance element of stardom and its relationship to genre, style and changing film technology. Also of concern is how stars and the discursive construction of stardom intersect with gender representation, race, ideology, sexuality, age, disability, nationality and other points of theoretical interest to and historical inquiry in contemporary film studies. While emphasis is placed on mainstream commercial U.S. cinema, students are encouraged to pursue questions beyond this framework within their own research. Same as Film 422 Credit 3 units. A&S : LA A&S : IQ, HUM BU : BA

L15 Drama 4234 Performing Knowledge: Arts Integration Pedagogy in Theory and Practice
This course invites students interested in the performing arts to apply their talents to the K-12 classroom through a service-learning component that allows them to develop and implement an arts-integrated curriculum grounded in current research in the cognitive sciences. Divided into four units, the course begins with a survey of recent research in cognitive science that traces the effects of arts-related activities on brain development. The second unit builds upon that theoretical grounding, focusing on a model of arts-integrated pedagogy developed through Harvard University’s Project Zero. The third and fourth units are practice-based, with students developing a lesson plan in a core subject area that incorporates the performing arts. Then — in consultation and collaboration with an Interchange artist-in-residence and a master teacher in the St. Louis or Normandy Public Schools — students implement their curriculum in a K-12 classroom, testing its efficacy as well as the theoretical assumptions upon which it is based. This course is open to all students across campus who have a strong interest and/or background in the arts, and who wish to explore opportunities in service learning. CBTL course. Credit 3 units. A&S : LA A&S : IQ, HUM

L15 Drama 431 English Drama Exclusive of Shakespeare to 1642
Studies of selected major plays against a background of change and tradition in English drama from its beginnings to the closing of the theaters. Same as E Lit 431 Credit 3 units. A&S : TH FA : Lit

L15 Drama 432 Topics in Renaissance Drama
A study of Elizabethan and Jacobean theatrical culture — the plays, players, playwrights and audiences of public theaters, private theaters and banqueting halls. Study includes the plays of Lyly, Kyd, Marlowe, Jonson, Chapman, Ford, Beaumont, Fletcher, Marston, Middleton, Webster and Shakespeare. Same as E Lit 432 Credit 3 units. A&S : TH FA : Lit

L15 Drama 435 Expressionism in the Arts
A close study of expressionism as an international phenomenon in the arts, from the anti-naturalist movements of the 1890s to Hitler’s condemnation of expressionism as decadent. The evolution of expressionist theater from Wedekind to Toller and Kaiser and such composers as Schoenberg and Berg; in the visual arts, such groups as Der blaue Reiter and Die Brücke, such independents as Kokoschka; in cinema, such figures as Pabst, Murnau, Von Sternberg and Lang. Prerequisite: Drama 208E, Drama 336 or permission of instructor. Credit 3 units. A&S : TH FA : AH

L15 Drama 436 Seminar in Comparative Drama
Examination of dramatic works in a variety of comparative contexts, such as thematic predecessors in the same and other genres, the legacy of a text (play, poem, film), comparison of national theatrical conventions and the transplantation of one tradition into another (Shakespeare versus French classicism), text versus production, adaptation of one genre to another (novel to play). Same as Comp Lit 436 Credit 3 units. A&S : TH FA : Lit

L15 Drama 440 Acting IV
Acting IV synthesizes the student’s performance training; creative and scholarly writing skills; and knowledge of dramatic literature. The advanced acting student is encouraged to develop and articulate his/her own aesthetic convictions. The course includes intensive solo performance projects, including writing and performing original monologues. Also, significant emphasis is placed on preparing the student for the work of professional acting, including workshops on audition monologues, head shots, résumés and economic issues. In addition, the students become familiar with various American theater cities, the regional theater system, and prominent working theater artists. The course closes with a public performance of the original, scripted and audition material developed over the semester. Prerequisite: Drama 342. Credit 3 units. A&S : LA A&S : IQ, HUM
**L15 Drama 444 Directing II: Coaching the Actor**
Further study in the fundamentals of directing. Emphasis on the director’s work with actors, designers and a realized metaphorical concept. Prerequisites: Drama 343 and permission of instructor.
Credit 3 units. A&S : LA A&S : IQ, HUM

**L15 Drama 445 Seminar**
Rotating upper-level seminar. Senior seminar normally offered each semester and meant to satisfy the 400-level requirement for the drama major.
Credit 3 units. A&S : LA A&S : IQ, HUM

**L15 Drama 447 Seminar in Theater History**
Rotating upper-level seminar in theater history. Same as Comp Lit 425
Credit 3 units. A&S : TH A&S : IQ, HUM FA : Lit

**L15 Drama 448 The History of Theater Design**
Survey course covering the history of the performance space and the scenic design elements contained within that space. The visual elements and theater architecture of each period are examined in relationship to the art and technology of the time. Prerequisites: Drama 207C or 208C, and Drama 212E.
Credit 3 units. A&S : TH FA : AH

**L15 Drama 450 Advanced Scene Design**
Advanced projects in scene design including drafting, rendering, model building and conception. Prerequisite: Drama 311M or permission of instructor.
Credit 3 units. A&S : LA A&S : IQ, HUM

**L15 Drama 4505 Playwright's Workshop**
This course offers an organized independent study for advanced students in playwriting. The class is structured by the participants. Prerequisites: Drama 227 Playwriting, Drama 473 Advanced Playwriting and permission of instructor.
Credit 3 units.

**L15 Drama 451 Topics in Period Style: Baroque Opera and Neoclassical Style**
An exploration of the dynamic interplay between high Baroque culture and the perceived style of the ancient Greeks and Romans. Primary sources used are paintings, sculpture and renderings for Baroque operas, as well as rare artifacts that exist from that time as these sources relate to classical evidence extant in that period. Secondary sources are journal articles and records of fully staged productions of intervening years. Primary interest is retracing the thought processes of the designers of Baroque opera. Focus is on Purcell's *Dido and Aeneas*, looking at the libretto and its relationship to source texts, both ancient and contemporary, and also its place within the cultural history of the theater. Projects include: in-class presentations and a research paper or fully realized design project.
Credit 3 units. A&S : LA A&S : IQ, HUM FA : AH

**L15 Drama 4511 American Television Genres**
Same as Film 451
Credit 3 units. A&S : TH A&S : IQ, HUM BU : BA

**L15 Drama 453 American Drama**
Topics in American Drama.
Credit 3 units. A&S : TH A&S : IQ, HUM FA : Lit

**L15 Drama 455 Practicum in Arts Management**
Assigned work and projects under faculty supervision in Washington University's Edison Theatre or off-campus cooperating institutions. Prerequisite: permission of instructor.
Credit 3 unit.

**L15 Drama 456 A Madman in the Theater: The History of Insanity on Stage from Sophocles to Shaffer**
The image of the madman and the theme of insanity have been extraordinarily captivating to theater artists from the Greeks to the present. In this course we consider some of the most remarkable examples from the classical period, including Sophocles' *Ajax* and Euripides' *Medea* and *The Bacchae*, and the Renaissance (*Hamlet, Othello, The Spanish Tragedy, The Duchess of Malfi, Life is a Dream*). We investigate these works both for what they tell us about the image of the madman in the historical period and culture in which they were written as well as in order to closely examine the texts themselves. We also examine plays from the 19th and 20th centuries, including Buchner’s *Woyzeck*, O'Neill’s *Emperor Jones*, Anouilh’s *The Madwoman of Chaillot*, Miller’s *Death of a Salesman* and Shaffer’s *Equus*. Finally, the course makes extensive use of the Performing Arts Department’s production of Peter Weiss’ extraordinary work *Marat/Sade* and incorporate theoretical writings such as Michael Foucault’s *Madness and Civilization* into discussions.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

**L15 Drama 459 The Filmed Stage Play**
Close textual analyses of stage plays and their film adaptations, examining structural parameters such as space, time point of view, spectator position and performance in the two art forms. Prerequisite: permission of the instructor.
Credit 3 units. A&S : TH

**L15 Drama 460 The Creative Impulse**
L15 Drama 465 The Chinese Theater
Same as Chinese 467
Credit 3 units. A&S: TH, SD, A&S: IQ, HUM, LCD, SD FA: AH

L15 Drama 469 Topics in Shakespearean Production
This course examines Shakespeare's comedies in performance. Combining scene work and production history, students gain access to the world of the comedies from a hands-on, theoretical and historical perspective. Prerequisites: Drama 395C or permission of instructor.
Credit 3 units. A&S: LA A&S: IQ, HUM

L15 Drama 471 Millinery Design and Construction
A practical course exploring the basic techniques and different methods of constructing hats and accessories. Students work with a variety of materials including buckram, straw, felt and wire that they purchase. Research and design projects culminate in the construction of several projects in class. Prerequisite: Drama 307 or 421 or permission of instructor.
Credit 3 units. A&S: LA A&S: IQ, HUM

L15 Drama 473 Advanced Playwriting
This course explores the tendencies and relationship between each individual student writer and the page. Exercises dispel any lingering doctrine that presupposes a certain style of writing. A large part of the class centers around collaborations. The writers write scenes as a final project for an acting class, and also work with two professional actors in an extended writing project that culminates in a script-in-hand presentation. The informal moments between collaborations look at the process beyond the first draft — i.e., the playground of language, nonverbal options, and the maintaining of "the work" through rewrites, readings, workshops and productions. Prerequisite: Drama 227 Introduction to Playwrighting.
Credit 3 units. A&S: LA A&S: IQ, HUM

L15 Drama 474 Acting Theories
This course explores in depth the major theoretical texts on acting and performance theory. Pertinent philosophical texts, dramatic theories, acting systems and methodologies are studied. The survey operates chronologically from early documents on acting (Greek, Roman, Italian Renaissance) through to modern and contemporary documents that inform acting and acting training today (Stanislavsky, Brecht, Grotowski, Meisner, Spolin, Suzuki). Methodologies and practices of select major stage actors are explored as well. In some cases, directing theories that have had major influence on acting theory are examined.
Credit 3 units. A&S: TH A&S: IQ, HUM

L15 Drama 478 The Eye of the Mask: A Multicultural History of the Theater through Mask Making and Design
An exploration of the history of masks used in the theater. Topics include drama of ancient Greece, the ancient No Theater of Japan, the Italian theater of commedia dell'arte, the dance drama of Bali, the Venetian and Mardi Gras Carnival celebrations, and ritual and ceremonial masks of other cultures: Africa, Latin America and Asia, using the instructor's extensive collection of masks as primary research subjects. Projects include: an in-class presentation and research paper with three to five fully realized mask designs are constructed within class and at an additional lab time discussed on the first day.
Credit 3 units. A&S: TH A&S: IQ, HUM BU: HUM

L15 Drama 479 Fundamentals of Sound Design
Encompassing both creative and technical aspects of sound in the performing arts, the course gives theoretical knowledge and practical experience in the following areas: fundamental rules of physics and electronics related to sound, use of standard digital recording studio equipment, "training" of the ear, and basic techniques of sound montage. Students are expected to participate in a variety of conceptual and research-oriented exercises as well as complete several lab projects. Sound-related work on Performing Arts Department productions may be required. Prerequisites: Drama 212 and permission of instructor.
Credit 3 units. A&S: LA A&S: IQ, HUM

L15 Drama 487 Theater Culture Studies Seminar
Rotating upper-level topics course. Topics come from Theater Culture Studies sequence.
Credit 3 units. A&S: TH, WI A&S: IQ, HUM, WI FA: AH

L15 Drama 493 Senior Project
Specialized study in a selected area in drama. Required of all drama majors not taking Drama 499. Prerequisite: 15 units of advanced work in drama at the 300 or 400 level.
Credit 3 units.
L15 Drama 499 Study for Honors
Prerequisites: senior standing, a cumulative and a major GPA of 3.5, and permission of the chair of the Performing Arts Department.
Credit -6 unit.

L15 Drama 4990 Independent Work
Students may contract with a faculty supervisor for credit for their work on theatrical productions or research. Contracts must be signed by the student and the coordinator of Drama 500 before the student’s work on the project commences. Credit and grade option to be determined in each case. In order to enroll for this course, students must complete a contract and submit it to the Performing Arts Department office.
Credit -6 unit.

L15 Drama 4991 Acting
Independent study. In order to enroll for this course, students must complete a contract and submit it to the Performing Arts Department office.
Credit -3 unit.

L15 Drama 4992 Directing
Independent study. In order to enroll for this course, students must complete a contract and submit it to the Performing Arts Department office.
Credit -3 unit.

L15 Drama 4993 Technical Theater
Independent study. In order to enroll for this course, students must complete a contract and submit it to the Performing Arts Department office.
Credit -3 unit.

L15 Drama 4994 Voice, Speech
Independent study.
Credit -3 unit.

L15 Drama 4995 Literature, Theory, Criticism
Independent study. In order to enroll for this course, students must complete a contract and submit it to the Performing Arts Department office.
Credit -3 unit.

Earth and Planetary Sciences
If you are interested in studying the Earth and other planets at one of the top geoscience departments in the country, Earth and Planetary Sciences is an excellent choice for you. Always closely allied to practical concerns, the field is rapidly expanding and becoming more quantitative. Offerings range from general courses surveying the concepts, methods and results of Earth and planetary sciences, suitable for any nonmajor, through a program of fundamental, modern, quantitative studies that will prepare students for the full range of opportunities in the geosciences in the 21st century.

Depending on your interests, you may choose to focus on geology, geophysics, geochemistry or environmental science. This variety gives you flexibility in designing a program that best meets your needs.

Our faculty is internationally renowned for its research. Some study seismic waves, gravity field and rock deformation to understand how Earth operates today and how it evolved through time. Others analyze chemical composition of Earth, planets, meteorites and cosmic dust. The department is currently taking an active role in the exploration of Venus, Mars, the moon and other parts of the Solar System. It hosts the Geosciences Node for NASA’s Planetary Data System which archives and distributes data related to the study of the surfaces and interiors of planetary bodies.

As an undergraduate major, you can work with faculty in the laboratory to conduct many of your own studies, using analytical facilities and computer modeling, and you also may gather data in the field. Many students participate actively in cutting-edge research in geology, geochemistry, environmental sciences and geophysics, using advanced laboratory equipment and some of the world’s most powerful computing systems; some students have co-authored published scientific papers. You also learn hands-on geology through visits to unusual geological structures in the local Midwest area and through participation in a summer field school. Summer internships at such places as the Smithsonian Institution also are available. Current field studies involve expeditions to Africa, Antarctica, Italy, and Tonga and Fiji.

With a major from Earth and Planetary Sciences, you have a choice of several career paths. Many recent graduates of the department have continued their research in graduate school. Others have accepted positions in government, industry and environmental business. You also may choose to work in a variety of related fields.

The department offers majors and minors in Earth and Planetary Sciences and in Environmental Earth Sciences.

Contact Person: Margo Mueller, Assistant to Chairman
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E-mail: mueller@wunder.wustl.edu
Departmental website: http://eps.wustl.edu

Chair
Douglas A. Wiens
The Major in Earth and Planetary Sciences

Total units required: 37 plus 24 in math, chemistry and physics for a total of 61

Required courses:
- EPSc 201 Earth and the Environment: 4
- EPSc 352 Earth Materials: 5
- EPSc 353 Earth Forces: 4

A writing-intensive course:
- EPSc 404 Ideas and Controversies In the Geosciences or EPSc 498 Undergraduate Research Seminar

An approved summer field camp of at least 6 units of credit. The field camp must be attended after either the junior or senior year. You may propose to the faculty an alternative program of study as a substitute for field camp.

Elective courses:

In-depth study in one of three disciplines within the geosciences:

1. Geology: EPSc 310 Geological Field Methods, EPSc 385 Earth History, EPSc 409 Surface Processes, EPSc 413 Introduction to Soil Science, EPSc 418 Paleobiology, EPSc 422 Sedimentary Geology, EPSc 429 Environmental Hydrogeology, EPSc 430 Environmental Mineralogy, EPSc 431 Petrography, EPSc 437 Introduction to Petrology, EPSc 443 Methods in Biogeochemistry, EPSc 460 Introduction to Structural Geology, EPSc 463 Field and Structural Geology, EPSc 473 Planetary Geology, EPSc 484 Paleoenvironmental Reconstruction and EPSc 505 Advanced Physical Geology.

2. Geochemistry: EPSc 323 Biogeochemistry, EPSc 401 Earth Systems Science, EPSc 441 Introduction to Geochemistry, EPSc 443 Methods in Biogeochemistry, EPSc 444 Environmental Geochemistry, EPSc 446 Stable Isotope Geochemistry, EPSc 448 Microbial Geochemistry, EPSc 449 Microbes in the Environment, EPSc 474 Planetary Geochemistry and EPSc 480 Special Topics In Microbiology–Chemistry–Earth Science.

The Major in Environmental Earth Sciences

Students begin their interdisciplinary study of the environment with three introductory courses, one each in environmental geology, environmental biology and environmental ethics. You would then deepen your understanding of environmental science by taking three additional intermediate-level earth science courses and two introductory-to-intermediate courses in the natural sciences, mathematics or environmental engineering from an approved list of relevant courses. You must then take five courses across the natural sciences, social sciences and engineering focused on a particular environmental theme. You may choose from courses listed in existing themes (Climate and Energy, Human-Altered Environments, and Life in its Environment) or design your own theme with approval of your adviser. Finally, in your junior or senior year, you would fulfill a Capstone experience by applying what you’ve learned outside the classroom, through either a 3-credit field course, internship or independent research.

The following prerequisites also are required for the above course of study: Chem 111A General Chemistry I, Chem 112A General Chemistry II (or a score of 4 or 5 on the AP Chemistry Exam); Math 131 Calculus I, Math 132 Calculus II, Math 233 Calculus III; and Physics 117A General Physics I– Physics 118A General Physics II or Physics 197 Physics I– Physics 198 Physics II.

You also may be able to take graduate Earth and Planetary Sciences courses with the permission of your adviser and the specific course instructor.

More information about the department, its faculty and staff, and additional details on our degree programs can be found at http://eps.wustl.edu/.

The Minor in Earth and Planetary Sciences

To minor in Earth and Planetary Sciences, you must complete at least 16 units, including the introductory course EPSc 201 Earth and the Environment, followed by EPSc 352 Earth Materials and EPSc 353 Earth Forces. At least one additional course, not including EPSc 390 Independent Study or EPSc 490 Independent Study, must be at the 300 level or above. Your minor program must be approved by the faculty adviser who is assigned to you when you declare the minor.

Units required: 16

Required courses:
EPSc 201 Earth and the Environment
EPSc 352 Earth Materials
EPSc 353 Earth Forces

At least one additional EPSc course numbered 300 or above, not including EPSc 390 Independent Study, is required.
Additional Information

Senior Honors: If you are interested in the Honors program, you should consult with the chair or director of undergraduate studies concerning eligibility and requirements or visit the department’s website.

The Minor in Environmental Earth Sciences

Following the philosophy of the EES major, the minor combines interdisciplinarity with a solid grounding in earth science.

Required courses:
- EPSc 201 Earth and the Environment (4 credits)
- Biol 2950 Introduction to Environmental Biology (3 credits)
- Pol Sci 2010 Introduction to Environmental Policy (3 credits)

Electives:
Choose three of:
- EPSc 308 Topics in Environmental Sustainability (3 credits)
- EPSc 323 Biogeochemistry (3 credits)
- EPSc 352 Earth Materials ("5 credits, counts as two courses")
- EPSc 353 Earth Forces (3 credits)
- EPSc 401 Earth Systems Science (3 credits)
- EPSc 413 Introduction to Soil Science (3 credits)
- EPSc 428 Hydrology (3 credits)
- EPSc 429 Environmental Hydrogeology (3 credits)
- EPSc 430 Environmental Mineralogy (3 credits)
- EPSc 443 Methods in Biogeochemistry (3 credits)
- EPSc 444 Environmental Geochemistry (3 credits)
- EPSc 454 Exploration and Environmental Geophysics (3 credits)
- EPSc 484 Paleoenvironmental Reconstruction (5 credits, counts as two courses)
- EPSc 484 Environmentalism (3 credits)
- EPSc 484 Geomorphology (3 credits)
- EPSc 484 Geophysics (3 credits)
- EPSc 484 Geology (3 credits)
- EPSc 484 Geology of the Earth (3 credits)
- EPSc 484 Geology of the Environment (3 credits)
- EPSc 484 Geology of the Planets (3 credits)
- EPSc 484 Geology of the Universe (3 credits)
- EPSc 484 Geology of the World (3 credits)

Earth and Planetary Sciences

L19 EPSc 103A Oceanography
Emphasis on geological, chemical and physical oceanography. Topics: topography and origin of ocean basins; origin and composition of sea floor; effect of compositional variations on biological productivity; dynamics of water movements, including coastal processes.
Credit 3 units. A&S : NS A&S : IQ, NSM BU : SCI FA : NSM

L19 EPSc 106A Freshman Seminar: Earth and Planetary Sciences
Each week a different faculty member presents a lecture or laboratory demonstration relating to recent discoveries in geology and the planetary sciences, or about general topics dealing with volcanism, earthquakes, plate tectonics, geological hazards, fossil life or earth history. Prerequisite: freshman standing or sophomore standing with permission of instructor. Credit/no credit only. Students attend all lectures and write a short summary of each.
Credit 1 unit. A&S : NS A&S : IQ, NSM

L19 EPSc 108A Oceans and the Atmosphere
Basic concepts of the evolution and physical structures of the Earth’s oceans and the atmosphere. Dynamic aspects of the oceans (waves, tides, tsunamis) and atmospheric circulation (weather). Role of biological processes (including anthropogenic) in defining the present oceans and atmosphere. Global climate issues discussed in EPSc 111.
Credit 3 units. A&S : NS A&S : IQ, NSM BU : SCI FA : NSM

L19 EPSc 109A Quantitative Reasoning in Environmental Science
Introduction to practical mathematical methods for understanding environmental aspects of our planet, particularly how the environment changes with time through human interactions. Emphasis on intuitive approaches in devising simple relationships for understanding quantitative outcomes of natural processes. Introduction to basic statistical methods, including hypothesis testing, and how statistics can be applied to environmental problems.
Credit 3 units. A&S : NS, QA A&S : IQ, NSM, AN BU : SCI FA : NSM

L19 EPSc 111 Introduction to Global Climate Change in the 21st Century
Global climate and global climate change and their impacts on life and civilization. Integrated view of global climate and the diverse forces that can alter global climate. Historical and potential future consequences of global climate change on human life, our industrial civilization, and its sustainability.
Credit 3 units. A&S : NS A&S : IQ, NSM

L19 EPSc 112 Freshman Seminar: Engineering the Climate
Geoengineering, the deliberate manipulation of the earth’s climate, may be part of a solution to the predicted future global warming. Is this advisable, or even possible? Discussions, lectures and readings used to learn how earth’s climate works. Examination of some proposals for altering the climate. Past attempts for deliberate human alteration of natural systems discussed and evaluated. Consideration of geoengineering as an ethical issue. Prerequisite: first-year undergraduate status.
Credit 3 units. A&S : NS A&S : IQ, NSM

L19 EPSc 116A Resources of the Earth
Introduction to major resources of the Earth: rocks, minerals, water, soil, air. Basics of geology presented so that origin, supply and uses of resources can be better understood. Environmental awareness stressed. Field trip required.
Credit 3 units. A&S : NS A&S : IQ, NSM BU : SCI

L19 EPSc 118A Geology of National Parks

Survey of geologic processes occurring at the Earth’s surface and its interior using national parks and monuments as the prime venue for presentation. Volcanism and mountain-building; the work of streams, glaciers and wind; lake and coastline development; stratigraphy and sedimentation; and Earth history. Material presented in a geographic context, with emphasis on landforms and landscape evolution, relating geology to the development and settlement of the United States.

**Credit 4 units. A&S : NS, A&S : IQ, NSM BU : SCI FA : NSM**

**L19 EPSc 201 Earth and the Environment**
Introduction to the study of the Earth as a dynamic, evolving planet. Emphasis on how internal and surface processes combine to shape the environment. Themes: Earth’s interior as revealed by seismic waves; Earth history and global tectonics shown by changes to ocean floors, mountain-building, formation of continents, earthquakes and volcanism; climate history and global biogeochemical cycles, influenced by circulation of atmosphere and oceans, ice ages and human activity. Composition and structure of rocks and minerals. Three class hours and one two-hour lab a week.

**Credit 4 units. A&S : NS, A&S : IQ, NSM BU : SCI**

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**L19 EPSc 319 Physical Oceanography**
Ocean circulation, El Niño, dynamical tides, tsunami, coastal ocean, enclosed seas, paleo-ocean, sedimentation, ice-atmosphere-ocean interaction, biology-carbon cycle.

**Prerequisites:** Chem 111A, Chem 112A, Physics 117A, Physics 118A, Math 132, Math 133; or permission of instructor.

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**L19 EPSc 125 The Dinosaurs: “Facts” and Fictions**
An introduction to the history of prehistoric life from its early beginnings about 3.5 billion years ago until the present. Emphasis is placed on the origin and evolution of dinosaurs and the stratigraphic and biological methods used by paleontologists to decipher their habits and relation to the Mesozoic world. In addition to the remarkable evolutionary history of dinosaurs, topics relating to the history of fishes, amphibians, reptiles, birds and mammals provide a summary understanding of the Earth’s amazing pageant of past life.

**Credit 3 units. A&S : NS, A&S : IQ, NSM BU : SCI**

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**L19 EPSc 131 Natural Disasters**
Examination of the effects of natural hazards on landscapes of the Earth in general, as well as on populated areas specifically, through numerous case studies. Social, economic and political consequences of natural disasters. Locations, particularly in the United States, where disasters are likely to occur in the future. Nature of the hazards and what preparations are possible to minimize damage and the number of casualties.

**Credit 3 units. A&S : NS, A&S : IQ, NSM BU : SCI**

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**L19 EPSc 171A The Solar System**
Survey of the planets and satellites of our solar system. Includes results from Apollo manned missions to the Moon and spacecraft missions to the planets and their major satellites. Present ideas about the age, formation and early history of the sun, Earth and meteorites.

**Credit 3 units. A&S : NS, A&S : IQ, NSM BU : SCI FA : NSM**

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**L19 EPSc 210A Epic of Evolution: Life, Earth and the Cosmos**
Evolution of the universe, the Earth and life, woven together in narrative. Themes of complexity, scale, entropy and information applied to the Big Bang, origins of matter, formation and history of the Earth, origins of life and diversification of species. Discussion sections explore the implications of the scientific epic for religion, philosophy, the arts and ethics.

**Credit 3 units. A&S : NS, A&S : IQ, NSM BU : SCI FA : NSM**

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**L19 EPSc 219 Energy and the Environment**
Examination of the topic of energy from many human-relevant perspectives. Humans use an enormous amount of energy, at the rate of 18 terawatts. Where does this energy come from? How long will it last? What are the consequences? Examination of energy resources and consumption from scientific, social, economic and political viewpoints. Relationship of energy to concepts such as heat, work and power. Energy use by society. Energy sources, pros and cons of use, availability now and in the future. Types, abundance, advantages, challenges of renewable energy sources. Prerequisite: one year of high-school physics or chemistry.

**Credit 3 units. A&S : NS, A&S : IQ, NSM BU : SCI**

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**L19 EPSc 221A Human Use of the Earth**
Examination of the impacts of a growing population on the Earth, including habitat destruction, resource depletion, and air and water pollution. Population growth, landscape change, and the distribution and uses of the water, mineral and energy-producing resources of the Earth.

**Credit 3 units. A&S : NS, A&S : IQ, NSM BU : SCI, FA : NSM**

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**L19 EPSc 226A Earth, Environment, and the Future**
Examination of the work of streams, glaciers and wind; lake and coastline development; stratigraphy and sedimentation; and Earth history. Material presented in a geographic context, with emphasis on landforms and landscape evolution, relating geology to the development and settlement of the United States.

**Credit 3 units. A&S : NS, A&S : IQ, NSM BU : SCI FA : NSM**

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**L19 EPSc 230 Introduction to Astrobiology**
Astrobiology is the study of life — its origin, distribution and impact on the Earth, and the destiny of life elsewhere in the universe. Course includes the investigation of the influence of pseudoscience and the media on public understanding of scientific issues, the origin of the solar system and the Earth, origin of life, the early Earth environment, the evolutionary history of life on Earth, life in extreme environments and methods for detecting life on other worlds such as Mars and Jupiter’s satellite Europa. Discussion include philosophical issues such as the nature of life and the significance of finding life elsewhere. Three class hours and one one-hour discussion period a week.

**Credit 3 units. A&S : NS**

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**L19 EPSc 249 Global Environmental Change**
Ocean circulation, El Niño, dynamical tides, tsunami, coastal ocean, enclosed seas, paleo-ocean, sedimentation, ice-atmosphere-ocean interaction, biology-carbon cycle.

**Prerequisites:** Chem 111A, Chem 112A, Physics 117A, Physics 118A, Math 132, Math 133; or permission of instructor.
L19 EPSc 323 Biogeochemistry
Survey of biogeochemical interactions among Earth's crust, oceans and atmosphere, including perturbations due to human activities. Carbon, nitrogen, phosphorus and sulfur biogeochemical cycles. Greenhouse warming of atmosphere from carbon dioxide and chlorofluorocarbons; effects of inorganic and organic wastes in groundwater systems. Introductory course for students of environmental science and nonscience majors. Prerequisite: permission of instructor.
Credit 3 units. A&S : NS A&S : IQ, NSM

L19 EPSc 352 Earth Materials
Fundamental principles of crystal chemistry; symmetry and structure of crystals (minerals); X-ray analysis of crystalline materials; information on the important mineral groups (definition of the groups; composition, structure, physical properties, occurrence and usage of major mineral species); optical mineralogy. Geological and environmental aspects of earth materials. Prerequisite: EPSc 201 (may be taken concurrently) and Chem 112A (or AP Chem score of 4); or permission of instructor. Three class hours, one two-hour laboratory, and one two-hour discussion period a week.
Credit 5 units. A&S : NS A&S : IQ, NSM BU : SCI FA : NSM

L19 EPSc 353 Earth Forces
Basic concepts regarding the forces that act upon the Earth, how geological materials react to these forces, and the time scale over which they respond. Emphasis on physical concepts needed to understand the geodynamical behavior of the Earth over a broad range of length and time scales. Application and interpretation of geophysical methods to probe the interior of the Earth. Prerequisites: EPSc 201 (may be taken concurrently), Physics 117A (or Physics 197) and Math 131, or permission of instructor. Three class hours and one two-hour laboratory a week.
Credit 4 units. A&S : NS A&S : IQ, NSM BU : SCI FA : NSM

L19 EPSc 385 Earth History
Introduction to the concept of “deep time” and the parallel biological evolutionary and environmental changes that have occurred throughout Earth history. Topics include early evolution of life, rise of atmospheric oxygen, global glaciation, mass extinctions. Prerequisite: EPSc 201 or permission of instructor.
Credit 3 units. A&S : NS A&S : IQ, NSM

L19 EPSc 390 Topics in the Geosciences
The content of this course varies each time it is offered, as announced by the department. With permission of the adviser, this course may be repeated for credit. Prerequisite: permission of instructor.
Credit 4 units. A&S : NS A&S : IQ, NSM

L19 EPSc 401 Earth Systems Science
Quantitative introduction to physical and chemical interactions among the atmosphere, oceans and solid earth. Use of the geologic record to infer how such interactions varied over geologic time. Prerequisite: EPSc 352 or permission of instructor or the graduate adviser.
Credit 3 units. A&S : NS A&S : IQ, NSM FA : NSM

L19 EPSc 404 Ideas and Controversies In the Geosciences
Great ideas and controversies in the geological sciences and how ideas change and become accepted in science. The format is part lecture, part discussion. Writing and oral presentation are emphasized. Students read primary sources, as well as books, journals and Web-based historical accounts and interpretations. Among the topics addressed are: continental drift and plate tectonics, development of the geological time scale, age of the earth, mass extinctions and the Snowball Earth hypothesis. Prerequisites: EPSc 352 and EPSc 353 (may be taken concurrently) or permission of instructor.
Credit 3 units. A&S, WI A&S : IQ, NSM, WI

L19 EPSc 407 Remote Sensing
Use of different parts of the electromagnetic spectrum (visible, ultraviolet, infrared and radio wavelengths) for interpretation of physical and chemical characteristics of the surfaces of Earth and other planets. Digital image systems and data processing. Prerequisite: Physics 117A and Physics 118A (or Physics 197 and Physics 198), or permission of instructor.
Credit 3 units. A&S : NS A&S : IQ, NSM FA : NSM

L19 EPSc 408 Earth’s Atmosphere and Global Climate
Structure and dynamics of Earth’s atmosphere. Basic factors controlling global climate of Earth. Quantitative aspects of remote sensing of atmosphere. Remote sensing instrumentation. Prerequisites: Math 233 and Physics 117A (or Physics 197), or permission of instructor.
Credit 3 units. A&S : NS A&S : IQ, NSM FA : NSM

L19 EPSc 409 Surface Processes
How do landscapes evolve? Examination of chemical and physical processes that modify earth’s surface. Introduction to soil formation. Focus on modern systems, particularly fluvial, karst and desert terrains. Brief discussion of coastal and glacial systems. Human agency in geomorphic change. Lab covers survey techniques for acquisition of topographic data and use of geographic information systems for geomorphic and hydrologic analysis. Field trips required. Prerequisites: EPSc 352 or permission of instructor. Three class hours and one three-hour lab a week.
Credit 4 units. A&S : NS A&S : IQ, NSM BU : SCI FA : NSM
L19 EPSc 410 Earth Remote Sensing Methods and Instrumentation
Detection of electromagnetic radiation reflected, scattered or emitted by components of the Earth system. Spectroscopy of remote sensing. Interpretation of received radiation via radioactive transfer within a context of real measurements. Theory of instruments and detectors. Comparison of realized equipment to theoretical models. Prerequisite: Physics 118A, Chem 112A (or AP Chem score of 4), Math 233, or permission of instructor. Credit 3 units. A&S : NS A&S : IQ, NSM BU : SCI FA : NSM

L19 EPSc 413 Introduction to Soil Science
Physical, chemical and biological processes that occur within soil systems. Types of soils and how these relate to soil formation. Major components of soil, including soil water, minerals, organic matter and microorganisms. Soils in wetlands and arid regions. Cycling of nutrients and contaminants in soils. Soil quality, conservation and sustainability. Two one-day field trips required. Prerequisite: EPSc 323 or Chem 112A (or AP Chem score of 4), or permission of instructor. Credit 3 units. A&S : NS A&S : IQ, NSM

L19 EPSc 418 Paleobiology
Detailed survey of the history of life on Earth and the major geological events (e.g., mountain building, change in sea level, continental fragmentation) that affect the evolution and distribution of life. Focus on the past 540 million years, the age of the “more complex” forms of life. Appearances, evolution and extinctions of the major groups of organisms of this time. Includes major reef-building communities, major plant groups, and important animal groups on land and in the oceans. Environmental change through time and extinctions, both past and current. Prerequisite: EPSc 201 or permission of instructor. Three class hours and one two-hour laboratory a week. Credit 4 units. A&S : NS

L19 EPSc 422 Sedimentary Geology
Survey introduction to sedimentary processes and materials, including description, formation and interpretation. Sedimentary materials account for most of the Earth’s crust, and much of our understanding of Earth history comes from their examination. Many of our economic resources, such as coal, oil and natural gas, and many environmental problems, are related to or derive from sediments. Goals: understanding and identifying sediments and processes and using them to interpret stratigraphic, paleoenvironmental and tectonic information: obtaining the understanding of sedimentology that is relevant to environmental issues; increasing scientific literacy and critical thinking. Prerequisites: EPSc 201 or permission of instructor. Three class hours and one two-hour lab a week. Mandatory field trips. Credit 4 units. A&S : NS A&S : IQ, NSM

L19 EPSc 428 Hydrology
Survey of principles that govern the flow of water in river and groundwater systems in deep geologic environments. Basic equations of fluid flow, dynamics and the characteristics of drainage basins, rivers, floods and important aquifers. Exploitation of groundwater systems. Prerequisites: EPsc 353, Physics 117A (or Physics 197) and Math 233, or permission of instructor. Credit 3 units. A&S : NS A&S : IQ, NSM FA : NSM

L19 EPSc 429 Environmental Hydrogeology
Introduction to principles that govern the flow and geochemistry of water in river and shallow groundwater systems. Characteristics of drainage basins, rivers, floods and important aquifers. Anthropogenic impact on fresh water systems and efforts to remediate damaged systems. Prerequisite: EPSc 201 or permission of instructor. Fulfills the Natural Systems elective requirement for Master of Landscape Architecture students. Credit 3 units. A&S : NS A&S : IQ, NSM

L19 EPSc 430 Environmental Mineralogy
Topics connected with environmental mineralogy, some selected by students. Topics may include: mineral dust such as asbestos; containment materials for nuclear waste disposal; environmental ramifications of the processing and use of phosphate fertilizers; lead in the environment; acid mine drainage; microbial mediation of sulfide oxidation; minerals in the human body; weathering of building materials; materials engineering; and engineering of materials for more effective recycling. Three class hours and one two-hour laboratory a week. Participation in discussions, term paper, two field trips required. Most readings from primary sources. Prerequisite: EPSc 352 or permission of instructor. Credit 4 units. A&S : NS A&S : IQ, NSM FA : NSM

L19 EPSc 431 Petrography
Origin of selected igneous and metamorphic rock suites investigated by integrating field, laboratory and theoretical approaches to petrogenesis. Petrographic, electron microprobe and X-ray fluorescence methods taught and utilized as tools in class exercises. Field trips to nearby localities. Prerequisites: EPSc 352 or permission of instructor. Credit 3 units. A&S : NS A&S : IQ, NSM FA : NSM

L19 EPSc 432 Environmental Mineralogy
Topics connected with environmental mineralogy, some selected by students. Topics may include: mineral dust such as asbestos; containment materials for nuclear waste disposal; environmental ramifications of the processing and use of phosphate fertilizers; lead in the environment; acid mine drainage; microbial mediation of sulfide oxidation; minerals in the human body; weathering of building materials; materials engineering; and engineering of materials for more effective recycling. Three class hours and one two-hour laboratory a week. Participation in discussions, term paper, two field trips required. Most readings from primary sources. Prerequisite: EPSc 352 or permission of instructor. Credit 4 units. A&S : NS A&S : IQ, NSM FA : NSM

L19 EPSc 433 Introduction to Petrology
Classification, origin, mineralogy and geological occurrence of major igneous and metamorphic rocks. Laboratory emphasis on identification of rocks and minerals in hand specimens and in thin sections. Prerequisite: EPSc 352 or permission of instructor. Three class hours and one two-hour laboratory a week. Credit 4 units. A&S : NS A&S : IQ, NSM
Microorganisms are ubiquitous and have a large impact on the chemistry of pristine and polluted soil, surface and groundwater environments. Acids and bases; mineral solubility; carbonate chemistry; chemical speciation; redox reactions adsorption and ion exchange; and the speciation, mobility and toxicity of metals. Prerequisite: EPSc 201 and Chem 112A (or AP Chem score of 4), or permission of instructor.
Credit 3 units. A&S : NS A&S : IQ, NSM FA : NSM

L19 EPSc 463 Exploration and Environmental Geophysics
Basic geophysical techniques used in exploration and environmental geophysics, emphasizing seismic and electromagnetic methods. Basic theory, field procedures and interpretation of data. Use of geophysical instruments on field trips, followed by reduction and analysis of acquired data. Prerequisites: EPSc 353, Physics 117A (or Physics 197), Math 131 and Math 132, or permission of instructor. Two class hours and one two-hour laboratory a week and approximately four one-day field trips during the semester.
Credit 4 units. A&S : NS A&S : IQ, NSM FA : NSM

L19 EPSc 454 Introduction to Seismology
Introduction to earthquake and exploration seismology. Seismic wave propagation, data analysis and processing, earthquake mechanisms, seismic constraints on the structure of the Earth, relationship of seismicity to plate tectonics. Prerequisites: EPSc 353 and Math 217, or permission of instructor.
Credit 3 units. A&S : NS A&S : IQ, NSM FA : NSM

L19 EPSc 453 Interior of the Earth
Composition and temperature of Earth’s mantle and core, determined by geophysical methods. Inferences about mantle and core dynamics, especially interactions. Current understanding and history of interior in fields of seismology, geomagnetism, mineral physics, geodynamics. Prerequisite: EPSc 353 or permission of instructor.
Credit 3 units. A&S : NS A&S : IQ, NSM FA : NSM

L19 EPSc 452 Geodynamics
Fundamental physical processes necessary to understand plate tectonics and a variety of geological phenomena. Heat flow, gravity, elasticity and flexure, rheology of Earth materials. Prerequisites: EPSc 353 or permission of instructor.
Credit 3 units. A&S : NS A&S : IQ, NSM FA : NSM

L19 EPSc 449 Geosciences
Stress, strain, rheology, ductile and brittle deformation processes and structures from microscale to macroscale. Applications to tectonics and whole Earth structure. Labs cover stress/strain analysis, experimental rock deformation, field techniques, interpretation of geologic maps and cross
sections. Prerequisites: EPSc 352 and EPSc 353 or permission of instructor. Three hours of lecture and one two-hour laboratory a week.
Credit 4 units.  A&S : NS  A&S : IQ, NSM  FA : NSM

L19 EPSc 463 Field and Structural Geology
Introduction to concepts and principles of structural geology with emphasis on field and laboratory methods for mapping and describing geologic structures. Topics include stress and strain, fracturing and brittle behavior, jointing and faulting, plate tectonics, geologic history of North America. Lab and field work include introduction to topographic maps, orthographic projections, Mohr circle of stress, stereonet analysis, structure contouring, pace-and-compass mapping, determination of stratigraphic thickness, construction of geologic maps and cross-sections. One-and-a-half hour lecture, one three-hour lab a week. Up to six additional outdoor exercises on weekends.
Prerequisites: EPSc 352 and EPSc 353 or permission of instructor.
Credit 4 units.  A&S : NS

L19 EPSc 473 Planetary Geology
Discussion of the evolution of the terrestrial planets and the outer-planet satellites as evidenced by the geologic records left on the surfaces of these bodies. Focus on major processes affecting planetary surfaces: impact cratering, volcanism, tectonism, and erosion and sedimentation by wind and water.
Prerequisites: EPSc 352 and EPSc 353, or permission of instructor.
Credit 3 units.  A&S : NS  A&S : IQ, NSM  FA : NSM

L19 EPSc 474 Planetary Geochemistry
A survey of the geochemistry of the planets and their satellites using data from Earth-based, Earth-orbital and spacecraft observations. Prerequisite: EPSc 352 or permission of instructor.
Credit 3 units.  A&S : NS  A&S : IQ, NSM  FA : NSM

L19 EPSc 480 Special Topics In Microbiology–Chemistry–Earth Science
Investigation of scientific questions at the interface of microbiology, biochemistry, ecology, geochemistry and environmental studies. Content varies each time this course is offered. With permission of the chair, course may be repeated for credit.
Prerequisite: permission of instructor.
Credit 3 units.  A&S : NS

L19 EPSc 483 Paleoenvironmental Reconstruction
How do we know about environments of the geologic past? Survey of paleoenvironmental proxies (stable isotopes, macroflora, macro- and micro-fauna, pollen/palynomorphs, paleosols, lacustrine sediments, etc.); applications and limitations of each proxy; analytical techniques. Focus on terrestrial, as opposed to marine, environments. Prerequisite: EPSc 201 or permission of instructor; EPSc 422 recommended.
Credit 3 units.  A&S : NS  A&S : IQ, NSM

L19 EPSc 490 Independent Study
Independent study for advanced undergraduates or for graduate students, supervised by a faculty member. Prerequisite: permission of instructor. Credit to be arranged.
Credit -12 unit.

L19 EPSc 498 Undergraduate Research Seminar
Provides an opportunity for advanced undergraduates to synthesize many of the diverse subdisciplines of Earth and Planetary Sciences while focusing on a research topic. Subject changes each offering. Each subject is unique and timely, but broad enough to encompass wide-ranging interests among students. Students conduct original research, make written reports of the results, and make oral presentations of their projects in class. Prerequisite: senior standing or permission of instructor.
Credit 3 units.  A&S : NS, WI  A&S : IQ, NSM, WI  FA : NSM

L19 EPSc 499 Honors Research
Independent work for undergraduate Honors, supervised by a faculty member. Prerequisites: senior standing, eligibility for Honors and permission of instructor.
Credit 3 units.  A&S : NS  FA : NSM

East Asian Languages and Cultures
The department offers programs in the study of the East Asian languages, literatures and cultures, including both the traditional and modern periods of their development. A major in any of the East Asian languages and cultures, or through the more general East Asian Studies, offers a solid preparation for graduate study in these areas. It also opens up career opportunities in diplomacy, business, law, journalism and higher education.

Majors and minors are offered in Chinese, Japanese and East Asian Studies; a minor is offered in Korean and the other areas as well. The majors typically require completion of 27 upper-level units. Specific requirements usually include one 200-level foundational course, the equivalent of four years of modern language study, one course in the classical language, and two or more courses in the relevant literary tradition. In addition, all majors (except those who are fulfilling a capstone requirement in a second major) are required to fulfill the EALC capstone requirement.

The minors require the completion of 18 units, 9 of which must be at the 300 level or above. Specific requirements normally
include the equivalent of two years of modern language study and one or more courses in the relevant literary tradition: three of these courses must be at the 300 level or above. Students who are double majoring must keep in mind that the Chinese and Japanese majors require 27 units of advanced course work that are unique to the major. The EAS major requires 24 units. The minors require 18 units unique to the minor.

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Departmental website: http://ealc.wustl.edu

Chair  
Robert E. Hegel  
Liselotte Dieckmann Professor of Comparative Literature  
PhD, Columbia University

Professors  
Rebecca Copeland  
PhD, Columbia University  
Beata Grant  
PhD, Stanford University  
Marvin H. Marcus  
PhD, University of Michigan

Associate Professor  
Lingchei Letty Chen  
PhD, Columbia University

Assistant Professors  
Ji-Eun Lee  
PhD, Harvard University  
Pauline Chen Lee  
PhD, Stanford University  
Zhao Ma  
PhD, Johns Hopkins University  
Jamie Newhard  
PhD, Columbia University

Senior Lecturers  
Mijeong Mimi Kim  
EdD, University of San Francisco  
Xia Liang  
MA, Beijing Normal University  
Virginia S. Marcus  
MA, University of Michigan, New York University  
Judy Zhijun Mu  
PhD, University of Illinois at Urbana-Champaign  
Fengtao Wu

MA, Indiana University–Bloomington

Lecturers  
Wenhui Chen  
MA, National Taiwan Normal University  
Shino Hayashi  
MA, University of Wisconsin, University of Minnesota  
Insung Ko  
MA, Korea University  
Chun-ying Lin  
MA, National Taiwan Normal University  
Kaori Nakata  
MA, Ohio State University  
Ke Nie  
MA, Capital Normal University  
Wei Wang  
MA, University of Minnesota, Beijing Language and Culture University

Professors Emeriti  
Tamie Kamiyama  
PhD, Saint Louis University  
Viola Liu  
MA, Seton Hall University  
Robert E. Morrell  
PhD, Stanford University  
James C. Shih  
PhD, University of California–Berkeley  
Richard H. Yang  
PhD, New School for Social Research  
Betty Pei-shan Yue  
MA, Washington University

With a major in one of the East Asian languages and cultures (Chinese or Japanese) or in East Asian Studies, a student can expect to gain proficiency in one or more of these languages, study the area’s literary and cultural landmarks, and gain familiarity with Asian history and civilizations.

The Majors  
For information on the major in East Asian Studies, see the East Asian Studies (p. 312) page of this Bulletin.  
For information on the major in Chinese Language and Culture, see the Chinese (p. 261) page of this Bulletin.  
For information on the major in Japanese Language and Culture, see the Japanese (p. 499) page of this Bulletin.
There is no major in Korean at this time.

For information on the minor in East Asian Studies, see the East Asian Studies (p. 313) page of this Bulletin.

For information on the minor in Chinese Language and Culture, see the Chinese (p. 262) page of this Bulletin.

For information on the minor in Japanese Language and Culture, see the Japanese (p. 500) page of this Bulletin.

For information on the minor in Korean Language and Culture, see the Korean (p. 520) page of this Bulletin.

For East Asian Studies courses, see the East Asian Studies (p. 313) page of this Bulletin.

For Chinese courses, see the Chinese (p. 262) page of this Bulletin.

For Japanese courses, see the Japanese (p. 500) page of this Bulletin.

For Korean courses, see the Korean (p. 520) page of this Bulletin.

**East Asian Studies**

The Department of East Asian Languages and Cultures offers a major and minor in East Asian Studies. The major in East Asian Studies entails the comprehensive study of the cultures and societies of East Asia in an interdisciplinary program that encompasses language, literature, history, anthropology, art history, film, philosophy and religious studies. As majors, students are expected to maintain at least a B– average in all departmental courses.

Washington University is one of this nation’s oldest centers for the study of China and Japan. The department offers an impressive range of courses in modern Chinese and Japanese languages through the advanced level in addition to classical language study. A more modest but growing program of Korean language study also is available. Our dedicated teacher-scholars are interested in mentoring undergraduates with an interest in East Asia.

Our humanities-based course of study is broad and flexible, and students can easily arrange for a double major within the College of Arts & Sciences or a dual major with another school in the university.

Given the increasingly Asian-oriented global economy, career possibilities are expanding dramatically. Our broad-based curriculum prepares students for East Asia-focused careers in academia, diplomacy, business, education and law, among others.

**Phone:** 314/935-4448

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**Endowed Professors**

Robert E. Hegel  
Lieselotte Dieckmann Professor of Comparative Literature  
PhD, Columbia University  
(East Asian Languages and Cultures)

**Professors**

Rebecca L. Copeland  
PhD, Columbia University  
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Beata Grant  
PhD, Stanford University  
(East Asian Languages and Cultures)

Marvin H. Marcus  
PhD, University of Michigan  
(East Asian Languages and Cultures)

**Associate Professors**

Lingchei Letty Chen  
PhD, Columbia University  
(East Asian Languages and Cultures)

Steven B. Miles  
PhD, University of Washington  
(History)

Lori Watt  
PhD, Columbia University  
(History and International & Area Studies)

**Assistant Professors**

Kristina Kleutghen  
PhD, Harvard University  
(Art History)

Ji-Eun Lee  
PhD, Harvard University  
(East Asian Languages and Cultures)

Pauline Chen Lee  
PhD, Stanford University  
(East Asian Languages and Cultures)

Zhao Ma  
PhD, John Hopkins University  
(East Asian Languages and Cultures)

Jamie Newhard  
PhD, Columbia University  
(East Asian Languages and Cultures)
The Major in East Asian Studies

Units required: 24 upper-level units (300-level or above), no more than 9 of which may be language units.

Prerequisites: Two of the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Asia 223C</td>
<td>Korean Civilization</td>
<td>3</td>
</tr>
<tr>
<td>East Asia 226C</td>
<td>Japanese Civilization</td>
<td>3</td>
</tr>
<tr>
<td>East Asia 227C</td>
<td>Chinese Civilization</td>
<td>3</td>
</tr>
</tbody>
</table>

Requirements:

1. At least two semesters of Chinese, Japanese or Korean beyond the second-year level. (Up to 9 units of advanced language, including classical language, may be used to fulfill the upper-level requirements for the major.) Native speakers who place out of all available courses in their native language may fulfill this requirement either with a second East Asian language or, with the approval of their major adviser, completing 9 additional units (any level) in non-language EAS courses.
2. Up to 24 upper-level units selected from at least three different disciplines (anthropology, art history, film, history, literature, philosophy, religious studies or, when available, economics, political science, sociology, etc.), and at least two different areas of East Asia (e.g. Korea and Japan, China and Korea, China and Japan). Please note that at least one of these courses must deal with the premodern period.

3. All students for whom EAS is a Prime Major must also satisfy the capstone requirement. This may be done in two ways, both of which require a presentation in the EALC Senior Symposium in the spring:
   a) Successful completion of a senior honors thesis. This option, which also entitles the student to Latin Honors, requires a minimum of 3.65 GPA. The thesis is researched and written over two semesters, for a total of 6 units, which are in addition to the 24 required for the major.
   b) Successful completion of an approved 400-level course taken during the fall or spring of the senior year. (This course may be included as one of the required upper-level courses for the major.)

Additional Information

• Students must maintain a B– average or higher in all courses taken to fulfill the requirements of the major. Students who do not meet this requirement may either repeat the course(s) in question or earn at least a B– in an approved equivalent course or courses (either during the summer or in a study abroad program).

• If a student has a major and a minor (e.g. a Chinese major and an East Asian Studies minor) the major must have 18 upper-level units independent of the minor, and the minor must have 12 units independent of the major.

• Courses for the major may not be taken Credit/No Credit.

• Normally, no more than 3 units of transfer or study abroad nonlanguage courses may be applied to the minor.

• Normally, Independent Study units may not be used to fulfill the requirement for the minor.

The Minor in East Asian Studies

Units required: a minimum of 12 upper-level (300-level or above) units, no more than 3 of which may be language units.

Requirements:

1. One of the following courses:

   East Asia 227C  Chinese Civilization  3
   East Asia 226C  Japanese Civilization  3
   East Asia 223C  Korean Civilization  3

2. At least two semesters of Chinese, Japanese or Korean language beyond the first-year level. Native speakers who place out of all available courses in their native language may fulfill this requirement by taking the courses in a second East Asian language or, with the approval of their major adviser, completing 6 additional units (any level) in nonlanguage EAS courses.

3. At least 12 upper-level units selected from at least two different disciplines (e.g. anthropology and literature, art history and political science) and two different areas (e.g. China and Japan, Korea and China).

Additional Information

• Students must maintain a B– average or higher in all courses taken to fulfill the requirements of the minor. Students who do not meet this requirement may either repeat the course(s) in question or earn at least a B– in an approved equivalent course or courses (either during the summer or in a study abroad program).

• If a student has a major and a minor (e.g. a Chinese major and an East Asian Studies minor), the major must have 18 upper-level units independent of the minor, and the minor must have 12 units independent of the major. If a student has two minors, each must have 12 units independent of one another.

• Courses for the minor may not be taken Credit/No Credit.

• Normally, no more than 3 units of transfer or study abroad nonlanguage courses may be applied to the minor.

• Normally, Independent Study units may not be used to fulfill the requirement for the minor.

East Asian Studies

L03 East Asia 111 Introduction to Asian Art
Same as Art-Arch 111
Credit 3 units.  A&S : LA, CD    A&S : IQ, HUM, LCD    BU : HUM

L03 East Asia 180 Freshman Seminar in Religious Studies
Same as Re St 180
Credit 3 units.  A&S : TH    A&S : IQ, HUM    BU : ETH    FA : SSP

L03 East Asia 2060 East Asia Since 1500
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>L03 East Asia 2210</td>
<td>Topics in Japanese Literature and Culture</td>
<td>Same as Japan 221. Credit 3 units. A&amp;S : TH, A&amp;S : IQ, HUM, LCD</td>
</tr>
<tr>
<td>L03 East Asia 223C</td>
<td>Korean Civilization</td>
<td>Same as Korean 223C. Credit 3 units. A&amp;S : TH, CD, SD</td>
</tr>
<tr>
<td>L03 East Asia 226C</td>
<td>Japanese Civilization</td>
<td>Same as Japanese 226C. Credit 3 units. A&amp;S : TH, CD, SD, A&amp;S : IQ, HUM, LCD</td>
</tr>
<tr>
<td>L03 East Asia 227C</td>
<td>Chinese Civilization</td>
<td>Same as Chinese 227C. Credit 3 units. A&amp;S : TH, CD, SD, A&amp;S : IQ, HUM, LCD, BU : BA, IS</td>
</tr>
<tr>
<td>L03 East Asia 303</td>
<td>The Taoist Tradition</td>
<td>Same as Re St 303. Credit 3 units. A&amp;S : TH, A&amp;S : IQ, HUM, LCD, BU : ETH</td>
</tr>
<tr>
<td>L03 East Asia 3050</td>
<td>Contemporary Chinese Culture and Society</td>
<td>Same as Anthro 3050. Credit 3 units. A&amp;S : SS, SD, A&amp;S : IQ, SSC, SD, FA : SSP</td>
</tr>
<tr>
<td>L03 East Asia 3051</td>
<td>Anthropology of Tibet and the Himalayas</td>
<td>Same as Anthro 3051. Credit 3 units. A&amp;S : SS, A&amp;S : IQ, SSC, BU : IS</td>
</tr>
<tr>
<td>L03 East Asia 3056</td>
<td>Material Culture in Modern China</td>
<td>Same as Anthro 3056. Credit 3 units. A&amp;S : SS, CD, A&amp;S : IQ, SSC, LCD, FA : SSP</td>
</tr>
<tr>
<td>L03 East Asia 3059</td>
<td>New Departures in the Study of Culture, Health and Medical Practices in</td>
<td>Same as Anthro 3059. Credit 3 units. A&amp;S : NS, A&amp;S : IQ, NSM</td>
</tr>
<tr>
<td>L03 East Asia 3060</td>
<td>East Asia Since 1500</td>
<td>Same as History 3060. Credit 3 units. A&amp;S : TH, CD, A&amp;S : IQ, HUM, LCD, BU : IS</td>
</tr>
<tr>
<td>L03 East Asia 3090</td>
<td>Chinese Thought</td>
<td>Same as Re St 3090. Credit 3 units. A&amp;S : TH, CD, A&amp;S : IQ, HUM, LCD</td>
</tr>
<tr>
<td>L03 East Asia 3092</td>
<td>Confucian Thought: The Sage and Society: Writing-Intensive Seminar</td>
<td>Same as Re St 3092. Credit 3 units. A&amp;S : TH, WI, A&amp;S : IQ, HUM, WI</td>
</tr>
<tr>
<td>L03 East Asia 3112</td>
<td>Buddhist Traditions</td>
<td>Same as Re St 311. Credit 3 units. A&amp;S : TH, A&amp;S : IQ, HUM, BU : ETH</td>
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<tr>
<td>L03 East Asia 312C</td>
<td>Japan Since 1868</td>
<td>Same as History 312C. Credit 3 units. A&amp;S : TH, CD, A&amp;S : IQ, HUM, LCD, BU : IS, FA : SSP</td>
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<tr>
<td>L03 East Asia 3162</td>
<td>Early Modern China: 1350–1890</td>
<td>Same as History 3162. Credit 3 units. A&amp;S : TH, CD, A&amp;S : IQ, HUM, LCD, BU : IS</td>
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<td>L03 East Asia 3165</td>
<td>The Chinese Diaspora to 1949</td>
<td>Same as History 3165. Credit 3 units. A&amp;S : TH, CD, A&amp;S : IQ, HUM, LCD</td>
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<td>L03 East Asia 3202</td>
<td>Japan from Earliest Times to 1868</td>
<td>Same as History 3202. Credit 3 units. A&amp;S : TH, CD, A&amp;S : IQ, HUM, LCD, BU : IS</td>
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L03 East Asia 3310 19th-Century China: Violence and Transformation
Same as History 331
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L03 East Asia 332C The Classical Voice In Japanese Literature
Same as Japan 332C
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : HUM FA : Lit

L03 East Asia 333C The Modern Voice In Japanese Literature
Same as Japan 333C
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : ETH FA : Lit

L03 East Asia 3352 China’s Urban Experience: Shanghai and Beyond
Credit 3 units. A&S : TH A&S : IQ, HUM

L03 East Asia 3361 The Floating World in Japanese Literature
Same as Japan 336
Credit 3 units. A&S : TH, CD, SD A&S : IQ, HUM, LCD, SD FA : Lit

L03 East Asia 3411 Literature of Early and Imperial China
Same as Chinese 341
Credit 3 units. A&S : TH, CD, SD A&S : IQ, HUM, LCD, SD BU : HUM FA : Lit

L03 East Asia 3415 Early Chinese Art: From Human Sacrifice to the Silk Road
Same as Art-Arch 3415
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD EN : H

L03 East Asia 3421 Literature of Modern and Contemporary China
Same as Chinese 342
Credit 3 units. A&S : TH, CD, SD A&S : IQ, HUM, LCD, SD BU : ETH FA : Lit

L03 East Asia 3442 Tradition and Innovation: Chinese Painting from the 4th to 20th Centuries
Same as Art-Arch 3442
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L03 East Asia 3462 Topics in East Asian Religion
Same as Re St 346
Credit 3 units. A&S : TH A&S : IQ, HUM

L03 East Asia 3464 Japanese Literature in Translation II
Same as Japan 346
Credit 3 units. A&S : TH, CD, SD A&S : IQ, HUM, LCD, SD

L03 East Asia 352 Literature of Modern and Contemporary Korea
Same as Korean 352
Credit 3 units. A&S : TH, CD, SD A&S : IQ, HUM, LCD, SD BU : IS

L03 East Asia 355 Topics in Korean Literature and Culture
Same as Korean 355
Credit 3 units. A&S : TH, CD, SD A&S : IQ, HUM, LCD, SD

L03 East Asia 3591 The Chinese Marketplace: Globalization and Local Transformations
Drawing upon an interdisciplinary approach, this course addresses several major themes focusing on the dynamics of China’s unprecedented socioeconomic transformations. Topics covered include the implications of globalization for everyday life in the local contexts, the cultural dimensions of international business, and the rise of entrepreneurship and consumerism in contemporary China, etc. This course provides a set of conceptual tools and a new perspective that help students better describe and understand the social world around them. Students develop a critical, even “skeptical” view toward superficial explanations of take-for-granted practices by replacing common sense understandings of interpersonal interactions with an uncommon sense about the links between individual experiences, structural forces and particular marketplaces. Must be enrolled in the Study Abroad Program at Fudan University in Shanghai, China.
Credit 3 units. A&S : SS A&S : IQ, SSC

L03 East Asia 3593 China–U.S. Relations and the Rise of Asia
This course provides, in critical and analytical ways, a general introductory overview of China–U.S. relations and the rise of Asia over the past decades. The course touches upon selected topics that highlight the main contemporary contours of China–U.S. relations and the prospects and challenges in the rise of Asia. The course is divided into two interrelated sections. The first section gives an account of China–U.S. relations historically with focus on political, economical, security and cultural aspects. In the second section, the rise of Asia as a recent phenomenon
is observed and its prospects and challenges are examined and analyzed. Must be enrolled in the Study Abroad Program at Fudan University in Shanghai, China.

Credit 3 units.  A&S : SS  A&S : IQ, SSC

L03 East Asia 370  Women Writers at Court: Japanese Examples in Comparative Context
Same as Hum 370
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L03 East Asia 380 Topics in Religious Studies
Same as Re St 380
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : ETH  FA : SSP

L03 East Asia 382 Writing Women of Imperial China
Same as Chinese 382
Credit 3 units.  A&S : TH, WI  A&S : IQ, HUM, LCD, WI  BU : HUM

L03 East Asia 386 Empires and Aftermaths (WI)
Same as IAS 386
Credit 3 units.  A&S : TH, CD, WI  A&S : IQ, HUM, LCD, WI  EN : H

L03 East Asia 4011 Popular Culture and Consumption in Modern China
Same as Anthro 4011
Credit 3 units.  A&S : SS, CD, WI  A&S : IQ, SSC, LCD

L03 East Asia 4030 Topics in East Asian Religions
Same as Re St 403
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM

L03 East Asia 4033 Culture, Illness and Healing in Asia
Same as Anthro 4033
Credit 3 units.  A&S : SS, CD  A&S : IQ, SSC, LCD

L03 East Asia 4034 Family Change in East Asia
Same as Anthro 4034
Credit 3 units.  A&S : SS  A&S : IQ, SSC

L03 East Asia 4141 Readings in Classical Chinese Philosophy
Same as Chinese 414
Credit 3 units.  A&S : TH, CD
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<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
<th>Requirements</th>
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<td>L03 East Asia 470</td>
<td>Readings in Chinese Literature</td>
<td>3</td>
<td>A&amp;S : TH, CD, SD, A&amp;S : IQ, HUM, LCD, SD</td>
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<td>L03 East Asia 471</td>
<td>Topics in Japanese Culture</td>
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<td>L03 East Asia 4711</td>
<td>Topics in Religious Studies</td>
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<td>A&amp;S : TH, A&amp;S : IQ, HUM</td>
<td>Credit 3 units.</td>
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<tr>
<td>L03 East Asia 476</td>
<td>Reading Seminar in Chinese Traditional Fiction</td>
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<td>A&amp;S : TH, A&amp;S : IQ, HUM, LCD</td>
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<td>L03 East Asia 477</td>
<td>Cultures of Memory in Postwar Germany and Japan</td>
<td>3</td>
<td>A&amp;S : TH, A&amp;S : IQ</td>
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<td>L03 East Asia 4770</td>
<td>Reading Seminar in Chinese Traditional Poetry</td>
<td>3</td>
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<tr>
<td>L03 East Asia 479</td>
<td>Reading Seminar in Modern Chinese Literature</td>
<td>3</td>
<td>A&amp;S : TH, CD, A&amp;S : IQ, HUM, LCD</td>
<td>Credit 3 units.</td>
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<tr>
<td>L03 East Asia 480</td>
<td>Topics in Buddhist Tradition</td>
<td>3</td>
<td>A&amp;S : TH, SD, A&amp;S : IQ, HUM, SD</td>
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<td>L03 East Asia 481</td>
<td>Reading Seminar in Religion and Chinese Literature</td>
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<td>A&amp;S : TH, A&amp;S : IQ, HUM, LCD</td>
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<tr>
<td>L03 East Asia 482</td>
<td>Reading Seminar in Gender and Chinese Literature</td>
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<td>A&amp;S : TH, A&amp;S : IQ, HUM, LCD</td>
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<td>L03 East Asia 484</td>
<td>Core Seminar in East Asian Studies: East Asia in Scholarly Literature</td>
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<td>A&amp;S : TH, CD, A&amp;S : IQ, HUM, LCD, BU : ETH FA : SSP</td>
<td>Credit 3 units.</td>
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<tr>
<td>L03 East Asia 486</td>
<td>Independent Work For Senior Honors</td>
<td>3</td>
<td>A&amp;S : TH, A&amp;S : IQ, HUM, LCD</td>
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<td>L03 East Asia 489</td>
<td>Topics in Modern Chinese Literature</td>
<td>3</td>
<td>A&amp;S : TH, A&amp;S : IQ, HUM, LCD</td>
<td>Credit 3 units.</td>
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L03 East Asia 490 Topics in Chinese Literature and History
Same as Chinese 490
Credit -3 unit. A&S : TH A&S : IQ, HUM, LCD FA : Lit, SSP

L03 East Asia 4911 The Nativist Dimension in Modern Japanese Culture
A discourse of “uniqueness” has been a prominent feature of Japanese culture in the 20th century, both before and after the Pacific War. This course explores the domain of nativist expression in modern Japan. While focusing on literary texts by writers such as Kawabata and Tanizaki, we also consider a range of artistic, cinematic and cultural production. Considerable attention is paid to “Nihonjinron,” an important — and best-selling — genre of “Japanese uniqueness” writing. Our goal is to make sense of the complex intersection of traditionalism and modernism in 20th-century Japan, and to consider the larger question of modern nationhood and the construction of national identity.
Credit 3 units. A&S : TH A&S : IQ, HUM

L03 East Asia 4914 Advanced Seminar in History: Japan in World War II: History and Memory
Same as History 4914
Credit 4 units. A&S : TH A&S : IQ, HUM, LCD FA : SSP

L03 East Asia 496 Readings in Asian Studies
Prerequisite: permission of the chair of the department.
Credit -3 unit. A&S : TH

L03 East Asia 4967 Advanced Seminar: East Asian History
Same as History 4967
Credit 4 units. A&S : TH

L03 East Asia 4971 Guided Readings in Korean
Same as Korean 497
Credit -3 unit. A&S : LA

L03 East Asia 498 Guided Readings in Chinese
Same as Chinese 498
Credit -3 unit. A&S : LA

L03 East Asia 499 Guided Readings In Japanese
Same as Japan 499
Credit -3 unit. A&S : LA

Economics
The economics program explores the problems of a modern economy and introduces the methodological tools economists use. It emphasizes the development of analytical models and their application to important economic, social and political issues such as inflation, unemployment, taxation, poverty, pollution, government decision-making and regulation. Our faculty, which is made up of leading teacher-scholars, includes specialists in: economic history, game theory, microeconomics, industrial organization, macroeconomics, monetary economics, political economy and public finance.

The study of economics contributes to a broad liberal arts education and helps you develop superior problem-solving skills. It is an excellent course of study to pursue, whether you plan to enter the workforce after graduation or you are considering graduate work in law, engineering or the social sciences. Economics also provides exceptional preparation for careers in business, either immediately following graduation or after completing master’s-level graduate work in business (e.g., M.B.A., M.ScFin). In addition to the introductory and intermediate economic theory courses, courses that have particular relevance for business include: Econ 335, Econ 413, Econ 4151, Econ 428, Econ 451, Econ 452 and Econ 456. Economics students with business interests should strongly consider completing at least one internship (academic credit for unpaid internships is available via Econ 299) to obtain practical business experience, and they should discuss with their advisers the possibility of taking courses such as accounting in the Olin Business School.

Contact Person: Dorothy Petersen, Academic Coordinator
Phone: 314/935-5644
E-mail: dottie@wustl.edu
Departmental website: http://economics.wustl.edu

Chair
Stephen Williamson
Robert S. Brookings Distinguished Professor in Arts & Sciences
PhD, University of Wisconsin–Madison

Professors
Costas Azariadis
Edward Mallinckrodt Distinguished Professor in Arts & Sciences, Graduate Admissions Officer PhD, Carnegie-Mellon University

Marcus Berliant
PhD, University of California–Berkeley

Michele Boldrin
Joseph Gibson Hoyt Distinguished Professor in Arts & Sciences PhD, University of Rochester
The Major in Economics

Total units required: 31–36

Required courses:
Econ 1011 and Econ 1021
Math 132
Math 2200 (or an alternative statistics course, which must be approved by the department)
Econ 493 or Math 233
Econ 4011 and Econ 4021, usually taken in the sophomore or junior year

Elective courses:
Four (12 units) advanced economics electives, at least two of which must have an Econ 4011 or Econ 4021 prerequisite.
Additional Information

Senior Honors: Students are invited (in the second semester of the junior year) to participate in the honors program during their senior year if they meet certain academic requirements. To graduate with Latin Honors, one of the major electives must be Econ 413 and you must either complete two additional Econ 4011/Econ 4021 prerequisite electives or write an honors thesis (via Econ 490/Econ 499). Additionally, all honors students must complete Math 233 and either Math 3200 or Math 493.

More information on the major, the minors, course offerings and the honors program are in the Economics Undergraduate Guide, available at economics.wustl.edu and from the department. You also are encouraged to contact the Academic Coordinator with any questions you may have.

The Minor in General Economics

Economics Units required: 15

Required courses:
- Econ 1011 Introduction to Microeconomics
- Econ 4011 Intermediate Microeconomic Theory
- Econ 4021 Intermediate Macroeconomic Theory

Elective course: One elective having at least Econ 1011 and/or Econ 1021 as a prerequisite course.

Prerequisites: The prerequisite course for Econ 4011 is Math 132. In addition, Econ 493 or Math 233 must be taken prior to, or concurrent with, enrollment in Econ 4011. The prerequisite course for Econ 4021 is Econ 4011.

The Minor in Applied Microeconomics

Economics Units required: 15

Required courses:
- Econ 1011 Introduction to Microeconomics
- Econ 1021 Introduction to Macroeconomics
- Econ 4011 Intermediate Microeconomic Theory

Elective courses:
- One elective having Econ 4011 as a prerequisite course.
- One elective having at least Econ 1011 and/or Econ 1021 as a prerequisite course.

Prerequisites: The prerequisite course for Econ 4011 is Math 132. In addition, Econ 493 or Math 233 must be taken prior to, or concurrent with, enrollment in Econ 4011.

Economics

L11 Econ 1011 Introduction to Microeconomics

Determination of prices; distribution of national income; theory of production. For a thorough introduction to economics, Econ 1021 also should be taken.
Credit 3 units. A&S : SS, QA A&S : IQ, SSC, AN

L11 Econ 1021 Introduction to Macroeconomics

Business fluctuations: inflation and recession; monetary and fiscal policy; economic development. For a thorough introduction to economics, Econ 1011 also should be taken.
Credit 3 units. A&S : SS, QA A&S : IQ, SSC, AN

L11 Econ 124 Principles of Macroeconomics Seminar with Computing Applications

Introduction to macroeconomic principles including business fluctuations: inflation and recession; monetary and fiscal policy; economic development. Students use modern computing resources to complete various assignments such as retrieving price indices and constructing a web page. This course substitutes for Econ 1021 for all major and minor requirements. Enrollment limited to 25 students. (Offered infrequently.)
Credit 3 units. A&S : SS, QA A&S : IQ, SSC, AN FA : SSP

L11 Econ 205 Napster, AIDS and Intellectual Property

Controversy surrounds the downloading of music over the internet and the aggressive response of the RIAA to protect their copyrights. Included in this is the lawsuit against Grokster, and the bringing of lawsuits against individual music lovers. Also controversial is the patent protection afforded AIDS drugs, resulting in such high prices that they are unavailable in Africa, the area most devastated by AIDS. Copyrights and patents are justified in the U.S. Constitution by Article I Section 8: “The Congress shall have Power to ... promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.” The goal of this seminar is to examine from an economic perspective to what extent modern intellectual property law does in fact “promote the Progress of Science and useful Arts.” Note: This course does not count toward the major or minor in Economics.
Credit 1 unit. A&S : SS A&S : IQ, SSC AN FA : SSP

L11 Econ 2391 Economies as Cultural Systems

Many contemporary approaches to economics downplay or bracket the importance of culture in the workings of economic systems. In this class we focus on approaches to distribution and exchange in which culture and social institutions figure prominently, if not preeminently. We sample a diverse array of economies, from gift exchange to the ceremonial destruction of wealth, from Melanesia to Wall Street, in order to evaluate some of the assumptions that undergird market capitalism. What are market institutions and what forms do they take? What is the relationship between economy and society? How does culture shape distribution and consumption?
Same as Anthro 3391
Credit 3 units.  A&S : SS  A&S : IQ, SSC  EN : S

L11 Econ 299 Internship
Students may receive up to 3 units of credit for an unpaid internship. The internship must be approved by the Career Center and supervised by a faculty member. Note: See Career Center for further information. This course does not count toward the major or minor in Economics.
Credit -3 unit.  FA : SSP

L11 Econ 309W Microeconomics of Public Policy
We explore the key public policy issues, with a focus on the prominent issues facing our country today. In particular, we have selected 10 topics that are investigated: poverty, crime, discrimination, “big business,” international trade, immigration, health care, education, energy and the environment. We identify and objectively analyze the problems surrounding each of the issues, including their causes, consequences and measurement. Prerequisite: Econ 1021.
Credit 3 units.  A&S : SS, WI  A&S : IQ, SSC, WI

L11 Econ 326 American Economic History
Basic theoretical concepts applied to analyze the changing structure and performance of the American economy from colonial times to the present. Prerequisites: Econ 1011 and 1021.
Credit 3 units.  A&S : SS  A&S : IQ, SSC  BU : BA  FA : SSP

L11 Econ 335 Money and Banking
Money and the monetary system; money creation by the banking system; central bank functions; monetary theory and economic policy. Prerequisite: Econ 1011 (103B) and 1021 (104B).
Credit 3 units.  A&S : SS  A&S : IQ, SSC  FA : SSP

L11 Econ 348 Economic Realities of the American Dream
Exploration of the realities of economic life in the United States and how they correspond to the American Dream. Interdisciplinary perspectives from economics, sociology and other areas of social inquiry. Emphasis on the consistency between empirical data and different concepts of the American Dream. Specific topics to include sources of economic growth and changing living standards, unemployment, impact of globalization on U.S. citizens, economic mobility, poverty and inequality, and social justice. Prerequisites: Econ 1011 and Econ 1021, or consent of the instructors.
Credit 3 units.  A&S : SS  A&S : IQ

L11 Econ 352 Health Economics
Analysis of consumer demand for health care, medical technology and the role of health insurance. Emphasis placed on behavior of the physician (whether he acts as an agent for the consumer or on his own behalf); on the use of paramedics, preventive care, outpatient care and the general market organization of the health industry. The major concern is the rising cost of health care and appropriate public policy responses. Prerequisite: Econ 1011.
Credit 3 units.  A&S : SS  A&S : IQ, SSC  FA : SSP

L11 Econ 380 Labor and the Economy
Economic analysis of labor markets. Theory and policy applications of labor supply and labor demand; explanations of wage and income differentials; migration and immigration; discrimination; labor unions; unemployment. Prerequisite: Econ 1011 (103B).
Credit 3 units.  A&S : SS  A&S : IQ, SSC  FA : SSP

L11 Econ 4011 Intermediate Microeconomic Theory
Analytic theory of consumer and producer behavior under perfect and imperfect competition. Coverage of demand theory (indifference curves and utility functions) and preferences under uncertainty, including expected utility and risk aversion. Development of general equilibrium under pure exchange, including the concepts of competitive equilibrium and Pareto efficiency. Discussion of the role of time as it pertains to interest rates, discounting and net present value. Analysis of standard monopoly and simple oligopoly problems. Development of noncooperative game theory, including strategic and extensive-form equilibria and Nash and sub-game perfect equilibria. Thorough training in intermediate theory requires both Econ 4011 and Econ 4021. Prerequisites: Econ 1011, Math 132 and concurrent enrollment in, or prior completion of, either Math 233 or Econ 493 (Mathematical Economics). Students registering for Section 1 (Levine) also may register for Econ 4011A, a session meeting weekly, on Friday, to review homework problems.
Credit 3 units.  A&S : SS  A&S : IQ, SSC

L11 Econ 4021 Intermediate Macroeconomic Theory
Credit 3 units.  A&S : SS  A&S : IQ, SSC

L11 Econ 403 Economics of Law
The course provides an introduction to the economic analysis of law. Mastery of basic economic approaches to the study of legal institutions is a valuable skill that benefits a broad range of students. The course covers the fundamental contributions made
by the economic approach in five core areas: property, contracts, torts, litigation and crime. Time permitting we cover other areas of the law such as family, privacy and discrimination law. About 50 percent of the course is devoted to formal economic modeling of legal issues. Approximately 30 percent of the course focuses on empirical tests of the insights from the early theoretical contributions in the field and the theoretical models developed in class. The remaining 20 percent of the course uses classic legal cases to illustrate the real-world applications of the theoretical models developed in class. Prerequisite: Econ 4011. Econ 413 is recommended.
Credit 3 units. A&S : SS    A&S : IQ, SSC

L11 Econ 404 Behavioral Economics and Experimental Economics
Behavioral economics is an effort to incorporate ideas from psychology into economic models of behavior. We focus on popular experimental anomalies, including the Allais and Rabin paradoxes, ultimatum bargaining, the centipede and public goods contribution games. We examine the extent to which these are consistent with standard economic theory and how they may contradict it. The primary focus is a critical examination of psychological theories of nonstandard preferences including loss aversion, probability weighting, reciprocity, fairness and present bias. Theories of incorrect beliefs and systematic biases such as money illusion and procrastination are covered. Applications to the current economic crisis also are discussed. The class includes an introduction to experimental methods in economics, including hands-on experience in the MISSEL laboratory. A sound grounding in economic theory is essential to the course. Prerequisites: you must have successfully completed Econ 4011, and should be acquainted with basic optimization theory, expected utility theory, risk aversion, discounting and basic game theory including dominance, Nash equilibrium and subgame perfection.
Credit 2 units. A&S : SS A&S : IQ, SSC

L11 Econ 406 Current Topics in Health Economics
In this advanced undergraduate course we mix textbook surveys of major topics in health economics, with student-led critiques of current and classic journal articles and presentations of own projects. The course is designed to prepare you to be informed participants in the current debate about health care policy. Core topics include the social and economic determinants of health, psychological factors influencing health behavior and health care choices, and development of a critical perspective about the data sources and methodologies in health care research. This course is more advanced than Econ 352, but welcomes an interdisciplinary mix of undergraduates interested in economics, public health and health care. Prerequisite: Econ 4011 or permission of the instructor.
Credit 3 units. A&S : SS A&S : IQ, SSC

L11 Econ 4111 Optimization and Economic Theory
An introduction to mathematical optimization and its applications within economics. The course is designed for, and should be taken by, all undergraduates considering graduate study in economics, but all interested students are welcome. Prerequisites: Econ 4011 (401), Math 233 and Math 309, or permission of the instructor.
Credit 3 units. A&S : SS A&S : IQ, SSC

L11 Econ 413 Introduction to Econometrics
Course provides a basic working knowledge of econometrics. Topics include: translation of economic theory into statistical models; statistical foundations of econometrics; preregression analysis; bivariate and multiple regression techniques; hypothesis testing; multicollinearity; specification error; auto correlation; errors in variables; identification; and simultaneous estimation. Prerequisites: Econ 1011 (103B), Econ 1021 (104B), and Math 2200 or equivalent.
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L11 Econ 4151 Applied Econometrics
Introduction to econometrics as it is applied in microeconomics and macroeconomics (modular). Emphasis is on hands-on implementation of the models covered in the course. Topics related to the analysis of microeconomic data include cross-section and panel data linear models and robust inference; instrumental variables estimation; simultaneous equation models; models for discrete choice; and truncation, censoring and sample selection models. Topics related to the analysis of macroeconomic data include linear time series models; practical issues with likelihood-based inference; forecasting; structural identification based on timing restrictions; and computational methods for hypothesis testing. Prerequisites: Econ 4011 (401) and Econ 413.
Credit 3 units. A&S : SS A&S : IQ, SSC

L11 Econ 428 Capital Market Imperfections and Entrepreneurial Finance
Analysis of problems in capital markets for firm financing and institutional structures that address these problems. Investigation of asymmetric information between firms and potential investors and associated moral hazard and adverse selection problems that raise the cost of funds and constrain firm growth. Empirical tests for the presence of financing constraints on firms. A substantial portion of the course explores the role of venture capital, especially in the high-tech sector of the United States economy where venture capital is important for commercializing cutting-edge science. Prerequisite: Econ 4011. Econ 413 is recommended.
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L11 Econ 435 Open Economy Macroeconomics
This course begins with a review of international trade theory, of the balance of payment accounts, and their relationship to international borrowing and lending. We then study the asset approach to exchange rates determination, exchange rate behavior in the short and in the long run, and the relationship of exchange rates with prices and output. The course also explores monetary and fiscal policy under both fixed and floating exchange rates, macroeconomic policy coordination and optimum currency areas, international debt problems of developing countries, and their relation to stabilization program. Prerequisite: Econ 4021.
Credit 3 units.  A&S : SS    A&S : IQ , SSC    FA : SSP

L11 Econ 444 Innovation and Intellectual Property: Theory and Practice
Innovation — figuring out better and cheaper ways of satisfying human desires — is the key to improving our well-being. It is not patient saving and accumulation that makes us so much better off than we used to be: capital accumulation is only the conduit through which the innovation juices flow. The question is: What drives it? How come some societies are apparently much more innovative than others? How come we have the impression that most useful inventions took place in the past three centuries? Are there policies that help fostering innovation and others that hurt? The course tries to address these questions. Economists have many theories of innovation, some better than others. We look at the theories, we examine the facts (past and present), then we go back to the theories and reconsider their explanatory power. With this background, we approach the debate about intellectual property, what it is and what it is not good for, whose interests it serves, and whose well-being it thwarts. Prerequisite: Econ 4011.
Credit 3 units.  A&S : SS    A&S : IQ, SSC

L11 Econ 445 Public Finance
The study of fundamental forms of market failure that provide the economic rationale for government action. The first third of the class examines market failure when an economy contains externalities and public goods and the general nature of public policies that address these issues. The second third addresses particular public policies, with a focus on their intended and unintended consequences and their costs. The final third addresses taxation. Topics include the measurement and evaluation of tax burdens, the federal personal income tax, tax evasion and proposals for fundamental tax reform. Prerequisite: Econ 4011.
Credit 3 units.  A&S : SS    A&S : IQ, SSC    FA : SSP

L11 Econ 448W Current Macroeconomic Issues
Review and extension of macroeconomic models from Econ 4021 from a comparative perspective and use of these models to analyze current macroeconomic and policy issues. Topics include recession and recovery; long-term growth; saving and social security; investment; and monetary policy. Multiple writing assignments that emphasize critical analysis of theoretical perspectives and readings applied to current macroeconomic topics. Assignments are revised to improve logical structure, clarity and style. Enrollment limited to 15 students with priority given to senior economics majors. Prerequisite: Econ 4021. Please note: Requests for online registration are wait-listed. Credit 3 units.  A&S : SS, WI  A&S : IQ, SSC, WI  FA : SSP

L11 Econ 451 Environmental Policy
Course examines the relationship between environmental economics and environmental policy. The course focuses on air pollution, water pollution and hazardous wastes, with some attention given to biodiversity and global climate change. The course examines critically two prescriptions that economics usually endorses: (1) “balancing” of benefits against costs (e.g., benefit-cost analysis) and the use of risk analysis in evaluating policy alternatives; and (2) use of market incentives (e.g., prices, taxes or charges) or “property rights” instead of traditional command-and-control regulations to implement environmental policy. Prerequisite: Econ 1011 (103B).
Credit 3 units.  A&S : SS    A&S : IQ, SSC    BU : BA, ETH    FA : SSP

L11 Econ 452 Industrial Organization
Theoretical and empirical analysis of the presence and value of competitive forces in the United States economy. Theories of industrial organization and development of criteria for performance of noncompetitive industries. Prerequisite: Econ 4011.
Credit 3 units.  A&S : SS    A&S : IQ, SSC

L11 Econ 456 Business, Government and the Public
The increasingly complex interrelationships among business, government and the public, focused on a set of major problems currently involving these relationships. Prerequisites: Econ 1011, 1021 and junior standing.
Credit 3 units.  A&S : SS, QA  A&S : IQ, SSC, AN

L11 Econ 460 Urban Economics
Economic function of the city and the role of the city in a national economy. Local decision making; financing of local government expenditures. An analysis of selected urban problems, such as causes and effects of housing market segregation; decay and abandonment; landlord-tenant relations; crime; and urban transport systems. Prerequisite: Econ 4011.
Credit 3 units.  A&S : SS    A&S : IQ, SSC    FA : SSP

L11 Econ 467 Game Theory
Introduction to the mathematical theory of games as applied to the study of economics. Topics include games of complete and incomplete information, noncooperative games with and without
time dependency, and cooperative games with and without transferable utilities. Emphasis placed on game theoretic models of industrial organization and political economy. Prerequisites: Econ 4011, Math 233 and Math 2200. Credit 3 units. A&S : SS  A&S : IQ, SSC  FA : SSP

L11 Econ 469 Great Transformation
The contemporary “market society” is the result of the simultaneous emergence, over a very long span of time, of the liberal-democratic nation states, of a number of highly productive technologies, and of a distribution of property rights that, for a lack of better term, we label “capitalistic.” There is a widespread view that, historically, the Industrial Revolution constitutes the point of deceleration that ushered in (among other) all these changes, leading to what some have labeled the “Great Transformation.” According to this view, the changes that “capitalism” induced were so deep that they modified even human nature, altering forever our culture, our value systems, the way social interactions are conceived and organized, what we seek in life and what we do not. A new “man” appeared, that was and is radically different from those of the past, from those of “pre-capitalist” societies. There is also a minority view according to which, where most see a historical discontinuity, we should actually see a series of continuous processes evolving over time, leading to a sequence of progressive small changes that only when observed from afar and after the fact may appear as the discontinuity we now believe to have taken place. There was no Great Transformation, in other words: humans have the same, basic set of “deep values and goals” today that they had a few thousand years ago, their fundamental preferences have not changed and the analytical categories that allow us to understand human actions and social interactions today are also applicable to the many cultures and societies that came before us. There is more continuity in human history than popular theories would like us to believe. A different, more brutal way of posing the same problem is: what brought about the Industrial Revolution and the thing we call capitalism? When did they start, if they ever started? Why did the Industrial Revolution take place in the 18th-century Britain and not elsewhere in Europe or in Asia? Was it inevitable or was it a sheer chance? Was there a kind of “historical miracle” behind it or was it the likely and almost natural outcome, at that point in time? What evidence do we have pointing in one direction or in the other? What was lost in the transformation and what was gained? Is the current market society sustainable or should we expect another “Great Transformation”? The course focuses on these questions and related ones. We try addressing them by using a minimum of social-sciences theory (drawing from the best lessons of psychology, economics, anthropology and history) and with a particular attention to facts, data, statistics and empirical findings in general. We read or consult quite a substantial amount of research from all the social sciences; there is also quite a bit of informed class discussion and of writing, alone or in groups, to summarize and articulate our findings. Prerequisites: Econ 4011 and 4021 or permission of instructor. Credit 3 units. A&S : SS  A&S : IQ, SSC

L11 Econ 471 Development Economics
Investigation of issues related to the development of the economies of third-world countries. Topics include economic growth, poverty and the distribution of income with an emphasis on labor markets and education. Consideration of the effectiveness of various institutional policies designed to encourage development including decentralization and privatization. Empirical examples drawn from international experience, especially Latin America. Prerequisites: Econ 4011 and Econ 413. Credit 3 units. A&S : SS  A&S : IQ, SSC

L11 Econ 472 Topics in Growth and Development
This course highlights important empirical facts concerning growth and development in various countries at different development stages. Fundamental growth theory is then provided for explaining these facts systematically and for evaluating the consequences of commonly adopted development policies. Topics vary, but may include population; human capital and labor market development; R&D and innovation; finance and growth; modernization and industrial transformation; world income disparities and poverty problems; institutions and political economy issues; environmental and social factors; and international trade and economic integration. Prerequisites: Econ 4011 and 4021. Credit 3 units. A&S : SS  A&S : IQ, SSC

L11 Econ 4721 Advanced Topics in Modern Economic Growth
This course studies economic theories that explain the observed patterns of economic development across time and space. What explains the growth of the world economy since the Industrial Revolution? Why are the level and the growth rate of per-capita income so different across countries? What are the determinants of inequality and risk faced by individuals in different countries? Theories featuring the role of investment, human capital, technology, coordination, financial markets and environmental variables are presented. Theories are evaluated using historical data and detailed case studies. This course is designed to complement Econ 472. Prerequisite: Econ 4011. Credit 3 units. A&S : SS  A&S : IQ, SSC

L11 Econ 474 The Poverty of Nations
This course focuses on the failures of economic development and the extreme and persistent poverty we find in South Asia, sub-Saharan Africa and other parts of the developing world, including major urban centers. What exactly is poverty? Who are the poor? How many of them are there? Why are they poor? What individual or collective actions can they (or we)
take to improve their lot? Prerequisites: Econ 4011 and 4021 or permission of instructor.
Credit 3 units. A&S : SS A&S : IQ, SSC

L11 Econ 475 International Trade
Analysis of international trade from different perspectives: Ricardian, Heckscher-Ohlin and new trade theories. Topics include patterns of trade, gains from trade, protectionism, international factor movements, political economy of trade policy, balance of payments, exchange-rate determination and international investment. Rigorous application of microeconomic theory to trade issues and in-depth discussion of current international policy questions. Prerequisite: Econ 4011. Econ 413 is recommended.
Credit 3 units. A&S SS A&S : IQ, SSC BU : IS FA : SSP

L11 Econ 483 Economics of Education
The course involves analysis of the economic and social determinants and consequences of education. Because each person’s education is an investment in human capital that allows the individual to contribute to society in a productive way, education becomes a crucial determinant of an economy’s ability to achieve high growth with high wages, low unemployment and strong social cohesion. This course addresses three essential topics from the wide-ranging field of the economics of education. The first is demand-side oriented and includes: (1) the measurement of the returns to education in the labor market (human capital theory; the central idea of education as human capital investment); and (2) a characterization of the education production function, which relates the various inputs affecting a student’s learning (schools, families, peers, neighborhoods, etc.) to measure outputs including labor market success, graduation rates and standardized test scores. The second important topic involves political economy and the supply side: the financing and provision of education. The third part of the course is devoted to the links between education and economic development, including cross-country differences in schooling, returns to schooling and per-capita income. Prerequisites: Econ 4011, Econ 4021 and Econ 413.
Credit 3 units. A&S SS A&S : IQ, SSC EN : S

L11 Econ 4861 Seminar in Macro and Monetary Economics
Topics chosen by instructor from modern empirical and theoretical research papers in macroeconomics. Student participation in class discussions of research papers is essential. Topics vary, but may include the link between capital markets, consumption and investment; imperfect competition and macroeconomic fluctuations; real business cycles models; and post-Keynesian macroeconomics. Prerequisites: Econ 4011, 4021 and 413. Please note: requests for online registration are wait-listed. Undergraduates must receive instructor permission to be enrolled. Graduate students should register for Econ 586B.
Credit 3 units. A&S SS A&S : IQ, SSC

L11 Econ 490 Independent Work
Prerequisites: senior standing and permission of the supervising faculty member. See Academic Coordinator for further details. Note: This course does not count toward the major or minor in Economics. Credit to be determined; maximum 6 units.
Credit -6 unit. FA : SSP

L11 Econ 493 Mathematical Economics
The objective of this course is to develop the mathematical tools necessary for the study of intermediate micro- and macroeconomics theory and the advanced electives in economics. The principal focus is the calculus of multivariate functions, including total and partial differentiation, unconstrained and constrained optimization of multivariate functions, and implicit and inverse function rules. Time permitting, the application of prior to utility theory and production and cost are developed. Additional topics include difference equations and an introduction to matrices. Economics majors and minors must take either this course or Math 233. Either this course or Math 233 must be taken prior, or concurrently with, to Econ 4011. Students who have taken, or are taking, Math 233 are encouraged to take this course as well. Prerequisites: Econ 1011 and 1021, and Math 132.
Credit 1 unit. A&S SS A&S : IQ, SSC

L11 Econ 496 Teaching Practicum in Economics
Opportunity for undergraduates to assist in course instruction, tutoring and preparation of problems, readings and exam materials under supervision of faculty. Credit variable, maximum 3 units. Note: this course does not count toward the major or minor in economics.
Credit -3 unit. A&S SS FA : SSP

L11 Econ 497 Research in Economics
Opportunity to work as part of a research project under faculty supervision. Note: this course does not count toward the major or minor in Economics. May be repeated for credit.
Credit -3 unit. A&S SS A&S : IQ, SSC FA : SSP

L11 Econ 499 Study for Honors
Independent reading and research under faculty direction leading to a senior honors thesis. Prerequisites: invitation into the departmental Honors Program and permission of the director of Undergraduate Studies.
Credit 3 units. A&S SS FA : SSP

Education
The Department of Education offers you a choice between two basic types of majors: the teacher education majors, which allow you to prepare for a career as a teacher, and the educational
Our teacher education programs prepare you to teach in your choice of elementary, middle or high school settings. While this major prepares you for a teaching career, you also will be prepared to seek a position in a cultural institution or educational agency.

Our teacher education majors provide you with course work in the psychological bases of learning and teaching; the social and historical background of school systems; and teaching methodology, which includes student teaching. Student teaching is done during your senior year as part of an integrated professional semester of interrelated courses and teaching experiences in a local school. You also will have other opportunities to participate in field experiences because school visits and observations are included in many additional teacher education courses.

Our major in educational studies examines the historical, social, cultural, psychological and public policy aspects of education. As an educational studies major, you may choose to observe in schools, to engage in internships or to work with faculty members on their research. Many educational studies majors pursue graduate or professional study; however, this major also prepares you to work in educational, nonprofit or government agencies.

For Teacher Education Majors, you should seek admission to a teacher preparation program early in your sophomore year. To...
be eligible you must pass an entrance examination mandated by Missouri and have at least a 3.0 grade point average. In addition, you should consult with an Education Department adviser as early as possible to ensure that you fulfill College of Arts & Sciences, departmental and professional requirements for certification. Upon completion of your program, a satisfactory records check and the recommendation of the Washington University Department of Education, the Missouri Department of Elementary and Secondary Education issues you a teaching certificate if you have passed the relevant parts of the Praxis teaching exit test and have an overall grade point average of at least 3.0 and no grade lower than B in required field or education course work. The following teacher education majors are available:

The Major in Elementary Teacher Education

**Total units required:** 48

This major prepares you to teach grades one through six and may be completed within a four-year undergraduate degree. You are required to complete a second major other than education and complete the following education courses:

- 3 credits in Educational foundations (Educ 301, 453B, 459F or 481)
- Educ 313B, 4052, 408, 4681, 470, 4831 and 4911
- Math 266
- The methods block — Educ 4731, 4741, 4751, 4771, 4841 and 525. During the spring of the junior year, you must enroll in the methods block.
- Elementary student teaching (Educ 4911) occurs during the fall of your senior year, during which you concurrently enroll in Educ 470 and 4831.

The Major in Middle School Teacher Education

**Total units required:** 44

This option prepares you to teach in middle school grades five through nine. You must major in a subject field taught at the middle school level (English, science, mathematics or social studies) and maintain a 3.0 grade point average in that content field. In addition, you are required to take the following education courses:

- 3 credits of Educational foundations (Educ 301, 453B, 459F or 481)
- Educ 325, 4052, 408, 4451, 4681, 4821 and 4843, 4951, 4952
- Your content area’s curriculum and instruction course
- Educ 4922 and 5681. This course work includes a semester of student teaching during your senior year.

The middle school teacher education option may be done in conjunction with the secondary major (all requirements for both must be met including student teaching at both levels). Students who choose middle school will student teach in the spring of their senior year. Some education course work will be taken concurrently with student teaching, but that course work will vary depending upon the option selected.

The Major in Secondary Teacher Education

**Total units required:** 30–33

This major prepares you to teach in a senior high school, grades nine through 12. You are required to complete a major in a teaching field, such as English, mathematics, sciences or social studies and to maintain a 3.0 grade point average in that content major. In addition, you are required to take the following education courses:

- 3 credits of Educational foundations (Educ 301, 453B, 459F or 481)
- Educ 4052, 408, 4821, 4843
- Your content area’s curriculum and instruction course (plus Educ 4451 for English majors)
- Educ 492 and Educ 5681. This course work includes a semester of student teaching (Educ 492) during the spring of your senior year during which you concurrently enroll in Educ 4821.

K–12 Teacher Education Major: This major prepares you to teach K–12 in the areas of art, foreign languages and Latin. You are required to complete a major in your teaching field and to maintain a 3.0 grade point average in that content major. In addition, you are required to take the following education courses: 3 credits of Educational foundations (Educ 301, 453B, 459F or 481); Educ 4052, 408, 4821, 4843; your content area’s curriculum and instruction course; Educ 494 and Educ 5681. This course work includes a semester of student teaching (Educ 494) during the spring of your senior year during which you concurrently enroll in Educ 4821.

The Major in Educational Studies

**Total units required:** 24

This major applies the perspectives and methods of various disciplines to questions about educational institutions and processes and the social and cultural factors that affect them. You are required to complete 24 units of advanced study as follows:

- three courses in discipline-based studies selected from Educ 304, 4621, 453B, 459F, 462, 4621 and 481
Arts & Sciences

- one or two courses in individual processes of education selected from Educ 315, 337, 4052, 408, 461BP and 5122
- one or two courses in social context of education selected from Educ 301C, 303R, 313B, 314, 4280, 4288, 4289, 4315, 4511P, 4608P, 489, 4891 and 557
- one elective
- in the senior year, either Educ 404 (Honors) or 4999 (Capstone Seminar)

Educational studies majors are strongly urged to choose a second major.

Additional Information

Senior Honors: If you wish to pursue honors study, you need to contact the departmental Honors Coordinator about eligibility. Qualifications for eligibility include a minimum 3.65 grade point average and completion of some education course work. For students entering Fall 2011 or later, minimum of 3.65 GPA is required. Honors study involves both demonstration of acquired knowledge and a thesis based on an original research project. You may contact a faculty honors adviser as early as the sophomore year, but ideally this is done during the junior year.

Title II: Section 207 of Title II of the Higher Education Act mandates that Washington University’s teacher education programs (or Department of Education) make public specific teacher education performance data. That information can be found on the Department of Education website at http://education.wustl.edu/files/education/Title_II_2010_Report_0.pdf.

The Minor in Learning Sciences

The goal of the learning sciences minor is to provide students with an opportunity to gain a working knowledge of the latest research on how children learn and to be able to use that knowledge to design more effective learning environments.

Units required: 18

Required courses:
- Educ 204 Introduction to the Learning Sciences
And one of the following courses:
- Psych 360 Cognitive Psychology
- Psych 4302 Cognitive Psychology Applied to Education

Elective courses:
Choose four from among the following upper-division courses:
- Educ 338 Computer Technology in Education
- Educ 304 Educational Psychology
- Educ 4033 Video Microanalysis: Methods and Tools
- Educ 4211 New Media Literacy and Popular Culture in Education
- Educ 4055 Central Topics in Learning Sciences Research
- Psych 361 Psychology of Learning*
- Psych 380 Human Learning and Memory*
- Psych 358 Language Acquisition
- Psych 4301 Contemporary Topics in Cognitive Development

*Psychology 100B is the prerequisite for all 300-level and above psychology courses.

The Minor in Educational Studies

Units required: 18

Required courses:
- Discipline-based study (two courses required):
  - Educ 304 Educational Psychology
  - Educ 453B Sociology of Education
  - Educ 459F Philosophies of Education
  - Educ 462 Politics of Education
  - Educ 4621 The Political Economy of Urban Education
  - Educ 481 History of Education in the United States
- Individual Processes of Education (one course required):
  - Educ 315 Cognitive Bases of Peak Performance I
  - Educ 337 Play and Development
  - Educ 4052 Educational Psychology: A Focus on Teaching and Learning
  - Educ 408 Education and Psychology of Exceptional Children
  - Educ 461B The Construction and Experience of Black Adolescence
- Social Context of Education (one course required):
  - Educ 301C The American School
  - Educ 303R Gender and Education
  - Educ 313B Education, Childhood and Society
  - Educ 314 Sociolinguistics, Literacies and Communities
  - Educ 4280 History of Urban Schooling in the United States
  - Educ 4288 Higher Education in American Culture
  - Educ 4289 Neighborhoods, Schools and Social Inequality
  - Educ 4315 Culture, Language and the Education of Black Students
  - Educ 4511 Race, Ethnicity and Culture: Qualitative Inquiry in Urban Education
  - Educ 4608 The Education of Black Children and Youth in the United States
  - Educ 489 Education and Public Policy in the United States
  - Educ 4891 The Science and Politics of Testing in the United States

Elective courses:
The remaining 6 units are electives that can be satisfied with any courses from the above lists.
Education

L12 Educ 102 Freshman Seminar: Successes, Challenges and Debates in Education
The purpose of this seminar is for students to gain a greater understanding of some of the most critical issues in education today. In addition to course readings and discussions, the class travels to various sites in the community in order to see some of the effects of these issues on students, parents, schools, teachers and their communities. The seminar consists of several segments. In each one, students read literature addressing a particular issue surrounding education, schooling and learning. Students then participate in a site visit to observe and/or experience the issue we are examining. Class sessions alternate between weekly meetings and site visits.
Credit 3 units. A&S : SS A&S : IQ, SSC EN : S

L12 Educ 200 Topics in Education
Introduction to broad areas of educational concern. Topics vary by semester.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : HUM FA : SSP

L12 Educ 203A Introduction to Education
This course is a broad look at the diverse issues surrounding education not only in the United States but around the world. Students examine schooling in areas such as the Pacific Rim, Middle East, Europe and America. We also take a look at educating when working with children with special needs. In addition, students explore some of the ideas and issues unique to the experience of teaching and learning in the U.S. Students work in small groups throughout the semester in projects designed to deepen their understanding of Education in the 21st Century. Throughout the semester, students participate in the Each One Teach One program as tutors. CBTL course. (This course is recommended for freshmen and sophomores only.).
Credit 3 units. A&S : SS A&S : IQ, SSC

L12 Educ 204 Introduction to the Learning Sciences
This course is an introduction to the science of how people learn. Research in the learning sciences explores learning across diverse educational contexts, including formal settings such as classrooms and informal settings such as after-school programs, families and social science disciplines. Many learning scientists are using advanced information technology to develop multimedia and Internet-based learning environments. Students learn about foundational theoretical approaches, empirical research and new learning environments that are based on this research.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA

L12 Educ 234 Introduction to Speech and Hearing Disorders
Introduction to the fields of speech-language pathology, audiology, education of hearing-impaired children, and speech and hearing sciences. Normal speech and hearing processes are discussed, as well as communication disorders. Selected research topics in speech and hearing sciences are presented.
Credit 3 units.

L12 Educ 300 Topics in Education
An examination and appraisal of major educational issues, drawing on normative frameworks, empirical research and analytical literature. Seminar format. Topics vary by semester.
Prerequisite: sophomore standing.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L12 Educ 301C The American School
An analysis of the development of American schooling within the context of American social history. Focus on three general themes: differing conceptions of schooling held by leading American educational thinkers, changing relationships among schools and such other educational institutions as the church and the family, policy issues that have shaped the development of schooling in America. Prerequisite: sophomore standing.
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : BA, ETH, HUM FA : SSP

L12 Educ 303 Gender and Education
An examination, through the lens of gender, of educational practices at the preprimary, primary, secondary and higher education levels. A sociological and historical approach links gender discrimination in education to other forms of discrimination as well as social forces. Students' own gender-related educational experiences are analyzed in the context of the literature used in the course. Prerequisite: sophomore standing or permission of instructor.
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD BU : BA FA : SSP

L12 Educ 304 Educational Psychology
A course in psychological concepts relevant to education. Organized around four basic issues: how humans think and learn; how children, adolescents and adults differ in their cognitive and moral development; the sense in which motivation and intention explain why people act as they do; how such key human characteristics as intelligence, motivation and academic achievement can be measured. Prerequisite: sophomore standing. Offered fall and spring semester.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L12 Educ 306 Literacy Education in the Context of Human Rights and Global Justice
Literacy is a fundamental human right. In this course, we explore the current and historical relationships between literacy and human rights. This includes an analysis of the ways in which literacy education is fundamentally linked to issues
of global justice, including political engagement and voting rights, environmental sustainability, gender and racial equality, and participation in the globalized economy. We investigate how literacy education has played a role in social struggles at local, national and international levels such as the creation of the Freedom Schools in St. Louis; the Native American boarding school movement; the Civil Rights movement in the United States including the creation of the Citizenship schools; the Ebonics debate in Oakland, California; the Nicaraguan Literacy Campaign; and the current No Child Left Behind federal educational policy. Students explore how literacy education has been used, in each of these cases, as a tool of empowerment and a tool of oppression.

L12 Educ 313B Education, Childhood and Society
An examination of childhood, child development and education from different perspectives. Observation of children in a variety of settings, including classrooms. Through historical, sociological, psychological and political readings, students clarify current ideas about children, investigate the nature of childhood, and begin to understand how and why childhood is constructed as it is. Prerequisite: sophomore standing. Limited to 45 students.
Credit 3 units. A&S : SS  BU : BA

L12 Educ 314 Sociolinguistics, Literacies and Communities
The well-known “literacy crisis” has forced scholars from many nations to turn their attention to learning about linguistic, cultural and class diversity of students and what this means for learning in schools. In this course we engage with the perceived disjuncture between homes, communities and schools in an era of higher literacy standards, local literacies and community knowledge. We examine the contribution of sociolinguistics to what we know about language and literacy education, achievement and how this relates to social transformation within and across communities. Students can expect theoretical and methodological conversations as we use critical discourse theories, systemic linguistic approaches and empowerment theories as lenses to formulate, challenge and critique the existing status of language and literacy education. CBTL course.
Credit 3 units. A&S : LA A&S : IQ, HUM BU : BA

L12 Educ 315 Cognitive Bases of Peak Performance I
An examination and appraisal of major educational issues, drawing on normative frameworks, empirical research and analytical literature. Seminar format. Topics vary by semester. Prerequisite: sophomore standing.
Credit 3 units. A&S : SS A&S : IQ, SSC

L12 Educ 325 Psychology of Adolescence
Same as Psych 325

L12 Educ 337 Play and Development
An examination of current research and theory in play, in development and education, from infancy through the early school years. Topics include play and the development of language, social skills, creativity and cognitive abilities. We also examine the uses of play in educational contexts, focusing on preschool and the early primary grades. Prerequisite: Psych 321 Developmental Psychology or Educ 304 Educational Psychology.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA

L12 Educ 338 Computer Technology in Education
Technology has become increasing important in education in the past 10 years. Many exciting new software applications have been developed by scholars in the learning sciences, an interdisciplinary field based in cognitive psychology. Many of these systems draw on the power of the Internet to support online student collaboration in inquiry-based and project-based learning. This course introduces students to computer technology in education. No prior knowledge of computer programming or software design is required. A major goal of the course is to teach students the basic concepts behind computer programming and design. Toward this end, a significant portion of the course involves laboratory work where students solve programming assignments. This basic knowledge allows students to acquire a deeper understanding of the different possible approaches to developing computer applications that are based on learning sciences research. This course requires a special classroom in which each student has his or her own computer during the class. Enrollment is limited to the number of students that can be supported by this classroom.
Credit 3 units. A&S : SS

L12 Educ 343 Text, Memory and Identity
This course explores issues of collective memory and identity through the study of texts such as national myths and official histories taught in schools. The focus is on texts themselves and how they are produced (e.g., by the state, popular culture) and consumed. The course has two components, methodological and analytical. In the first, we read a number of theoretical works devoted to definitions of the text from a historical and structural point of view. In the second, we analyze various key works that have played a crucial role in the formation of communities of memory and identity and the borders that separate them. The course is comparative, multidisciplinary and international in its scope.
Same as IAS 343
Credit 3 units. A&S : TH

L12 Educ 358 Language Acquisition

Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L12 Educ 330
L12 Educ 366 Psychology of Creativity
This course is an introduction to the psychological study of art and creativity. Our topics include the artist; the audience; the artistic product; the creative process; and social, cultural and institutional influences on the creative process. We explore these issues by considering a range of creative fields, including painting, literature, music and theater performance. Throughout the semester, we take a developmental perspective on psychology and art. How do children learn to create, perceive and understand different art forms? What role can the arts play in education? To ground our study of the psychology of art, we explore what “art” is, which members of society are labeled “artists,” and how these categories are socially and culturally defined. Prerequisite: Educ 304 Educational Psychology or Psych 325 Adolescent Psychology or Psych 321 Developmental Psychology.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L12 Educ 400 Topics in Education
An analysis of major educational issues, drawing on empirical research and literature. Seminar format. Topics vary by semester.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L12 Educ 4014 Urban Education in Multiracial Societies
Same as URST 400
Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI

L12 Educ 4015 American Democracy and the Policy-Making Process
Part of the Semester in D.C. Program; This course addresses the major issues and features of the domestic and foreign policy making processes in the United States. Same as Pol Sci 4001
Credit 3 units.

L12 Educ 4033 Video Microanalysis: Methods and Tools
The purpose of this course is to explore video microanalysis as a methodological tool for studying and valuing unconscious aspects of culturally diverse settings. Utilizing social cultural theoretical lens, this type of analysis reveals fleeting actions, subtle movements, peripheral events and nonverbal communication that are not easily identified in real-time viewing. Specifically we may look at facial expressions, direction of gaze, hand movements, body position and use of material resources as micro techniques to expand our capacity to explore minute aspects and alternative interpretations of social interactions.
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD

L12 Educ 404 Study for Honors
A research program arranged by the student and a faculty member. Prerequisite: recommendation for Honors study.
Credit 3 units. A&S : SS FA : SSP

L12 Educ 4052 Educational Psychology: A Focus on Teaching and Learning
The classroom as a physical, social and intellectual environment. Selected psychological concepts and theories are applied to processes and practices of teaching and learning through readings, discussions and participation/observation in preschools and elementary and secondary schools. A systematic, firsthand look at schooling in America both for prospective teachers and those interested in furthering their understanding of fundamental principles of teaching and learning. Prerequisite: sophomore standing. Must enroll in fieldwork laboratory (5 hours per week).
Credit 4 units. A&S : SS A&S : IQ, SSC FA : SSP

L12 Educ 4055 Central Topics in Learning Sciences Research
The learning sciences are a group of disciplinary approaches to the study of learning, including cognitive science, education, psychology, anthropology and sociology. The core of the approach is based in the study of cognition and its relationship to the disciplines of science, mathematics and literacy. Technology has become increasing important in the past 10 years, as computer-supported collaborative learning (CSCL) software has grown in sophistication and effectiveness. The learning sciences have contributed interesting new methodologies for studying and documenting how learning occurs in real-world settings. In this course, we review the broad range of research currently taking place in the learning sciences, including methodologies for studying learning, computer software that supports both solitary and collaborative learning, the impact of new technologies on educational practice, and the impact of learning sciences research on teacher professional development and schoolwide reform. Students acquire the ability to think creatively and critically about the learning sciences, and to evaluate critically the strengths and weaknesses of specific classroom approaches and software applications.
Credit 3 units. A&S : SS

L12 Educ 407 Curriculum and Instruction in Modern Foreign Languages
Modern foreign language curriculum in the secondary schools, with emphasis on the selection, organization and appraisal of materials. Analysis of methods of instruction and evaluation in teaching modern foreign languages. Prerequisite: admission to teacher education program. Secondary teacher education majors are required to take 3 credit hours during the fall semester in which student teaching is done.
L12 Educ 408 Education and Psychology of Exceptional Children
Major handicaps of children that require educational modifications. The nature of the handicaps, their known causes and educational provisions for exceptional children, ranging from special schools to "mainstreaming" children into regular classrooms. The nature of giftedness, together with current practices of educating gifted children and youth. Required in teacher certification program. Prerequisite: sophomore standing. Offered fall and spring semesters.
Credit 3 units. A&S : LA A&S : IQ, HUM FA : SSP

L12 Educ 4111 Linguistics and Language Learning
This course, taught in English, provides a critical survey of various components of linguistics and a second (including foreign) language (L2) program. It explores dimensions of second language teaching, acquisition, use and testing. Both theoretical and practical dimensions of linguistics and language learning are treated; note that supervised teaching practice is to be found elsewhere. This course is a required course for the Graduate Certificate in Language Instruction and an elective for the undergraduate minor in Applied Linguistics. Prerequisite: Ling 170 is recommended but not required.
Same as Span 413
Credit 3 units. A&S : LA A&S : IQ, SSC FA : SSP

L12 Educ 413 Curriculum and Instruction in Art K-12
Art curriculum in the public schools, with emphasis on examination of methods and materials for teaching art. Prerequisite: admission to teacher education program. Secondary teacher education majors are required to take 3 credit hours during the year in which student teaching is done. Offered fall semester.
Credit 3 units. A&S : LA A&S : IQ, HUM FA : SSP

L12 Educ 414 Curriculum and Instruction in English
English curriculum in the secondary school; emphasis on the selection and organization of materials. Analysis of methods of instruction and evaluation in teaching literature and language. Prerequisite: admission to teacher education program. Secondary teacher education majors are required to take 3 credit hours during the year in which student teaching is done. Offered fall semester.
Credit 3 units. A&S : LA A&S : IQ, HUM FA : SSP

L12 Educ 415 Curriculum and Instruction in Science
Secondary school science curriculum and instructional methods, including evaluation of curricular materials and student performance based on specific teaching objectives. Prerequisite: admission to teacher education program. Secondary teacher education majors are required to take 3 credit hours during the fall semester during the year in which student teaching is done. Offered fall semester.
Credit 3 units. A&S : NS A&S : IQ, NSM FA : SSP

L12 Educ 417 Curriculum and Instruction in Mathematics
Mathematics curriculum in the secondary school, with emphasis on modern developments in organization of mathematics. Analysis of methods of instruction and evaluation in teaching mathematics. Prerequisite: admission to teacher education program. Secondary teacher education majors are required to take 3 credit hours during the fall semester during the year in which student teaching is done.
Credit 3 units. A&S : SS A&S : IQ, NSM FA : SSP

L12 Educ 418 Curriculum and Instruction in Social Studies
Goals of general education in social studies and their relationship to the nature of knowledge in the social sciences. Introduction to the nature of thinking and its relationship to pedagogy and teaching materials. Prerequisite: admission to teacher education program. Secondary teacher education majors are required to take 3 credit hours during the year in which student teaching is done.
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L12 Educ 4211 New Media Literacy and Popular Culture in Education
At the closing of the 20th century, the "digital turn" began to shape how individuals learn, communicate and interact with one another. Current and emerging media technologies have continued to change how individuals (youth and adults alike) gather information; consume, produce and disseminate texts; and participate in both local and global communities through print- and screen-based platforms such as email, blog, podcast and mash-ups, among others. In this course, we explore what we mean by technology, the various types and uses of technology and the relationship of technology to literacy and education. We begin with characteristics of “new media” and consequences of the digital revolution. Then, we examine conceptualizations of literacy in a historical context—from literacy as reading and writing to literacy as multimodality, convergence and participation. Finally, we shift our inquiry to investigate how new media literacies and technologies are shaping (and are shaped by) different forms of popular culture in United States and international contexts, including parts of Asia, Australia, Europe, Africa and North and South America. We make explicit the connections to education and explore possible directions for research and practice, including copyright and fair use issues present in educational settings. Readings, discussions and activities online and in actual communities culminate in individual- and class-based new media productions. Prerequisite: at least junior standing or permission of the instructor.

Credit 3 units. A&S : NS A&S : IQ, NSM FA : SSP
A major purpose of the course is to study the research and policy literature related to neighborhoods, schools and the corresponding opportunity structure in urban America. The course is informed by theoretical models drawn from economics, political science, sociology, anthropology, education and law. A major focus is to gain greater understanding of the experiences and opportunity structure(s) of urban dwellers, in general, and urban youth, in particular. While major emphasis is placed on data derived from the interface of urban environments and the corresponding institutions within them, the generational experiences of various ethnic groups complement the course foci.

L12 Educ 4271 Health of the Child
A study of the health and nutrition of children. Prerequisites: admission to the teacher education program or permission of director of Teacher Education.
Credit 1 unit. A&S : SS  FA : SSP

L12 Educ 4280 History of Urban Schooling in the United States
This reading colloquium examines the history of urban schooling and school policy in the United States. Readings focus on the growing literature in the history of urban schooling and on primary source material. We explore urban schooling in general and we examine particular primary source material as well as particular cities and their school districts. Such districts may include New York, Boston, Chicago, Detroit, St. Louis, Los Angeles, San Francisco, Atlanta and others. The course has two goals: to develop a strong contextual understanding of the conditions of urban schooling, the history of urban school reform, and the debates over the purposes of urban schools; and to examine the ways historians have explored urban schooling in the U.S. Students should expect to read a book a week as well as primary source materials and occasional articles.
Credit 3 units. A&S : SS

L12 Educ 4288 Higher Education in American Culture
Colleges and universities in the United States have been the sites of both cultural conservation and political and cultural subversion from their founding in the 17th and 18th centuries. They have been integral to national and regional cultural and economic development. In addition, they have functioned as one component of an increasingly diversified and complex system of education. This course, a reading colloquium, surveys higher education in American history, including the ideas that have contributed to shaping that history, beginning with its origins in European institutional models. We use primary and secondary readings to examine critically its conflict-ridden institutional transformation from exclusively serving the elite to increasingly serving the masses. We explore the cultural sources of ideas as well as the growth and diversification of institutions, generations of students and faculty as they changed over time, and curricular evolutions and revolutions in relation to the larger social and cultural contexts of institutional expansion.
Credit 3 units. A&S : TH  BU : HUM  FA : SSP

L12 Educ 4289 Neighborhoods, Schools and Social Inequality
A major purpose of the course is to study the research and policy literature related to neighborhoods, schools and the corresponding opportunity structure in urban America. The course is informed by theoretical models drawn from economics, political science, sociology, anthropology, education and law. A major focus is to gain greater understanding of the experiences and opportunity structure(s) of urban dwellers, in general, and urban youth, in particular. While major emphasis is placed on data derived from the interface of urban environments and the corresponding institutions within them, the generational experiences of various ethnic groups complement the course foci.

L12 Educ 4301 Historical Social Content of the American School
Same description as Educ 301C The American School. Additional discussion, writing and research is expected for graduate credit.
Credit 3 units. A&S : TH, SD  A&S : IQ, HUM, SD  BU : BA, ETH, HUM  FA : SSP

L12 Educ 4312 Tools of Inquiry
This course offers an introduction to teacher inquiry and provides a foundation of skills, knowledge and performances that effective teachers use to monitor and improve practice. In this course teachers are actively involved in their own teaching and learning with an emphasis on the following: (1) Reflective practice: reflective practitioners continually evaluate the effects of their choices and actions on others (e.g., students, parents and other professionals in the learning community) and actively seek out opportunities to improve practice and grow professionally. (2) Use of technology: teacher leaders model the use of media and technology as tools of inquiry. This course supports teachers to do the following: use multiple sources of data to assess the growth of individual learners; use assessment data to adjust curriculum and instruction to student needs; investigate their own biases, assumptions and ideologies and monitor the effects on student learning; conduct research in the classroom to assist them in improving their practice; and use portfolios and other reflective practices to document and monitor their professional development. Offered spring semester.
Credit 3 units. A&S : SS  A&S : IQ, SSC

L12 Educ 4315 Culture, Language and the Education of Black Students
This course examines the communicative patterns of what is called variously African-American language, Pan-African linguistic systems and Ebonics within the context of public school policy and practice. In addition to a review of the structural and pragmatic aspects of Black speech, the course highlights relationships between controversies within the linguistic community, contrasting views of speech within Black lay
A course for those students who have an interest in teaching or educational design. This graduate/advanced undergraduate course focuses on the design and construction of educational projects for schoolchildren in the middle- and high school levels of mathematics and science. Students in the course, in small group collaborations, conduct an entire cycle of design, implementation and evaluation of a small math or science project (or both) for local middle or high school students. Projects are aligned with state and national standards, so they could be used in Missouri public schools. Creativity is encouraged. The course includes four phases of work throughout the semester: (1) Ongoing reading and discussion of the national and state standards for math and science instruction, and of research literature on inquiry in science and math education; (2) design of project activities, materials and assessments, including specification of content, pedagogical and technology goals, and alignment with standards; (3) conduct of the teaching projects at selected sites with middle-school or high school students; (4) evaluation of projects in a final presentation and report.

Students in science, mathematics, psychology and education, with interests in teaching, educational research or educational outreach, are encouraged to attend. Credit 3 units. A&S : SS

L12 Educ 4414 Learning Technologies for Math and Science
What does the integration of electronic technology into classrooms, projects and informal settings mean for the development of our students’ understanding of mathematics and science? What implications does it have for our own content understanding and for how we lead our students in the classroom? Can we really integrate information technology into the classroom in ways that truly enhance student inquiry and reasoning? This course focuses on the function, design, use and effectiveness of electronic technology in mathematics and science education, and, in particular, how it interacts with content and classroom practice. A primary perspective in the course is the ways in which electronic tools can be used to promote understanding and interpretation of data and quantitative thinking as springboards to inquiry, modeling, and the doing of “authentic science.” Participants learn several software applications and computer-based curricula and read current research on the implications for the learning sciences of technology and modeling in science and math. Content emphasis is from middle- and high school science and mathematics and is accessible to all teachers of science and math. In-service teachers, graduate students and advanced undergraduates in education, mathematics, science and psychology are invited. Credit 3 units. A&S : SS

L12 Educ 4415 Learning Sciences in Math and Science
This course introduces the concepts of the learning sciences as related to mathematics, science and technology education. The focus of the course is on how students learn fundamental concepts selected each semester from topics such as number, space, shape, data, operations, functions, rate, balance, density, etc. and how their ideas evolve and develop over time. The inventiveness of children’s thinking and the sophistication of their interactions are shown as rich resources, often underutilized in typical classroom instruction. The developmental and epistemological theories of scholars such as Jean Piaget and the von Hieles are contrasted with sociocultural and linguistic approaches such as of Lev Vygotsky, Sylvia Scribner and Michael Cole, and the pragmatic theories of John Dewey. Topics include studies of error patterns, misconceptions, alternative conceptions in mathematics and science and how these relate to outside experience, student interactions and discourse patterns using excerpts from real classrooms. Students are expected to read original works, learn to analyze video interviews from each perspective, and to read and summarize existing literature on children’s reasoning for specific topics. The course is
targeted toward upper-division undergraduates, master's and doctoral students in education, psychology and/or mathematics and science, and adjusted to meet these various levels of preparation. Credit 3 units.  A&S : SS

L12 Educ 4451 Teaching Writing in School Settings
Writing teachers often know how to write well but less about the teaching of writing. To provide effective instruction in writing, teachers need, first of all, experiences with writing instruction and theoretical knowledge to guide classroom practices. The goals of this course are as follows: to provide opportunities for all teachers of English and language arts, to develop theoretical knowledge and skill as teachers of writing, to connect the practices of research and teaching, to encourage teachers to give their students multiple and varied experiences with writing, to assist teachers in learning to respond to students' writing and assess their progress as writers. Credit 3 units.  A&S : SS  A&S : IQ, SSC

L12 Educ 4511 Race, Ethnicity and Culture: Qualitative Inquiry in Urban Education
Drawing on traditional and recent advances in the field of qualitative studies, this course is the first of a sequence to examine ethnographic research at the intersecting and overlapping points of race, ethnicity, class, gender and culture. The emphasis is on how these concepts are constructed both in the literature and in day to day life of real people and educational institutions in urban settings. There is a field component that involves nearby elementary and middle schools. Credit 3 units.  A&S : SS, SD  A&S : IQ, SSC, SD  BU : BA

L12 Educ 4512 Race, Ethnicity and Culture: Qualitative Inquiries into Urban Education II
This course is the second of two to examine ethnographic research at the intersecting and overlapping points of race, ethnicity, class, gender and culture. The emphasis in this course is on developing methodology that is consistent with critically grounded, socially responsible, culturally responsive and humane research projects and programs. Secondary English education majors are required to take fall semester during the year in which student teaching is done. Prerequisites: AFAS/Educ 4511 and/or permission of the instructor. Credit 3 units.  A&S : SS, WI  A&S : IQ, SSC, WI  FA : SSP

L12 Educ 4521 Teaching Adults in Community Settings
Communities possess a vast and varied choice of learning opportunities for the citizens, whose participation as volunteers, communicators, facilitators, mentors, leaders and instructors can enhance their own lives as well as the life of the community. This course helps students acquire the knowledge, skill sets, habits of mind, and learning strategies necessary for understanding the adult learner and the effective design of learning for personal and professional growth by adults in a variety of community settings. We inventory the class members’ interests in specific community contexts so that we can work with those settings in mind throughout the semester. Discussion of learners’ needs and peer practice of appropriate, effective instructional and learning strategies provide experience, new perspectives and opportunities for reflection. Course work serves as preparation for the final project, which is to create an instructional plan for adult learners that addresses a specific community learning need or situation. Credit 3 units.  A&S : SS  A&S : IQ, SSC

L12 Educ 453B Sociology of Education
How does society shape schools and schools shape society? An examination of cultural, political and economic factors and their relationship to the structure of our educational institutions; how control is exercised in classrooms; how knowledge and learning are defined, and basic values about equality, gender and social justice are shaped by teachers' educational decisions. Students analyze their own schooling experience, visit at least two schools, interview teachers and students, and consider what changes are needed to make schools more responsive to students and communities. Prerequisite: sophomore standing. Credit 3 units.  A&S : SS, SD  A&S : IQ, SSC, SD  BU : BA, ETH, HUM, IS  FA : SSP

L12 Educ 459F Philosophies of Education
An examination of distinct educational philosophies (traditional, progressive and radical) and an analysis of perennial topics in the philosophy of education (educational goals, the teacher’s and student’s roles, and curricular content). Discussion of such recent themes as gender relations and education; democracy and education; and moral values and education. Seminar format. Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : ETH  FA : SSP

L12 Educ 4608 The Education of Black Children and Youth in the United States
This course provides an overview of the education of Black children and youth in the United States. Covering both pre- and post-Brown eras, this course applies a deep reading to the classic works of DuBois and Anderson as well as the more recent works of Kozol, Delpit and Foster. The social, political and historical contexts of education as essential aspects of American and African-American culture and life, are placed in the foreground of course inquiries. Credit 3 units.  A&S : TH, SD, WI  A&S : IQ, HUM, SD, WI  FA : SSP

L12 Educ 461 Introduction to Educational Tests and Measurements
Basic concepts of tests and measurements for teachers (and other school personnel). Topics: test reliability and validity; fundamentals of test construction and standardization; analysis of major types of group tests used in schools, including achievement and aptitude tests; meaning and interpretation of test scores; development of school testing programs. Teacher-made tests a central concern. Prerequisite: Educ 4052 or the equivalent.
Credit 3 units. A&S : SS A&S : IQ, SSC

L12 Educ 461B The Construction and Experience of Black Adolescence
This course examines the construct of Black adolescence from the general perspectives of anthropology, psychology and sociocultural analysis. It begins by studying the construct of Black adolescence as an “invention” of the social and behavioral sciences. The course then draws upon alternative theoretical sources, such as humanities, critical pedagogy, grounded theory and mediated action theory to recast Black adolescence as a complex social, psychological, cultural and political phenomenon. While this course focuses on the meaning-making experiences of urban-dwelling Black adolescents, it highlights these relations within the context of class, gender and education. Same as AFAS 461B
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L12 Educ 462 Politics of Education
Politics is interpreted broadly to include not just government, but any situation in which people have to solve a problem or come to a decision. This course focuses on schools and the processes through which certain stories, identities and practices are promoted, and others, not.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L12 Educ 4621 The Political Economy of Urban Education
Defining a political economy of urban education involves the examination of power and wealth and the manner in which they operate in urban settings. It requires analysis of the larger urban social and economic context and consideration of historical forces that have brought the schools to their present state. In this course, we consider various political and economic factors that have influenced and shaped urban education in the United States, drawing upon the extant literature on urban education and related social science disciplines to characterize and discuss them. A particular focus of this course is on the dynamic interrelationships among the political economy, urban education and social stratification.
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD

L12 Educ 463 Economics of Education
How does society shape schools and how do schools shape society? An examination of cultural, political and economic factors and their relationship to the structure of our educational institutions; how control is exercised in classrooms; how knowledge and learning are defined; and how basic values about equality, gender and social justice are shaped by teachers’ educational decisions. Students analyze their own schooling experience, visit at least two schools, interview teachers and students, and consider what changes are needed to make schools more responsive to students and communities. Prerequisite: minimum sophomore standing.
Credit 3 units. A&S : SS

L12 Educ 4681 Teaching Reading in the Elementary School
This course, emphasizing emergent literacy and children’s literature, is the first in a sequence of three courses on teaching reading and writing. The purposes of this course are to survey children’s acquisition of oral and written language from an emergent literacy perspective, to focus on methods of teaching beginning reading, to develop uses of children’s literature in a reading program. Offered fall semester.
Credit 3 units. A&S : LA A&S : IQ, HUM FA : SSP

L12 Educ 4699 Adolescent Psychology in School Settings
An examination of current research on adolescent psychological development and the adolescent experience across different cultures. Emphasis is on the application of theories of adolescence to the classroom setting to those settings outside the classroom that can affect how students learn. Students are given a repertoire of pedagogical and communication strategies for effectively teaching adolescents as well as opportunities to implement and analyze them in the classroom and school.
Credit 3 units. A&S : SS FA : SSP

L12 Educ 4700 Language, Learning and Instruction
This course, which emphasizes children’s writing and literacy issues, is the third of three courses in a sequence on teaching reading and writing. The course reviews and elaborates on work from previous courses on children’s acquisition of written language, examines approaches to teaching writing, and focuses on work from sociological, feminist and philosophical perspectives to affirm and criticize aspects of these approaches. Prerequisites: Educ 4681 and 525.
Credit 3 units. A&S : LA A&S : IQ, HUM FA : SSP

L12 Educ 4731 Elementary School Mathematics
Fundamental concepts, properties, operations and application of mathematics related to the systems of whole numbers, integers, rational numbers and real numbers. Also included are measurement, simple geometry, probability and logical reasoning. Examination and implementation of varied curricula and teaching strategies. Prerequisite: admission to Elementary Education program or permission of director of Teacher Education. Offered spring semester.
L12 Educ 4741 Elementary Science: Content, Curriculum and Instruction
Focus on key concepts appropriate for elementary school science and health instruction. Repertoire of effective teaching strategies and approaches to curriculum development. Prerequisite: admission to teacher education program. Offered spring semester.
Credit 3 units. A&S : NS A&S : IQ, NSM FA : SSP

L12 Educ 4751 Elementary Social Studies: Content, Curriculum and Instruction
Introduction to key concepts in social studies, including economics and geography. Repertoire of effective teaching strategies and approaches to curriculum development in all areas of social studies. Prerequisite: admission to teacher education program.
Credit 2 units. A&S : SS A&S : IQ, SSC FA : SSP

L12 Educ 4771 Arts and Aesthetics: A Means of Communication
Methods and materials for integrating the arts and aesthetics into the elementary classroom. Emphasis on art, music and oral communication as well as curricula in movement. Prerequisite: admission to teacher education program or permission of instructor.
Credit 3 units. A&S : LA A&S : IQ, HUM FA : SSP

L12 Educ 481 History of Education in the United States
Examines education within the context of American social and intellectual history. Using a broad conception of education in the United States and a variety of readings in American culture and social history, the course focuses on such themes as the variety of institutions involved with education, including family, church, community, work place and cultural agency; the ways relationships among those institutions have changed over time; the means individuals have used to acquire an education; and the values, ideas and practices that have shaped American educational policy in different periods of our history.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : SSP

L12 Educ 4821 The Teaching-Learning Process in the Secondary School
Secondary teacher education majors are required to take this teacher-learning course during the spring semester in which student teaching is done. The course focuses on the study, practice and analysis of generic teaching strategies and skills needed to meet the needs of all students. Topics include classroom management, lesson planning, instructional and ethical decision making and strategies for presenting clear explanations, asking effective questions, conducting productive discussions, reaching students with different learning styles/abilities/cultural backgrounds, and using cooperative learning groups. Secondary teacher education majors are required to take 3 credit hours during the year when student teaching is done. CBTL course.
Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI FA : SSP

L12 Educ 4831 The Teaching-Learning Process in the Elementary School
Focus on four broad areas: self-awareness and human relations; generic teaching and behavioral management strategies; analysis of instruction; and social and political issues affecting the classroom. Topics include teacher-pupil relationships, evaluation of pupil progress, curriculum development, instructional technology and school organization. Prerequisite: admission to Elementary Teacher Education Program required. Elementary teacher education majors are required to take this course in the fall semester during which student teaching is done.
Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI FA : SSP

L12 Educ 4841 Elementary Methods Field Experience
Application and analysis of specific content area methods strategies in an elementary school classroom. Prerequisite: admission to teacher education program. Elementary teacher education majors are required to take this course during the spring semester before the year in which student teaching is done. Offered spring semester. CBTL course.
Credit 3 units. A&S : SS A&S : IQ, SSC, WI FA : SSP

L12 Educ 4843 Field Experience Seminar
This course guides students through a field experience in middle or secondary public school. Students observe and document classroom environment characteristics, professional teacher behaviors and student behaviors; work with students individually and/or in small groups; prepare and teach a lesson.
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L12 Educ 489 Education and Public Policy in the United States
Critical examination of current public policy issues that shape education in a variety of institutions. Theoretical approaches to educational policy making; the significance of values, social goals and knowledge in framing, implementing and evaluating educational policy; relations among educational institutions affected by policy issues. Lectures, class discussions and papers address literature on the problems of policy making and implementation, family policy, school policy, education and work policy, and cultural policy. Prerequisite: junior standing.
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP
L12 Educ 4891 The Science and Politics of Testing in the United States

Why do tests permeate American Society? Tests have been integral to the decision-making process in many venues of American culture — immigration opportunities, voting rights, college admissions, workforce considerations, special education placement, educational reform and graduation requirements. The credibility of these decisions depends upon the claim that a particular test is a scientific instrument and relevant to the decision-making process. This claim is worthy of study. The purpose of this course is twofold. The first purpose is to examine how the nexus of science and politics influence testing practices in American society. The second purpose is to explore how testing practices influence the culture of schools, civil liberties, the work place and public discourse about merit.

Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD

L12 Educ 4911 Student Teaching in the Elementary School

Supervised teaching experience. Group meetings and individual conferences. Emphasis on integration of theory/practice and reflection on teaching through videotape analysis. Prerequisites: admission to elementary teacher education program and permission of director of teacher education. Credit/no credit only. Elementary teacher education students enroll for 8 credits during the fall semester.

Credit -8 unit. A&S : SS A&S : IQ, SSC FA : SSP

L12 Educ 492 Middle School Curriculum and Instruction

Building on knowledge of the middle-level child and the ways in which middle schools are organized to meet the needs of middle-level children (covered in Educ 4951), this course explores the learning styles and attributes of middle school students and examines instructional theory, methods and materials appropriate to grades five through nine. In addition, portions of this course are devoted to specific content field methodology subdivided into English/language arts and social studies or science and math. The English/social studies and science/math sessions are held concurrently and students attend the session appropriate to their content major or minors. Interdisciplinary team teaching is modeled and featured in these sessions. Features a required practicum experience. Prerequisites: admission to Teacher Education program and Educ 4951.

Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L12 Educ 4922 Student Teaching in Middle Schools

Supervised teaching experience. Group meetings and individual conferences. Prerequisite: admission to teacher education program. Credit/no credit only. Middle-school teacher education students enroll for 8 credits during the spring semester.

Credit -8 unit. A&S : SS A&S : IQ, SSC FA : SSP

L12 Educ 492 Student Teaching in the Secondary School

Supervised teaching experience. Group meetings and individual conferences. Emphasis on integration of theory/practice and reflection on teaching through videotape analysis. Prerequisite: admission to teacher education program. Credit/no credit only. Secondary teacher education students enroll for 8 credits during the spring semester.

Credit -8 unit. A&S : SS A&S : IQ, SSC FA : SSP

L12 Educ 4952 Middle School Curriculum and Instruction

This course examines the history, goals, organization and philosophy of middle schools as institutions. Students explore how the characteristics and needs of early adolescents guide the mission, structure and operation of middle schools. Prerequisite: admission to teacher education program.

Credit 2 units. A&S : SS FA : SSP

L12 Educ 4999 Capstone Seminar in Educational Studies

All majors not writing an Education senior honors thesis are required to enroll in the senior seminar, a reading colloquium. Students read with faculty and write papers based on the readings and the courses taken to complete the major requirements in the program. All honors students are required to attend at least one session of the seminar to present their work, and all graduating Educational Studies majors, including those completing honors work in Educational Studies, are required to attend the final session of the seminar.

Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L12 Educ 494 Student Teaching in Grades K-12

Supervised teaching experience. Group meetings and individual conferences. Prerequisite: admission to teacher education program. Credit/no credit only. K-12 teacher education students enroll for 8 credits. Offered spring semester.

Credit -8 unit. A&S : SS A&S : IQ, SSC FA : SSP

L12 Educ 4951 Middle School Philosophy and Organization

This course examines the history, goals, organization and philosophy of middle schools as institutions. Students explore how the characteristics and needs of early adolescents guide the mission, structure and operation of middle schools. Prerequisite: admission to teacher education program.

Credit 2 units. A&S : SS FA : SSP

English

Undergraduates who major or minor in English explore literature as readers, and as writers, in a range of settings that focus — particularly through small class size — on the individual student. Because of the range of courses offered each semester and requirements that encourage personal development through an array of approaches and areas of study, our alumni, who include double majors in disciplines across Arts & Sciences, have succeeded at top graduate programs not only in English and creative writing but also in medicine, law and business.

This preparation begins at the freshman level, which includes a series of seminars taught by distinguished faculty during both semesters that encourage, for example, the development of creative writing skills through the reading of celebrated literary texts. Our department, which offers a minor in writing,
is the home of one of the top MFA programs in America. The department also offers a minor in English.

Phone: 314/935-5190  
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Departmental website: http://artsci.wustl.edu/~english/

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PhD, University of Toronto

Endowed Professors
Gerald L. Early  
Merle Kling Professor of Modern Letters  
PhD, Cornell University
Wayne Fields  
Lynne Cooper Harvey Distinguished Professor of English  
PhD, University of Chicago
Steven Zwicker  
Stanley Elkin Professor in the Humanities  
PhD, Brown University

Professors
Mary Jo Bang  
MFA, Columbia University
David Lawton  
FAAH, PhD, University of York
Joseph Loewenstein  
PhD, Yale University
Robert Milder  
PhD, Harvard University
Carl Phillips  
MA, Boston University
Vivian Pollak  
PhD, Brandeis University
Richard Ruland  
PhD, University of Michigan
Wolfram Schmidgen  
PhD, University of Chicago
Vincent Sherry  
Chair  
PhD, University of Toronto
Rafia Zafar  
PhD, Harvard University

Associate Professors
Miriam Bailin  
PhD, University of California–Berkeley
Guinn Batten  
PhD, Duke University
William Maxwell  
PhD, Duke University
William McElvy  
PhD, University of Virginia
Steven Meyer  
PhD, Yale University
Anca Parvulescu  
PhD, University of Minnesota
Jessica Rosenfeld  
PhD, University of Pennsylvania
Julia Walker  
PhD, Duke University

Assistant Professors
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PhD, University of Pennsylvania
Abram van Engen  
PhD, Northwestern University
Musa Gurnis  
PhD, Columbia University
Edward McPherson  
MFA, University of Minnesota–Twin Cities

Faculty Associate
Dillon Johnston  
PhD, University of Virginia

Senior Lecturers
Joan Brockman  
PhD, St. Louis University
Kathleen Drury  
MA, Washington University
Amy Pawl  
PhD, University of California–Berkeley
Paul Rosenzweig  
PhD, University of Michigan
Charles Sweetman  
PhD, Washington University

Lecturers
Jennifer Arch  
PhD, Washington University
Bethany Daniels  
MA, University of Missouri
Erin Finneran
The Major in English Literature

Units required: 30

Prerequisites:
- E Lit 2151 Literature in English: Early Texts and Contexts
- E Lit 2152 Literature in English: Modern Texts and Contexts

Required credits: 24 units of upper-division (300 and 400 level) work (at least 6 units must be 400 level). Must include, at a minimum:

Four required courses:
- Three Historical (3 out of 5 historical periods, any of which may be filled by American, British or Anglophone, with at least one course from each of these two Groups):
  - Group 1
  - Medieval
  - Early Modern
  - Group 2
  - The 18th Century
  - The 19th Century
  - The 20th Century and later

One Literary Theory

Four electives

Eight courses in all (including two 400-level courses)
- All courses must be taken for letter grades.
- Must receive a grade of C or better.
- Only one cross-listed course not home-based in English may be counted toward the 24 units required. The two required 400-level courses must be home-based in English.
- Maximum of 6 units from University College and/or Summer School courses may count toward the major. These selections need English Department approval.
- Study Abroad students must complete the 200-level prerequisite courses and at least two upper-level courses in English literature before going abroad.
- 3 units of 300- or 400-level courses in the literature of a language other than English may be counted toward the English major.
- Before the end of junior year, majors are encouraged to consult with advisers regarding the fulfillment of major requirements.

Additional Information

Transfer Units: Students must provide transcript of previous work to receive approval from the director of Undergraduate Studies.

Senior Honors: Students must have achieved a 3.6 grade point average in English and a 3.65 grade point average overall in order to apply for honors in English in spring of junior year. Students must successfully complete the required courses for the English major. Students must take E Lit 5001 Honors Thesis Tutorial in both fall and spring of senior year and E Lit 3991 Senior Research Seminar I and E Lit 3992 Senior Research Seminar II in fall and spring, respectively, of senior year.

Study Abroad: Four affiliate programs in England are open for well-prepared students: University College, London (UCL); University of Sussex; Oxford Program for Undergraduate Studies (OPUS); and Keble College at Oxford. Students interested in Study Abroad must apply and participate before senior year.

The Minor in English

Units required: 15
Required courses:

- E Lit 2151 Literature in English: Early Texts and Contexts
- E Lit 2152 Literature in English: Modern Texts and Contexts

Elective courses: Three upper-division (300- or 400-level) electives, one of which must be in literature pre-1700.

Additional Information

Students are expected to take courses for letter grades and to receive a grade of C or better in each. Additionally, all courses for the English minor should be home-based in the Department of English.

The Minor in Writing

Students who wish to take a Writing minor in addition to an English major are advised to take English and American literature courses (designated E Lit) exclusively for the major, E Comp courses exclusively for the minor.

The Writing minor consists of 15 units composed of any of the following courses but no more 6 units at the 200 level:

- E Comp 211 Writing 2 (with grade of B or better)
- E Comp 221 Fiction Writing 1
- E Comp 222 Poetry Writing 1
- E Comp 224 Playwriting
- E Comp 311 Exposition
- E Comp 312 Argumentation
- E Comp 314 Topics in Composition
- E Comp 321 Fiction Writing 2
- E Comp 322 Poetry Writing 2
- E Comp 352 Introduction to Screenwriting
- E Comp 421 Advanced Fiction Writing
- E Comp 422 Advanced Poetry Writing
- E Comp 4731 Advanced Playwriting
- E Comp 4801 Screenwriting
- E Comp 500 Independent Study (limit 3 units)

At least one of the five courses elected must be E Comp 311 Exposition, E Comp 312 Argumentation or E Lit 301E. With department approval, up to 6 units of journalism courses in writing or editing offered in University College or an off-campus internship (E Comp 298 Journalism: Communications Internship) oriented toward writing may be counted toward the minor. These two options may not be combined; i.e., regardless of level, at least three courses (9 units) must be chosen from the English Department offerings listed above.

English Composition

For courses in English Composition, please see the Writing (p. 717) page.

English Language and Literature

L14 E Lit 150 Literature Seminar for Freshman: How to Read a University

More than 70 percent of American adults now study at college for some time. But almost none study college as a formative individual experience and critical public institution while there. This course aims to fill this gap, encouraging students to reflect on the ground under their feet, the contemporary American university, and the myths, debates and histories that shape it. What is the purpose of higher education: to protect and defend islands of humanistic contemplation and disinterested scientific inquiry; to equip young citizens for informed democratic action; to train meritorcatic elites for high office and high salaries? And how has this purpose shifted with the growth of leading American universities from clerical enclaves to worldly research corporations? This course addresses such questions with help from three bodies of texts: canonical modern fictions of campus life by such authors as F. Scott Fitzgerald and Willa Cather, Mary McCarthy and Ralph Ellison, Philip Roth and Don DeLillo; some influential theories of the university and its intellectuals from Thomas Jefferson to Michel Foucault; and a trio of iconic college films: the Marx Brothers’ *Horsefeathers*, National Lampoon’s *Animal House* and Spike Lee’s *School Daze*.

Credit 3 units. A&S : TH  A&S : IQ , HUM  BU : ETH

L14 E Lit 151 Literature Seminar for Freshmen

Reading courses, each limited to 15 students. Topics: selected writers, varieties of approaches to literature, e.g., Southern fiction, the modern American short story, the mystery; consult Course Listings. Prerequisite: first-year standing.

Credit 3 units. A&S : TH  A&S : IQ , HUM  BU : HUM  FA : Lit

L14 E Lit 152 Literature Seminar for Freshman

Credit 3 units. A&S : TH  A&S : IQ , HUM

L14 E Lit 153 Literature Seminar for Freshman

Reading courses, each limited to 15 students. Topics: selected writers, varieties of approaches to literature, e.g., Southern fiction, the modern American short story, the mystery; consult Course Listings. Prerequisite: first-year standing.

Credit 3 units. A&S : TH  A&S : IQ , HUM

L14 E Lit 155 Literature Seminar for Freshmen

Reading courses, each limited to 15 students. Topics: selected writers, varieties of approaches to literature, e.g., Southern fiction, the modern American short story, the mystery; consult Course Listings. Prerequisite: first-year standing.

Credit 3 units. A&S : TH  A&S : IQ , HUM  BU : BA

L14 E Lit 156 Literature Seminar for Freshmen

Reading courses, each limited to 15 students. Topics: selected writers, varieties of approaches to literature, e.g., Southern
Arts & Sciences

fiction, the modern American short story, the mystery; consult Course Listings. Prerequisite: first-year standing.
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM

L14 E Lit 160 Literature Seminar for Freshmen
The Monstrous Imagination. Reading course, limited to 15 students. Prerequisite: first-year standing.
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM

L14 E Lit 189 Literature Seminars for Freshmen
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM

L14 E Lit 190 Freshman Seminar African and Afro-American Culture
Same as AFAS 188
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD  BU : BA, ETH  FA : Lit

L14 E Lit 201C Text and Tradition
Same as Hum 201C
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM  FA : Lit

L14 E Lit 205C Literary Modernities: Text and Tradition
Same as Hum 205C
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM  FA : SSP

L14 E Lit 209 World Literature
This course teaches ways of reading literature across cultures, introducing students to works of great imaginative power from different geographical regions and cultures of the world. The course focuses on works that address the condition of exile in its various forms: migration, expulsion, internal displacement and cultural adaptation. Although works are drawn primarily from the 20th century, we consider the way in which exile might be said to be a foundational condition of narrative itself. Among the writers we read are V.S. Naipaul, Assia Djebar, W.G. Sebald and Amos Oz.
Same as Comp Lit 211
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM  FA : Lit

L14 E Lit 214C Introduction to Women's Texts
Same as WGSS 214C
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD  BU : HUM  FA : Lit

L14 E Lit 2151 Literature in English: Early Texts and Contexts
This course provides beginning students of English with a chronological outline of early literature in English from the middle ages to the late 18th century. It introduces them to the central themes, genres and forces that have shaped the early history of literature as well as the tools, vocabularies and critical practices of literary studies. We organize our semester around four themes: inventing a nation; the sacred and the secular; centers and margins; private and public. We study, among others, four of the following key texts and authors: Sir Gawain and the Green Knight, Chaucer, Shakespeare, Milton and one of Defoe's novels.
Credit 3 units.  A&S : TH  A&S : IQ, HUM  EN : H

L14 E Lit 2152 Literature in English: Modern Texts and Contexts
This course provides beginning students of English with a chronological outline of modern literature in English from Romanticism to the present. It introduces them to the central themes, genres and forces that have shaped the modern history of literature as well as the tools, vocabularies and critical practices of literary studies. We organize our semester around five themes: literary revolutions; questions of genre; subjectivity and authorship; gender, sexuality and identity; modernism. We study texts from Britain/Ireland, the United States and at least one example of global literature in English.
Credit 3 units.  A&S : TH  A&S : IQ, HUM  EN : H

L14 E Lit 228 Theater Culture Studies I
Same as Drama 228C
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM  FA : AH

L14 E Lit 229C Theater Culture Studies II
Same as Drama 229C
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM  FA : AH

L14 E Lit 241E Masterpieces of European Literature I
Masterpieces of Western literature in English translation: Homer through Dante.
Credit 3 units.  BU : HUM

L14 E Lit 245 Topics in Literature
Topics varies by semester.
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L14 E Lit 257 The Art of Poetry
An introduction to the critical vocabulary necessary for the study and evaluation of poetry; provides a basic understanding of prosody, poetic forms and figurative language, and the historical periods in which poetry has been written.
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM
L14 E Lit 258 Art of the Novel
In this course we read novels drawn from several literary traditions and a number of distinctive narrative modes. Among the questions we consider are those addressing the nature of narrative form, and the literary and stylistic choices made in order to express such things as character and consciousness, society and history, and the relation between the fictive and the real. There are two papers and several short writing assignments. Credit 3 units. A&S : TH A&S : IQ, HUM EN : H

L14 E Lit 302W Writing Modern War
The 20th century, as Graham Greene observed, was a century “in which there would never be a peace.” This writing-intensive course examines the ways in which modern writers have tried to describe warfare and its impact on both combatants and those on the “home front.”. Credit 3 units. A&S : TH, WI

L14 E Lit 303W Strangers and Savages, Aliens and Outcasts
This writing-intensive course focuses on a literary tradition united by its representation of passionate hatred and intolerance. Credit 3 units. A&S : TH, WI

L14 E Lit 304W Craft of Fiction: Historical Fiction
This writing-intensive course is a literature/creative writing hybrid course in which a number of contemporary historical fictions (meaning, fictions set in periods prior to the authors’ births, and sometimes incorporating real historical events or figures) are covered. Credit 3 units. A&S : TH, WI

L14 E Lit 305W Fabricating Lives
The premise of this writing-intensive course is that autobiography is not a straightforward narrative of the past but a conscious shaping of life into a meaningful design. Credit 3 units. A&S : TH, WI

L14 E Lit 306 Old English Literature: Beowulf
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM

L14 E Lit 307 The Writing of the Indian Subcontinent
The Indian subcontinent has in recent years yielded a number of writers, expatriate or otherwise, whose works articulate the postcolonial experience in the “foreign” English tongue. This course is designed as an introductory survey of such writing, drawing on select subcontinental writers. Covering both fiction and nonfiction by several authors, including R.K. Narayan, Salman Rushdie, Anita Desai, Amitav Ghosh, Sara Suleri, Micheal Ondaatje and Romesh Gunesekera, we discuss such issues as the nature of the colonial legacy, the status of the English language, problems of translation (linguistic and cultural), the politics of religion, the expatriate identity and the constraints of gender roles. Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : HUM FA : Lit

L14 E Lit 3071 Caribbean Literature in English
Rum! Fun! Beaches! Sun! This is the image of the Caribbean in America today. This course surveys literature and culture from these islands, looking both at and beyond this tourists’ paradise. It aims to introduce students to the region’s unmistakably vibrant tradition of multicultural mixture, while keeping an eye on the long history of slavery and rebellion out of which the islands’ contemporary situation formed. Along the way we encounter a wide variety of texts, from the earliest writing focused on life in urban slums, to the first novel ever to have a Rastafarian as its hero, to more contemporary considerations of the region’s uncertain place in a U.S.-dominated world. Toward the end of the course, we also look at important films such as The Harder They Come and discuss the most globally famous cultural product of the contemporary Caribbean: reggae music. The course involves readings from multiple genres and covers authors such as C.L.R. James, Derek Walcott, Jean Rhys, V.S. Naipaul, Jamaica Kincaid and Caryl Phillips. Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L14 E Lit 308 Topics in Asian-American Literature: Identity and Self-image
Topics in Asian-American literature that vary from semester to semester. Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : HUM FA : Lit

L14 E Lit 311 Topics in English and American Literature
Topics: themes, formal problems, literary genres, special subjects (e.g., the American West, science and literature, the modern short story). Consult Course Listings for offerings in any given semester. Credit 3 units. A&S : TH A&S : IQ, HUM FA : Lit

L14 E Lit 311E Electronic Poetry
An inquiry into new forms of screen art beginning with traditional printed poetry to varieties of virtual poetry emergent on the computer screen; the stream of programming code as a level of writerly activity. Credit 3 units. A&S : LA

L14 E Lit 311W Electronic Poetry
The primary focus in this writing-intensive course is to look at every possible kind of electronic poetry we can come up with in order to evaluate it as poetry. Credit 3 units. A&S : LA
L14 E Lit 312 Topics in English and American Literature
Topics: themes, formal problems, literary genres, special subjects (e.g., English and American Romanticisms, science and literature, the modern short story). Consult Course Listings for offerings in any given semester.
Credit 3 units. A&S : TH, WI A&S : IQ, HUM, WI BU : HUM
FA : Lit

L14 E Lit 3121 The Medieval Romance
The romance grows out of the epic: how we get from the fall of Troy to the fall of Troilus. Readings from Vergil’s Aeneid to Sir Gawain and the Green Knight.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L14 E Lit 3122 Topics in Literature: Heroes and Lovers
We read Beowulf, Sir Gawain and the Green Knight, Chaucer’s Troilus and Criseyde, The Mabinogion, The Tain, Margery Kempe and Malory’s Morte d’Arthur.
Credit 3 units. A&S : TH BU : HUM FA : Lit

L14 E Lit 312W Topics in English and American Literature: Literature of Consolation
This course explores the theme of consolation in medieval poetry. We read narratives that represent the consolation of a variety of melancholy figures — philosophers in exile, lovers in mourning, citizens in plague-ridden cities, and women disturbed by misogynous writing. We examine the connection between representations of consolation and the act of reading, and think about literature itself (along with other art forms) as a contested site of entertainment, moral guidance, self-fashioning and redemption. Authors may include Boccaccio, Boethius, Chaucer, Christine de Pizan, Abelard and Heloise, and the Pearl-poet. As a writing-intensive class, we spend time writing and talking about writing in the classroom. We read our literary texts as “arguments” about literature in addition to other topics, and we read secondary articles as examples of scholarly writing that we may or may not want to adopt as models.
Credit 3 units. A&S : TH, WI A&S : IQ, HUM

L14 E Lit 313 Topics in English and American Literature
Called the “Age of Revolution,” the Romantic Age of British literature, 1770–1830, witnessed the birth of new lyric forms, the effacement of traditional strictures on style and taste, and produced through poetic voice (and its quaverings and multiplications) what might be called, oversimply, the modern subject. Within a developing discourse of human rights and personal freedom, this growing assertion through poetry of individual expressivity allowed William Blake to construct in a single work a visual and verbal Jerusalem. It encouraged William Wordsworth to write a pathbreaking investigation of the sources of his own creativity that challenged conventional restraints on what topics can, and cannot, be confessed in poetry. Beginning with these two poets, we consider the historical contexts, and the sometimes competing histories of ideas, that shaped the six major British Romantic poets: Blake, Wordsworth, Samuel Taylor Coleridge, Lord Byron and John Keats. We follow an anthology for much of the poetry, including the poems and prose of influential contemporaries (female as well as male) who included the political philosopher Edmund Burke and Mary Wollstonecraft. Texts assigned also include Mary Shelley’s Frankenstein and Byron’s Don Juan.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L14 E Lit 314 Topics in English and American Literature
Credit 3 units. A&S : TH A&S : IQ, HUM BU : IS FA : Lit

L14 E Lit 315 Topics in American Literature
Topics: themes, formal problems, literary genres, special subjects (e.g., the American West, American autobiographical writing). Consult Course Listings for offerings in any given semester.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : IS FA : Lit

L14 E Lit 315W The Literature of the American Revolution
While not a historical survey, the course presents several case studies raising questions about later myth and contemporary reportage.
Credit 3 units. A&S : TH, WI BU : HUM

L14 E Lit 316 Topics in American Literature
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM

L14 E Lit 316W Topics in American Literature
Topic varies. Writing-intensive.
Credit 3 units. A&S : TH, WI A&S : IQ, HUM, WI

L14 E Lit 317W Topics in English and American Literature
Selected topics vary from semester to semester. Writing-intensive.
Credit 3 units. A&S : TH, WI A&S : IQ, HUM, WI BU : HUM

L14 E Lit 318 Topics in American Literature
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L14 E Lit 3191 Contemporary American Women Poets
An introduction to the work of contemporary American poets who are women; extensive reading of both poetry and prose. Readings include the work of poets such as Bishop, Rich, Plath, Sexton, Clampitt, Gluck, Moss, Graham, Howe, Dove, Oliver, Forche, Lauterbach.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit
L14 E Lit 3192 Interdisciplinary Studies in the Humanities, 20th Century: The European Avant-Garde
Same as Hum 3191
Credit 3 units. A&S : TH A&S : IQ, HUM

L14 E Lit 321 American Literature to 1865
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L14 E Lit 3211 Topics in 19th-Century American Writing
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L14 E Lit 322 American Literature 1865 to Mid-20th Century
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L14 E Lit 3222 20th-Century American Writers
Credit 3 units. A&S : TH FA : Lit

L14 E Lit 322C Major American Writers II
Representative works of American writing from 1880 to the present, with particular attention to fiction and poetry; authors include James, Stein, Hemingway, Faulkner, Ellison. Prerequisite: 6 units of sophomore literature, junior standing or permission of instructor.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L14 E Lit 322E Major American Writers II
Representative works of American writing from 1880 to the present, with particular attention to fiction and poetry; authors include James, Stein, Hemingway, Faulkner, Ellison. Prerequisites: 6 units of sophomore literature, junior standing or permission of instructor.
Credit units.

L14 E Lit 322W Major American Writers II
This writing-intensive course is intended as an in-depth introduction to arguably the two most significant American fiction writers of the first half of the 20th century.
Credit 3 units. BU : HUM

L14 E Lit 323 Selected American Writers
Intensive study of one or more American writers. Consult Course Listings for offerings in any given semester.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L14 E Lit 326 Selected American Writers
Credit 3 units. A&S : TH FA : Lit

L14 E Lit 327 Selected American Writers
Credit 3 units. A&S : TH FA : Lit

L14 E Lit 328W Selected English and American Writers
Credit 3 units. A&S : TH, WI A&S : IQ, HUM, WI BU : HUM

L14 E Lit 329 Selected English and American Writers
Credit 3 units. A&S : TH FA : Lit

L14 E Lit 3301 Rogues to Riches: Reading Vice and Virtue in American Life Writing
Since England used its Western colonies both as a means to wealth and a place to unload its convicts, stories of success in America have uncomfortably took up space beside tales of crime and roguery. This class examine texts that take up the roles of virtue and hard work, as well those of deceit and shiftlessness in the formation of a certain kind of American personality. Reading novels, autobiographies, slave narratives and rogue biographies in the context of sermons, advice manuals and financial advice books, we investigate how judgments of morality and immorality can quickly become messy. Beginning with Defoe's *Moll Flanders*, the story of an irredeemable female convict who makes it big in America, the class proceeds to read works that ostensibly seek to extol either a life of wickedness or a life of virtue, while invariably presenting a hodgepodge of both. Other readings might include Equiano's *Interesting Narrative*, Franklin's *Autobiography*, Tbe Memoirs of Stephen Burroughs (an account of 18th-century America's most famous forg er), The Narrative of Frederick Douglass, *The Life and Times of P. T. Barnum, Twain's Huckleberry Finn, Alger's Ragged Dick and A Cool Million*, Nathanel West's savage and obscene parody of the archetypal American success story.
Same as AMCS 330
Credit 3 units. A&S : TH A&S : IQ, HUM BU : BA FA : SSP

L14 E Lit 3311 Interdisciplinary Studies in the Humanities
Same as Hum 3311
Credit 3 units. A&S : TH A&S : IQ, HUM

L14 E Lit 331C Tragedy
Credit 3 units. A&S : TH BU : HUM FA : Lit

L14 E Lit 3322 Reading in the Renaissance: Texts and Practices
This course aims, first, to acquaint students with English Renaissance literature, from Shakespeare to Dryden; then to investigate the ways in which that literature might have been read by its original audience; and finally to consider how such knowledge might, or should influence, our own understanding and experience of Renaissance texts.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM
L14 E Lit 334 A History of the Golden Age of Children's Literature
A comprehensive survey of the major works for children written during this period.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L14 E Lit 3341 The History of Children’s Literature from the End of the Golden Age to the Age of Multiculturalism
A continuation of E Lit 334, this is a comprehensive survey looking at the major works of children's and adolescent literature in both Britain and America.
Credit 3 units. BU : HUM

L14 E Lit 335 Modern Drama 1850–1920
The emergence of modern drama: emphasis on Ibsen, Strindberg, Chekhov, Shaw.
Credit 3 units. A&S : TH BU : HUM FA : Lit

L14 E Lit 3351 Modern Drama 1880–1945
Major figures of modern drama: Ibsen, Strindberg, Shaw, Chekhov, Lorca, Synge, Pirandello, Brecht and O’Neill. Close literary study and consideration of these plays as examples of the art of the stage. Reference also is made to contemporary experiments in the other arts and to major literary movements in the time period under consideration.
Credit 3 units. A&S : TH BU : HUM FA : Lit

L14 E Lit 3361 Modern Drama, 1945 to the Present
Course concentrates on the development of modern drama from 1945 to the present. Focus is on both literary and theatrical techniques as well as the examination of trends in the contemporary theater from Samuel Beckett through Sam Shepard. Perspective is comparative and international in scope, with particular attention given to women and minority playwrights.
Credit 3 units. A&S : TH BU : HUM FA : Lit

L14 E Lit 3370 Contemporary Stages: An Anglo-American History of Performance after 1950
Credit 3 units.

L14 E Lit 3371 The Theater of the Absurd
Credit 3 units. A&S : TH FA : Lit

L14 E Lit 339 Topics in 19th-Century American Writing
Credit 3 units. A&S : TH A&S : IQ, HUM FA : Lit

L14 E Lit 3391 Topics in 19th- and 20th-Century American Writing: American Short Fiction
This course is directed toward a broad range of majors and nonmajors with a serious but not scholarly interest in American Short Fiction.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM

L14 E Lit 340 Topics in 20th-Century American Writing
An introduction to major American works and writers from the later 19th century through the mid-20th century. Writers studied include Twain, James, Crane, Fitzgerald, Hemingway, Faulkner, Frost, Eliot and Stevens. The course assumes no previous acquaintance with the material and is directed toward a broad range of majors and nonmajors with a serious but not scholarly interest in the subject. Students with little or no background in literature might be advised to take E Lit 213C Chief American Writers, while English majors looking to do advanced work should consider the 400-level American literature sequence. Students who have taken E Lit 213C should not enroll in this course.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L14 E Lit 340W The American Novel: Split and Hybrid American Identities
Examination of the struggle to form an enabling identity for author, characters and text against the divisive pressures of family and society.
Credit 3 units. A&S : TH, WI A&S : IQ, HUM, WI BU : BA, HUM

L14 E Lit 342W The Romance: Medieval to Modern
Credit 3 units.

L14 E Lit 343 Two Cultures: Literature and Science
The relation between biology and literature as it has been examined and expressed in poetry, fiction and nonfiction of the past two centuries.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM

L14 E Lit 344W Writing About Performance
In this writing-intensive course, students develop critical strategies for writing about theater and other performance events, in the present and in a range of historical periods.
Credit 3 units. A&S : TH WI BU : HUM

L14 E Lit 3451 Topics in American Literature: Sexual Politics in Film Noir and Hardboiled Literature
Emerging in American films most forcefully during the 1940s, film noir is a cycle of films associated with a distinctive visual style and a cynical worldview. In this course, we explore the sexual politics of film noir as a distinctive vision of American sexual relations very bit as identifiable as the form’s stylized lighting and circuitous storytelling. We explore how and why sexual paranoia and perversion seem to animate this genre and why

This course is directed toward a broad range of majors and nonmajors with a serious but not scholarly interest in American Short Fiction.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM
these movies continue to influence “neo-noir” filmmaking into the 21st century, even as film noir’s representation of gender and sexuality is inseparable from its literary antecedents, most notably, the so-called “hard-boiled” school of writing. We read examples from this literature by Dashiell Hammett, James Cain, Raymond Chandler and/or Cornell Woolrich, and discuss these novels and short stories in the context of other artistic and cultural influences on gendered power relations and film noir. We also explore the relationship of these films to censorship and to changing post-World War II cultural values. Films screened in complete prints or in excerpts include many of the following: The Maltese Falcon, Double Indemnity, Murder My Sweet, Phantom Lady, Strangers on a Train, The Big Sleep, The Killers, Mildred Pierce, The High Wall, Sudden Fear, The Big Combo, Laura, The Glass Key, The Big Heat, Kiss Me Deadly, The Crimson Kimono, Touch of Evil, Alphaville, Taxi Driver, Devil in a Blue Dress, The Bad Lieutenant and Memento.

Same as Film 345
Credit 3 units.  A&S : TH    A&S : IQ , HUM

L14 E Lit 346 British Enlightenment Culture
To capture the range and vibrancy of British enlightenment culture, this class invites students to read broadly and imaginatively in the most influential literary, economic and philosophical texts of the time.
Credit 3 units.  A&S : TH    A&S : IQ , HUM    BU : IS

L14 E Lit 347 Masterpieces of Literature I
Masterpieces of Western literature in English translation: Homer through Dante.
Credit 3 units.  A&S : TH    A&S : IQ , HUM    BU : HUM

L14 E Lit 348 Masterpieces of Literature II
Masterpieces of Western literature in English translation: the 17th century through the 20th century.
Credit 3 units.  A&S : TH    A&S : IQ , HUM    BU : HUM

L14 E Lit 3500 Introduction to Postcolonial Literature and Theory
At its zenith, the British Empire encompassed almost a quarter of the globe, allowing the diminutive island nation unprecedented economic, military and political influence upon the rest of the world. This course introduces some of the foundational responses to this dominance, both literary and theoretical, by the colonized and their descendants. We examine important critiques of colonialism by theorists such as Frantz Fanon, Aimé Césaire, Edward Said, Homi Bhabha and Gayatri Spivak, as well as literary works that reflect a postcolonial critique by authors such as V.S. Naipaul, George Lamming, Doris Lessing and Ngugi wa Thiong’o. The course interrogates how literature could be said to help consolidate Empire as well as ways in which it might function as rebellion against imperial power, with a view toward teasing out the problematics of race, gender, language, nationalism and identity that postcolonial texts so urgently confront.
Credit 3 units.  A&S : TH , CD , SD    A&S : IQ , HUM , LCD

L14 E Lit 3522 Topics in Literature
Topics vary by semester.
Credit 3 units.  A&S : TH    A&S : IQ , HUM    BU : IS    FA : Lit

L14 E Lit 3524 Topics in Literature
Credit 3 units.  A&S : TH    A&S : IQ , HUM    BU : HUM

L14 E Lit 3525 Topics in English Literature
Credit 3 units.  A&S : TH    A&S : IQ , HUM    BU : IS

L14 E Lit 3530 Topics in American Culture Studies
Same as AMCS 3520
Credit 3 units.  A&S : TH    A&S : IQ , HUM

L14 E Lit 3531 Selected English and American Writers
Credit 3 units.  A&S : TH    A&S : IQ , HUM    BU : HUM    FA : Lit

L14 E Lit 355 Topics in Literary Criticism and Theory
Credit 3 units.  A&S : TH    A&S : IQ , HUM    BU : HUM    FA : Lit

L14 E Lit 3551 Topics: Literary Criticism and Theory: Ways of Approaching a Literary Text
Credit 3 units.  A&S : LA

L14 E Lit 356 The Art of the Novel
This course takes as its starting point traditional models of the novel and then examines a variety of novels from different traditions — American, British, continental — which, in differing ways, play against this type, bending, challenging or ignoring “the rules.” We are interested in attempting to understand the logic of such idiosyncratic forms, both why each writer is attempting to defy or undo our understanding of a normative “reality” and of the usual novelistic proprieties and how each novel provides its own manner of coherence.
Credit 3 units.  A&S : TH    A&S : IQ , HUM    BU : HUM    FA : Lit

L14 E Lit 3571 20th-Century Poetry
Credit 3 units.  A&S : TH    A&S : IQ , HUM    BU : HUM

L14 E Lit 358 Studies in Short Fiction
Study of the work of four novelists who also were fascinated by shorter forms throughout their careers: D. H. Lawrence, Joseph Conrad, Henry James and William Faulkner. The course
is concerned with the variety of forms their work takes as it is shaped by the very individual visions of each.
Credit 3 units.  A&S : TH  BU : HUM  FA : Lit

L14 E Lit 3581 Historical and Comparative Linguistics
Same as Ling 320
Credit 3 units.  A&S : LA  A&S : IQ, SSC  FA : Lit

L14 E Lit 3582 Black Literature: Race, Class and Writing in the United States and the Caribbean, 1900–1950
Study of the differences in literary tradition arising from the divergent social, racial and educational milieus of the United States and the West Indies.
Credit 3 units.  A&S : TH, SD  BU : BA, HUM

L14 E Lit 359 19th-Century American Women Writers
Same as WGSS 358
Credit 3 units.  A&S : TH, WI  A&S : IQ, HUM, WI  BU : HUM  FA : Lit

L14 E Lit 360 The Writings of Philip Roth
Fiction by Philip Roth in chronological order from his earliest to his last major effort.
Credit 3 units.  A&S : TH

L14 E Lit 3601 The Traffic in Women and Contemporary European Cinema
What binds society together? One of the most influential answers to this question was offered by French anthropologist Claude Lévi-Strauss. He argued that the fabric of a society is formed by a network of exchanges among kinship groups, which circulate three kinds of objects: economic goods, linguistic signs and women. In this course, we inquire into the place of women in this argument. We trace rudiments of the traditional marriage system (a father figure still “gives away” the bride in the marriage ceremony), its range of displacements in a global economy (transnational wives, nannies and domestic servants), the role of new media in the formation of new systems of trafficking (internet brides), and the place of the debate on gay marriage within the larger conversation. We read texts by Friedrich Engels, Sigmund Freud, Marcel Mauss, Claude Lévi-Strauss, Gayle Rubin, Luce Irigaray, Judith Butler, Barbara Ehrenreich and Arlie Russell Hochschild; and we watch a number of films that dramatize the traffic in women in the context of contemporary Europe: Coline Serreau’s Chaos, Lukas Moodysson’s Lilja 4-ever, Cristian Mungiu’s Occident, Nilita Vachani’s When Mother Comes Home for Christmas, Fatih Akin’s Head-on, Jean-Pierre and Luc Dardenne’s The Silence of Lorna.
Credit 3 units.  A&S : TH, CD, SD  A&S : IQ, HUM, LCD

L14 E Lit 362 The 18th Century: A Study of Major Texts
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM

L14 E Lit 363C Theater Culture Studies III
Same as Drama 365C
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : ETH  FA : Lit, SSP

L14 E Lit 365F The Bible as Literature
Extensive reading in English translations of the Old Testament and the New Testament, with emphasis on literary forms and ideas.
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : ETH  FA : Lit

L14 E Lit 366 The Development of American Romantic Thought: Enlightenment Confidence to Postmodern Questioning
We examine the revolutionary shift in human sensibility commonly known as “Romanticism” by tracing its development in America from the “Fireside Poets” (Bryant, Longfellow) and Transcendentalism (Emerson, Whitman) to anticipations of Modernism and Postmodernism (Henry Adams, Louis Sullivan, Charles Ives). Fulfills the 19th century and American literature requirements for the English major.
Credit 3 units.

L14 E Lit 367 Religious Themes in Contemporary Literature
The use by selected 20th-century writers of religious themes and symbols. Close analysis of the literary techniques by which religious concepts and images are developed and differing insights of writers representing a broad spectrum of contemporary attitudes toward religious issues.
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : ETH  FA : Lit

L14 E Lit 368 The Development of American Romantic Thought: Enlightenment Confidence to Postmodern Questioning
We examine the revolutionary shift in human sensibility commonly known as “Romanticism” by tracing its development in America from the “Fireside Poets” (Bryant, Longfellow) and Transcendentalism (Emerson, Whitman) to anticipations of Modernism and Postmodernism (Henry Adams, Louis Sullivan, Charles Ives). Fulfills the 19th century and American literature requirements for the English major.
Credit 3 units.

L14 E Lit 369 Reading Sex in Premodern England
This course introduces students to the literary representation of gender and sexuality in England from the medieval period to the 18th century. To understand a tradition that addressed the intractable problem of human sexuality in terms very different from ours, we ask: how does premodern culture imagine gendered identities, sexual difference, and erotic desire? How do various contexts — medical, religious, social, private, public — inform the literary representation of gender and sexuality? What are the anatomies and economies of the body, the circuits of physical pleasure, and the disciplines of the self that characterize human sexuality? Students have the opportunity to study romances, saints’ lives, mystical writings, diaries, plays, sex guides, novels and scientific treatises. By learning how to “read sex” in premodern literature, students acquire a broad cultural
and historical understanding of English sexualities before the descent of modern sensibilities.
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD

L14 E Lit 370 The Age of Victoria
Works of fiction, poetry, journalism, children’s literature, political cartoons, book illustrations, genre paintings and photographs. The course aims to give a sense of the age in all its diversity and peculiarity, as well as to concentrate on a few central issues and developments in 19th-century British society: e.g. industrialism, materialism, feminism, liberalism, the rise of the social sciences. Readings include works by Tennyson, Matthew Arnold, Lewis Carroll, Dickens, George Eliot, John Stuart Mill, Trollope, Oscar Wilde and Edmund Gosse.
Credit 3 units. A&S : TH BU : HUM FA : Lit

L14 E Lit 371 The Age of Chaucer
Study of the ways in which literature and history interplay between 1340 and 1400. Literary texts include writings by Chaucer, Langland, the Pearl Poet and anonymous composers of songs, dream visions, romances, satires, debates and low stories; attempts to move from these to theoretical and over into historical texts, alienating where necessary and translating where possible.
Credit 3 units. A&S : TH BU : HUM FA : Lit

L14 E Lit 372 The Renaissance
Major texts of the European Renaissance examined to set English literary achievement in a continental context. Among authors studied: Petrarch, Castiglione, Erasmus, More, Luther, Wyatt, Rabelais, Montaigne, Shakespeare, Spenser, Jonson, Milton. Prerequisite: 6 units of literature, junior standing or permission of instructor.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L14 E Lit 3725 Topics in Renaissance Literature
Topics course in Renaissance Literature.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM

L14 E Lit 3731 Writing and the Representation of Pain
Writing-intensive course on the representation of pain at every level, from private suffering to public policy. Course reader consists of examples of or extracts from a diversity of materials: the Bible and Ovid, medieval religious lyric, saints’ lives, visions of hell and damnation, descriptions of visionary illness, Freud’s Anna Q, Kafka’s In the Penal Colony, Wilde’s The Nightingale and the Rose, Woolf’s On Being Ill, Artaud and the Theater of Cruelty; autobiographical and other writings by Susan Sontag and Inga Clendinnen; theory by Bataille, Deleuze, Dollimore and Elizabeth Grosz; work on pain by Leder, Morris, Rey and others; poetry by Anne Sexton, Sylvia Plath, Gwen Harwood, Alan Jenkins and others. We also read Elaine Scarry’s The Body in Pain and two recent novels: Andrew Miller’s Ingenious Pain and Manil Suri’s The Death of Vishnu.
Credit 3 units. A&S : TH, WI BU : HUM

L14 E Lit 374W Epistolary Literature in the 18th Century: Other Peoples’ Letters
In this writing-intensive course, we examine the attraction the letter held for authors and readers alike, taking into consideration the advantages and the disadvantages of the form, its role in the development of the early novel, and current theories of epistolary writing.
Credit 3 units. A&S : TH, WI A&S : IQ, HUM, WI BU : HUM

L14 E Lit 375 The Romantic Period
Credit 3 units. A&S : TH FA : Lit

L14 E Lit 3752 Modern British Novel
Credit -6 unit.

L14 E Lit 375A American Culture Studies: Methods and Visions
Same as AMCS 375A
Credit 3 units. A&S : TH, WI A&S : IQ, HUM EN : H

L14 E Lit 375C Pastoral Literature
Same as Comp Lit 375
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD FA : Lit

L14 E Lit 376 The Victorian Period
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L14 E Lit 3778 Comparative Studies in the Novel
Same as Comp Lit 3778
Credit 3 units. A&S : TH FA : Lit

L14 E Lit 381 Banned Books
Why would anyone want to burn a book? Under what circumstances would you support censorship? Several years ago a Russian student was exiled to Siberia for possessing a copy of Emerson’s Essays; today, school boards in the United States regularly call for the removal of Huckleberry Finn and The Catcher in the Rye from classrooms and library shelves. Actions like these dramatize the complex interconnections of literature and society, and they raise questions about what we read and the way we read. The course explores these issues by looking closely at several American and translated European texts that have been challenged on moral, sociopolitical, or religious grounds to determine what some readers have found so threatening about these works. Possible authors: Goethe,
Arts & Sciences

Voltaire, Rousseau, Defoe, Hawthorne, Flaubert, Twain, Chopin, Brecht, Salinger, Aldous Huxley, Ray Bradbury. Brief daily writing assignments.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH FA : Lit

L14 E Lit 3831 Topics in African-American Poetry
Topics course with offerings varying depending on semester. Same as AFAS 3838
Credit 3 units. A&S : TH BU : HUM FA : Lit

L14 E Lit 3838 Topics in African-American Poetry
Same as AFAS 3838.
Credit 3 units. A&S : TH FA : Lit

L14 E Lit 3841 Gender and Consumer Culture in U.S. Fiction of the Late 19th and Early 20th Century
Same as WGSS 384
Credit 3 units. A&S : TH, SD, WI A&S : IQ, HUM, SD

L14 E Lit 387 African-American Literature: Early Writers to the Harlem Renaissance
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD

L14 E Lit 388 African-American Literature: African-American Writers Since the Harlem Renaissance
African-American literature in the 20th and 21st centuries grows from a Harlem Renaissance into a world-shaping institution. Guggenheim, Pulitzer and Nobel prize winners; card-carrying Communists; rock-ridden Republicans and Black Power nationalists; Broadway playwrights; Book-of-the-Month Club novelists; and even a U.S. president are among the many whose fictions and memoirs we study with special attention to the intimate links between black writing and black music. The syllabus thus features authors ranging from poet Alice Dunbar Nelson (born 1875) to satirist Colson Whitehead (born 1969), with more than a dozen stops in between. Written assignments may include two papers and two exams. Prerequisite: none, but related classes such as E Lit 215 and/or AFAS 208 are suggested. Satisfies the American literature requirement in English, and/or one 300-level elective requirement in AFAS.
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD

L14 E Lit 3881 Black Women Writers
In this class we explore the range of writing by African-American women over an approximately 200-year span. Many of the texts we explore are novels, although we read autobiographies, poetry and essays, too. Authors studied might include Phillis Wheatley, Pauline Hopkins, Marita Bonner, Gayl Jones, Lynn Nottage and others.
Same as AFAS 3651

L14 E Lit 3891 Shakespeare’s Sonnets: Framing the Sequence
Same as Hum 3951
Credit 3 units. A&S : TH A&S : IQ, HUM

L14 E Lit 395 Shakespeare
Credit 3 units.

L14 E Lit 395 Shakespeare’s Sonnets: Framing the Sequence
Same as Hum 3951
Credit 3 units. A&S : TH A&S : IQ, HUM

L14 E Lit 395 Shakespeare
Credit 3 units.

L14 E Lit 395C Shakespeare
Introductory course emphasizing critical interpretation. Representative plays are studied in detail. Required of all English majors and minors.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L14 E Lit 399 Senior Research Seminar
This course is tailored to the needs of students who are pursuing honors in English in their senior year. It develops students’ ability to gauge how different approaches affect the research and the outcome of a project in literary studies. It guides them in their research by analyzing and discussing research design, the construction of an archive, and the assessment and use of sources. Assignments include annotated bibliographies,
summarizes of the critical debate on student topics, abstract writing, research presentations, as well as drafts and final versions of chapters or essays. We workshop many of these assignments in the classroom and practice peer review. The seminar stretches over two semesters, ending before spring break, when honors work is due in the college. It is required for students who pursue honors by course work and by thesis. Credit 3 units.

L14 E Lit 3991 Senior Research Seminar I
This course is tailored to the needs of students who are pursuing honors in English in their senior year. It develops students’ ability to gauge how different approaches affect the research and the outcome of a project in literary studies. It guides them in their research by analyzing and discussing research design, the construction of an archive, and the assessment and use of sources. Assignments include annotated bibliographies, summaries of the critical debate on student topics, abstract writing, research presentations, as well as drafts and final versions of chapters or essays. We workshop many of these assignments in the classroom and practice peer review. The seminar stretches over two semesters, ending before spring break, when Honor's work is due in the College. It is required for students who pursue honors by course work and by thesis. Credit 3 units.

L14 E Lit 3992 Senior Research Seminar II
This course is tailored to the needs of students who are pursuing honors in English in their senior year. It develops students’ ability to gauge how different approaches affect the research and the outcome of a project in literary studies. It guides them in their research by analyzing and discussing research design, the construction of an archive, and the assessment and use of sources. Assignments include annotated bibliographies, summaries of the critical debate on student topics, abstract writing, research presentations, as well as drafts and final versions of chapters or essays. We workshop many of these assignments in the classroom and practice peer review. The seminar stretches over two semesters, ending before spring break, when Honor's work is due in the College. It is required for students who pursue honors by course work and by thesis. Credit 2 units.

L14 E Lit 4003 Blacks in Fiction
Credit 3 units. A&S : TH FA : Lit

L14 E Lit 402 Introduction to Graduate Studies I: Research
Introduction to academic scholarship and related professional activities. A workshop in developing topics, conducting research, preparing and presenting conference papers, articles and grant proposals. Credit 3 units. A&S : TH A&S : IQ, HUM FA : Lit

L14 E Lit 403 Black and White in American Drama
This course addresses the complex issue of race in America through the 19th and 20th centuries as dramatized by American playwrights, black and white. Authors include Countee Cullen, Lillian Hellman, Eugene O'Neill, Jean Toomer, Langston Hughes and Arthur Miller. Prerequisites: junior standing, two 300-level courses or better. Credit 3 units. A&S : TH FA : Lit

L14 E Lit 404 Topics for Writers: Beckett
Waiting for Godot, Happy Days, Krapp's Last Tape: these are but three of Samuel Beckett’s revolutionary texts for theater. The complete canon of plays is examined for structure and compositional elements. Students undertake exercises in dramatic composition and perform a chamber presentation of Endgame. Course is intended for writers with some experience of the dramatic form. Intending students must interview with instructor in November. Credit 3 units. A&S : LA FA : Lit

L14 E Lit 405 Living Influences: Poets and the Poets Who’ve Shaped Them
This course examines a number of very contemporary collections of poetry (e.g. from first-book writers such as Karen Volkman and Greg Williamson, to more established writers such as Carl Phillips and Frank Bidart) to discover how generations of writers speak to and through one another. The course considers the nature and possible anxieties of writerly influence and how traditional and/or canonical writers’ voices, verse, and vision have shaped a number of poets writing today. This class requires at least a basic knowledge of poetry in English up to the 1950s as we move freely among writers such as Ben Jonson, George Herbert, Gerard Manly Hopkins and Emily Dickinson, as well as Pound, Eliot, Lowell and Plath. Credit 3 units. A&S : TH FA : Lit

L14 E Lit 407 Old English, Introductory
Study of the Anglo-Saxon language and introduction to major prose and short poetry of the period. Prerequisites: junior standing and 6 units of literature. Credit 3 units. A&S : LA FA : Lit

L14 E Lit 408 Old English Literature
Close study of some major literary texts (e.g., Beowulf, the Exeter book) and major issues (e.g., Anglo-Saxon and Latin culture, traditions of heroic literature) of the Anglo-Saxon tradition. Prerequisite: E Lit 407 or permission of instructor. Credit 3 units. A&S : LA FA : Lit

L14 E Lit 410 Medieval English Literature I
Credit 3 units. A&S : TH A&S : IQ, HUM FA : Lit
L14 E Lit 4101 Medieval English Literature II
Topics course in Medieval English literature. Credit 3 units. A&S : TH, A&S : IQ, HUM

L14 E Lit 411 Old and Middle English Literature
Early English literature from Beowulf and Anglo-Saxon poetry, in translation, through major works in Middle English of the 14th and 15th centuries, exclusive of Chaucer. Credit 3 units. A&S : TH, FA : Lit

L14 E Lit 4111 Interdisciplinary Studies in the Humanities
Same as Hum 4111 Credit 3 units. A&S : TH, A&S : IQ, HUM

L14 E Lit 413 17th-Century English Literature: 1603–1660
Selected readings in English literature from Donne and Jonson through Dryden. Credit 3 units. A&S : TH, A&S : IQ, HUM, FA : Lit

L14 E Lit 415 18th-Century English Literature
Selected readings in English literature from Pope and Swift through the age of Johnson. Credit 3 units. A&S : TH, A&S : IQ, HUM, FA : Lit

L14 E Lit 415A Readings in 19th-Century English Literature
Credit 3 units. A&S : TH, FA : Lit

L14 E Lit 416 English Literature of the Romantic Period
Credit 3 units. A&S : TH, FA : Lit

L14 E Lit 4172 Roman Remains: Traces of Classical Rome in Modern British Literature
Same as Hum 4171 Credit 3 units. A&S : TH, A&S : IQ, HUM

L14 E Lit 418 Victorian Literature 1830–1890
Readings in such authors as Carlyle, Tennyson, Browning, Mill, Arnold and Pater. Credit 3 units. A&S : TH, A&S : IQ, HUM, FA : Lit

L14 E Lit 420 Topics in English and American Literature
Comparing the literatures — readings in the literature and theory of English and American Literature. Topics vary according to semester offerings. Credit 3 units. A&S : TH, A&S : IQ, HUM, FA : Lit

L14 E Lit 4204 Film Theory
Same as Film 420

Credit 3 units. A&S : TH, WI, A&S : IQ, HUM, WI, FA : Lit

L14 E Lit 423 Topics in American Literature
Credit 3 units. A&S : TH, SD, A&S : IQ, HUM, SD, FA : Lit

L14 E Lit 4231 Topics in American Literature I
Credit 3 units. A&S : TH, A&S : IQ, HUM, FA : Lit

L14 E Lit 4232 Slavery and the American Imagination
Credit 3 units. A&S : TH, A&S : IQ, HUM, FA : Lit

L14 E Lit 424 Topics in American Literature II: Modernisms in America
This course offers an advanced introduction to both the literature and the concept of modernism, the "ism" used to mark the experimental verve of early 20th-century writing and to grasp its ties to modernity or the modern social world. As the course title suggests, we devote most of our time to the career of modernism in the United States, a place imagined as both the modernist nation par excellence and the desert modernism escaped to be born. Three groups of primary texts — early modernist experiments, 1920s modernist landmarks and Great Depression revisions — illuminate the grand ambitions of eccentric literary forms and sequestered avant-garde movements; the public disputes and buried alliances between "high" expatriate and Harlem Renaissance modernisms; and the influential Depression-era reinterpretation of modernism as reactionary self-indulgence. The syllabus features fiction, poetry and drama by old and new literary celebrities: Djuna Barnes, John Dos Passos, T.S. Eliot, F. Scott Fitzgerald, Mike Gold, Ernest Hemingway, Nella Larsen, Meridel LeSueur, Claude McKay, Clifford Odets, Tillie Olsen, Ezra Pound, Jean Toomer and Richard Wright. A shorter list of critical essays highlights modernism's tendency to theorize itself while introducing 21st-century perspectives from the “New Modernist Studies.” Satisfies the American literature requirement. For undergraduates, junior or senior standing is required. Credit 3 units. A&S : TH, A&S : IQ, HUM, FA : Lit

L14 E Lit 4241 In the Kingdom of Swing — Black American Culture
An examination of the development of African-American literature and culture between 1929 and 1941. Credit 3 units. A&S : TH, FA : Lit

L14 E Lit 4243 Contemporary African-American Drama
A close study of selected plays from Africa, the Caribbean and the United States. We consider plays by Lonnie Carter, John Pepper Clark, Adrienne Kennedy, Wole Soyinka, Efua T. Sutherland, Derek Walcott and Edgar White, among others. Credit 3 units. A&S : TH, FA : Lit
L14 E Lit 4244 Topics in African-American Literature
Credit 3 units. A&S: TH A&S: IQ, HUM FA: Lit

L14 E Lit 425 Early American Literature: American Modernisms
This seminar offers an advanced introduction to both the literature and the concept of modernism, the “ism” used to mark the experimental verve of early 20th-century writing and to grasp its ties to modernity, or the modern social world. As the course title suggests, we devote most of our time to the career of modernism in the United States, a place imagined as both the modernist nation par excellence and the desert modernism escaped to be born. Three groups of primary texts — early modernist experiments, 1920s modernist landmarks, and Great Depression revisions — illuminate the grand ambitions of eccentric literary forms and self-sequestered avant-garde movements; the public disputes and buried alliances between “high” expatriate and Harlem Renaissance modernisms; and the influential Depression-era reinterpretation of modernism as reactionary self-indulgence. The syllabus features fiction, poetry and drama by old and new literary celebrities: Djuna Barnes, John DosPassos, T. S. Eliot, F. Scott Fitzgerald, Mike Gold, Ernest Hemingway, Ella Larsen, Meridel LeSueur, Claude McKay, Clifford Odets, Tillie Olsen, Ezra Pound, Jean Toomer and Richard Wright. A shorter list of critical essays highlights modernism’s tendency to theorize itself while introducing 21st-century perspectives from the “New Modernist Studies.”. Credit 3 units. A&S: TH A&S: IQ, HUM FA: Lit

L14 E Lit 428 Modernism and Postmodernism
Readings in early sources of 20th-century developments, followed by a selective survey of literary discourse from the 1920s through the 1990s in the United States. Prerequisites: junior standing and 6 units of literature or graduate standing. Credit 3 units. A&S: TH FA: Lit

L14 E Lit 4282 English Modernist Fiction
The first half of the 20th century produced some of English fiction’s greatest individual achievements, linked by writers’ attempts to represent, through narrative experiments, a world in which many certainties about self and society were dissolving. Attentive reading of 10 novels or short story collections; study of the historical and cultural contexts to which these writers were responding. Among writers considered: E.M. Forster, Virginia Woolf, D.H. Lawrence, Rebeca West, Joseph Conrad, Katherine Mansfield and Ford Madox Ford. Credit 3 units. A&S: TH

L14 E Lit 429 American Fiction Since 1945
Credit 3 units. A&S: TH A&S: IQ, HUM FA: Lit

L14 E Lit 431 English Drama, Exclusive of Shakespeare, to 1642
Studies of selected major plays against a background of change and tradition in English drama from its beginnings to the closing of the theaters. Credit 3 units. A&S: TH FA: Lit

L14 E Lit 432 Topics in Renaissance Drama
A study of Elizabethan and Jacobean theatrical culture — the plays, players, playwrights and audiences of public theaters, private theaters and banqueting halls. Study includes the plays of Lyly, Kyd, Marlowe, Jonson, Chapman, Ford, Beaumont, Fletcher, Marston, Middleton, Webster and Shakespeare. Credit 3 units. A&S: TH FA: Lit

L14 E Lit 4323 Reading in the Renaissance: Texts and Practices
Examination of reading practices among original audiences for Wyatt, Sidney, Shakespeare, Donne, Jonson, Herrick, Marvell, Rochester and Dryden and application to our understanding and experience of early modern texts.
Credit 3 units.

L14 E Lit 434 Topics in English and American Drama
Varies from semester to semester.
Credit 3 units. A&S : TH A&S : IQ, HUM FA : Lit

L14 E Lit 435 Childhood and Society: The Formation of Children’s Literature
An intensive examination of some of the major works that have shaped the canon and conception of children’s literature in the English-speaking world. Among the authors studied are George MacDonald, Mark Twain, Kenneth Grahame, L. Frank Baum, Lewis Carroll, Robert Louis Stevenson, Rudyard Kipling and others. If time permits at the end of the course, we examine some works that appeared in the Brownies’ Book, the children’s publication of the NAACP that appeared in 1920 and 1921, edited by W.E.B. Du Bois and Jessie Fauset, a significant attempt to create a literature for children of color.
Credit 3 units. A&S : TH FA : Lit

L14 E Lit 436 Craft of Fiction: Dialogue
A literature/creative writing hybrid course, we concentrate on the element of dialogue in fiction. We focus on 20th-century novels and stories that use dialogue in radical ways or place conversational dynamics at the center of their projects, probably including works by Don DeLillo, Henry Green, Grace Paley and Philip Roth. We consider the architecture of conversations — the evasions and hidden agendas; the art of the well-made monologue; how speech is shaped by varieties of linguistic capital; and secrets as a narrative device, extending into issues of conspiracy and paranoia. Because this is a craft rather than a traditional literature course, we approach the texts as creative writers (although experience as such is not required), considering what they have to say through a primary emphasis on the means they develop to say it, and we put the craft into practice: assignments include both a critical paper and a short story using radical elements of dialogue. We also make room for some consideration of the dynamics of actual conversations, outside of fiction, through a reading of some conversational analysts and speech-act theorists, and through some real-world experiments.
Credit 3 units. A&S : TH

L14 E Lit 437 Literary Theory: The Subject and Subjection
Credit 3 units.

L14 E Lit 438 African-American Comedy
Credit 3 units. A&S : TH FA : Lit

L14 E Lit 4381 Aesthetic Negativity: Adorno, Benjamin and Kracauer on Literature, Art and Media
Same as Comp Lit 438
Credit 3 units. A&S : TH A&S : IQ, HUM FA : AH, SSP

L14 E Lit 439 Literary Theory
Literary Theory course.
Credit 3 units. A&S : TH A&S : IQ, HUM

L14 E Lit 440 Modernism
Credit 3 units. A&S : TH A&S : IQ, HUM

L14 E Lit 441 Literature of Catastrophe
In this course we examine the ways in which art, both literary and visual, attempt to address catastrophic events.
Credit 3 units. A&S : TH

L14 E Lit 442 Introduction to Romantic Poetry
We read the poetry of the major Romantics — Blake, Wordsworth, Coleridge, Shelley, Byron and Keats — with attention to their biographical, historical, economic and cultural contexts.
Credit 3 units.

L14 E Lit 4454 Irish Women Writers
Credit 3 units. A&S : TH FA : Lit

L14 E Lit 446 Introduction to Contemporary Poetry
Introduction to contemporary poetry.
Credit 3 units. A&S : TH FA : Lit

L14 E Lit 4461 American Studies and Poetry: The 20th Century
Credit 3 units. A&S : TH FA : Lit

L14 E Lit 447 Modern British and American Poetry
Modern poetic forms, schools and techniques. Readings in such poets as Yeats, Eliot, Pound, Moore, Auden, Bishop, Hill.
Credit 3 units. A&S : TH FA : Lit

L14 E Lit 4471 Modern Poetry I: Modernisms
American and British poetry before, during and after World War I. Readings include Hardy, Yeats, Frost, Stein, Eliot, Williams, Moore, Johnson, Pound, H.D. and Stevens, as well as selections from Wordsworth, Whitman and Dickinson. First half of two-course sequence; second half optional.
Credit 3 units. A&S : TH A&S : IQ, HUM FA : Lit
L14 E Lit 4472 Modern Poetry II: Postmodernisms
American and British poetry from 1930 to the present. Readings include Stevens, Riding, Crane, Zukofsky, Bunting, Auden, Brooks, Olson, Bishop, Merrill, Ashbery, Hill, Ammons, Rich, Wright and Howe. Prerequisite: E Lit 4471 or permission of instructor.
Credit 3 units. A&S : TH FA : Lit

L14 E Lit 4485 Topics in Irish Literature I
Topics course in Irish literature.
Credit 3 units. A&S : TH A&S : IQ, HUM

L14 E Lit 4492 20th-Century Irish Poetry
Credit 3 units. A&S : TH FA : Lit

L14 E Lit 4492 The Irish Literary Revival
The class studies major writings by Oscar Wilde, W. B. Yeats, J. M. Synge, James Joyce and Flann O'Brien within the contexts of the language movement, colonialism, cultural nationalism, the socialist movement and the 1913 Lockout, the Easter Rising and the War for Independence, the Civil War, the founding of the Irish Free State, the Partition and the Irish Theocracy. Wilde's notions of the primacy of art with regard to politics and their elaboration by W. I. Thompson and Declan Kiberd are an organizing principle in the course. The class sees two films, offers oral reports and writes papers.
Credit 3 units. A&S : TH

L14 E Lit 450 American Film Genres
Same as Film 450
Credit 3 units. A&S : TH A&S : IQ, HUM FA : Lit

L14 E Lit 4505 Junior Colloquium
Same as Hum 450
Credit 3 units. A&S : TH, WI A&S : IQ, HUM, WI

L14 E Lit 4531 American Drama
Same as Drama 453
Credit 3 units. A&S : TH A&S : IQ, HUM FA : Lit

L14 E Lit 456 English Novel of the 19th Century
Prose fiction by such writers as Jane Austen, Dickens, Thackeray, George Eliot, the Brontës and Hardy.
Credit 3 units. A&S : TH A&S : IQ, HUM FA : Lit

L14 E Lit 458 The Modern Novel
Content and craft in the varying modes of the American, British and continental modern novel by such writers as James, Joyce, Lawrence, Faulkner, Kafka, Mann, Gide and Camus.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Units</th>
<th>Notes</th>
<th>Core Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>L14 E Lit 4631</td>
<td>Topics in English Literature and History: The 17th Century</td>
<td>3</td>
<td>Variable topics, such as writing, politics and society in Revolutionary England; life writing and literature in Early Modern England.</td>
<td>A&amp;S : TH, SD A&amp;S : IQ, HUM FA : Lit</td>
</tr>
<tr>
<td>L14 E Lit 4653</td>
<td>Banned Books</td>
<td>3</td>
<td></td>
<td>A&amp;S : TH FA : Lit</td>
</tr>
<tr>
<td>L14 E Lit 4655</td>
<td>The Pre-History of Blogging: Social Media of the Enlightenment</td>
<td>3</td>
<td>Same as Hum 465</td>
<td>A&amp;S : TH A&amp;S : IQ, HUM</td>
</tr>
<tr>
<td>L14 E Lit 466</td>
<td>Seminar in Theory and Methods</td>
<td>3</td>
<td></td>
<td>A&amp;S : TH A&amp;S : IQ, HUM</td>
</tr>
<tr>
<td>L14 E Lit 4693</td>
<td>Topics in European Literature and History</td>
<td>3</td>
<td></td>
<td>A&amp;S : TH FA : Lit</td>
</tr>
<tr>
<td>L14 E Lit 475</td>
<td>Intellectual History of Feminism</td>
<td>3</td>
<td></td>
<td>A&amp;S : TH A&amp;S : IQ, HUM FA : Lit</td>
</tr>
<tr>
<td>L14 E Lit 476</td>
<td>Feminist Literary and Cultural Theory</td>
<td>3</td>
<td>Studies in special subjects, e.g., romanticism, the new critics, poststructuralism. Same as WGSS 419</td>
<td>A&amp;S : TH A&amp;S : IQ, HUM</td>
</tr>
<tr>
<td>L14 E Lit 478</td>
<td>The Craft of Fiction</td>
<td>3</td>
<td>A literature/creative writing hybrid course concentrating on the element of dialogue in fiction, reading novels and stories that use dialogue in radical ways, including works by Don DeLillo, Henry Green, Zora Neale Hurston, Grace Paley and Philip Roth.</td>
<td>A&amp;S : LA FA : Lit</td>
</tr>
<tr>
<td>L14 E Lit 479</td>
<td>The Art and Craft of Poetry</td>
<td>3</td>
<td>An examination of poetry from its beginnings in English to the present day considering the relationship between earlier traditions and the manifestations of those traditions in contemporary poetry. Issues such as image; metaphor and the employment of it; notions of vision; the extent to which vision can spring from the intersection of art and craft. Study of prosody, reading poems that exemplify the successful use of prosodic technique, and trying our own hands at those techniques as well.</td>
<td>A&amp;S : LA A&amp;S : IQ, HUM FA : Lit</td>
</tr>
<tr>
<td>L14 E Lit 481</td>
<td>Selected English Writers I</td>
<td>3</td>
<td>Concentrated study of one or two major English writers, e.g., Spenser, Dickens, Blake, Yeats. Consult Course Listings.</td>
<td>A&amp;S : TH A&amp;S : IQ, HUM FA : Lit</td>
</tr>
<tr>
<td>L14 E Lit 482</td>
<td>Selected English Writers II</td>
<td>3</td>
<td>Concentrated study of one or two major English writers, e.g., Spenser, Dickens, Blake, Yeats. Consult Course Listings.</td>
<td>A&amp;S : TH FA : Lit</td>
</tr>
<tr>
<td>L14 E Lit 4820</td>
<td>Reading America: Henry Adams and the Study of American Culture</td>
<td>3</td>
<td>Same as AMCS 482</td>
<td>A&amp;S : TH A&amp;S : IQ, HUM</td>
</tr>
<tr>
<td>L14 E Lit 483</td>
<td>Selected American Writers I</td>
<td>3</td>
<td>Concentrated study of one or two major American writers, e.g., Gertrude Stein and Richard Wright; Emily Dickinson. Consult Course Listings each semester for specific authors.</td>
<td>A&amp;S : TH A&amp;S : IQ, HUM FA : Lit</td>
</tr>
<tr>
<td>L14 E Lit 484</td>
<td>Selected American Writers II</td>
<td>3</td>
<td></td>
<td>A&amp;S : TH A&amp;S : IQ, HUM FA : Lit</td>
</tr>
<tr>
<td>L14 E Lit 491</td>
<td>Chaucer</td>
<td>3</td>
<td>Readings in the Canterbury Tales. Lectures on background; critical analysis.</td>
<td>A&amp;S : TH A&amp;S : IQ, HUM FA : Lit</td>
</tr>
<tr>
<td>L14 E Lit 493</td>
<td>Spenser</td>
<td>3</td>
<td>Readings in the Fyra Queene and Shepheardes Calender, with attention to Spenser's deliberate fashioning of a literary career.</td>
<td>A&amp;S : TH FA : Lit</td>
</tr>
<tr>
<td>L14 E Lit 494</td>
<td>Milton</td>
<td>3</td>
<td>Major poems and prose works in relation to literary and intellectual currents of the 17th century.</td>
<td>A&amp;S : TH A&amp;S : IQ, HUM FA : Lit</td>
</tr>
</tbody>
</table>
L14 E Lit 4951 Seminar: The 19th-Century European Novel
Same as Comp Lit 495
Credit 3 units. A&S : TH A&S : IQ, HUM FA : Lit

L14 E Lit 496 Shakespeare Advanced Course
A study of Shakespeare's career as a dramatist, with intensive work on particular plays in the light of critical traditions.
Prerequisite: E Lit 395C or permission of instructor.
Credit 3 units. A&S : TH A&S : IQ, HUM FA : Lit

L14 E Lit 4968 Digital Methods in Literary Analysis: Shakespeare by the Numbers
This course will explore how emerging digital techniques can help us read literary texts in new ways. We will read a set of Shakespeare plays closely but also work with a large corpus of plays by Shakespeare and his contemporaries as we cover basic text-mining and visualization techniques and use simple statistical and quantitative approaches to think about questions of genre and style. We will ask how the typically "human" scale of reading that lets us respond to these texts can be captured on they massive scales at which computers can count, quantify and categorize. What nuance is lost in this translation between "close" and "distant" readings and what insights are gained?.
Credit 3 units. A&S : TH A&S : IQ, HUM

L14 E Lit 4969 Shakespeare in Production
Same as Drama 469
Credit 3 units. A&S : LA A&S : IQ, HUM

L14 E Lit 4976 Advanced Seminar in Literature
Same as History 4976
Credit 4 units. A&S : TH A&S : IQ, HUM

L14 E Lit 498 The Spenser Lab
This course involves graduate and undergraduate students in the ongoing work of the Spenser Project, an interinstitutional effort to produce a traditional print edition of the Complete Works of Edmund Spenser.
Credit 3 units. A&S : TH A&S : IQ, HUM

L14 E Lit 498W The Spenser Lab
In this writing-intensive course, the students are given a variety of writing tasks: writing commentaries, introductions, software manuals, grant proposals, software requirements and design documents (SRDDs).
Credit 4 units. A&S : TH, WI A&S : IQ, HUM, WI

Environmental Studies
Students interested in studying the environment can choose among three majors in the following academic departments: Biology, Earth and Planetary Sciences, and Political Science. The curriculum for these majors will be integrated and interdisciplinary with common courses in each of the majors that draw from courses in many disciplines across Arts & Sciences and the university. In this way we will capture the strengths of both the traditional academic departments and the interdisciplinary innovation necessary to explore fully the multiple issues and questions posed in the study of the environment.

Please see the following pages for more information on these majors:
Environmental Biology (p. 235)
Environmental Earth Science (p. 302)
Environmental Policy (p. 615)

All current students entering in 2009 or earlier will be able to continue their studies under the existing Environmental Studies major (p. 359).

Phone: 314/935-7047
E-mail: bowinston@wustl.edu
Departmental website: http://enst.wustl.edu/

Director
Tiffany Knight
Associate Professor
PhD, University of Pittsburgh (Biology)

Associate Director
Eleanor Pardini
Lecturer and Research Scientist
PhD, University of Georgia (Biology)

Endowed Professors
Raymond E. Arvidson
James S. McDonnell Distinguished University Professor
PhD, Brown University (Earth and Planetary Sciences)

Pratim Biswas
Stifel and Quinette Jens Professor
PhD, California Institute of Technology (Chair, Department of Energy, Environmental, and Chemical Engineering)

Milorad (Mike) Dudukovic
Laura and William Jens Professor
PhD, Illinois Institute of Technology, Chicago
Robert Pollak
Hennrich Distinguished Professor of Economics
PhD, Massachusetts Institute of Technology
(Economics)

Barbara A. Schaal
Mary-Dell Chilton Distinguished Professor in Arts & Sciences
PhD, Yale University
(Biology, Director of Tyson Research Center)

Alan R. Templeton
Charles Rebsstock Professor of Biology
PhD, University of Michigan
(Biology)

Richard Axelbaum
PhD, University of California–Davis
(Energy, Environmental, and Chemical Engineering)

Robert E. Criss
PhD, California Institute of Technology
(Earth and Planetary Sciences)

Willem H. Dickhoff
PhD, Free University, Amsterdam
(Physics)

Robert F. Dymek
PhD, California Institute of Technology
(Earth and Planetary Sciences)

J. Claude Evans
PhD, State University of New York–Stony Brook
(Philosophy)

M. Bruce Fegley
PhD, Massachusetts Institute of Technology
(Earth and Planetary Sciences)

T. R. Kidder
PhD, Harvard University
(Department Chair of Anthropology, Professor of Archaeology)

William R. Lowry
PhD, Stanford University
(Political Science)

Jill D. Pasteris
PhD, Yale University
(Earth and Planetary Sciences)

Bruce Petersen
PhD, Harvard University
(Economics)

D. Tab Rasmussen
PhD, Duke University
(Physical anthropology)

Glenn D. Stone
PhD, University of Arizona
(Sociocultural anthropology)

Robert W. Sussman
PhD, Duke University
(Physical anthropology)

Doug A. Wiens
PhD, Northwestern University
(Earth and Planetary Sciences, Chair)

Associate Professors

Geoff Childs
PhD, Indiana University
(Sociocultural anthropology)

Daniel Giammar
PhD, California Institute of Technology
(Energy, Environmental, and Chemical Engineering)

Ken Olsen
PhD, Washington University
(Biology)

Jennifer R. Smith
PhD, University of Pennsylvania
(Earth and Planetary Sciences)

Jay R. Turner
DSc, Washington University
(Chemical and civil engineering)

Assistant Professors

Jeffrey G. Catalano
PhD, Stanford University
(Earth and Planetary Sciences)

David Fike
PhD, MIT
(Earth and Planetary Sciences)

Young-Shin Jun
PhD, Harvard University
(Energy, Environmental, and Chemical Engineering)

Additional Faculty

Karen DeMatteo
Lecturer
PhD, Saint Louis University
(Environmental Studies, GIS)

Maxine I. Lipeles
JD, Harvard University
(Law, Interdisciplinary Environmental Clinic)

Beth Martin
MS, Washington University
(Law and Environmental Studies)
The Major in Environmental Studies

Students interested in studying the environment can choose among three majors in the following academic departments: Biology, Earth and Planetary Sciences, and Political Science.

Please see the following pages for more information on these majors:

Environmental Biology (p. 235)
Environmental Earth Science (p. 302)
Environmental Policy (p. 615)

Current students entering in 2009 or earlier will be able to continue their studies under the existing Environmental Studies major. Please visit the department’s website or the archived 2010 Bulletin for requirements.

The Minor in Environmental Studies

Required Courses:
- EPSc 201 Earth and the Environment (4 units)
- Biol 2950 Introduction to Environmental Biology (3 units)
- Pol Sci 2010 Introduction to Environmental Policy (3 units)

Elective Courses: 9 units — one course from each of the three categories below

One advanced science course:
- EPSc 323 Biogeochemistry
- EPSc 370 Biological Conservation
- Biol 372 Behavioral Ecology
- Biol 381 Introduction to Ecology
- EPSc 401 Earth Systems Science
- EPSc 413 Introduction to Soil Science

One advanced political science or law course:
- Pol Sci 3240 The Political Economy of Public Goods
- Pol Sci 331 Topics in Politics: Theories of Justice
- Pol Sci 332 Environmental and Energy Issues
- Pol Sci 3752 Topics in American Politics: Globalization, Urbanization and the Environment
- Pol Sci 4043 Public Policy Analysis, Assessment and Practical Wisdom
- EnSt 539 Interdisciplinary Environmental Clinic

Courses that are offered less frequently or have more prerequisites but that are pre-approved substitutions for these requirement categories include:

Advanced anthropology or ethics:
- Anthro 3053 Nomadic Strategies and Extreme Ecologies
- Anthro 3322 Brave New Crops
- Anthro 3472 Global Energy and the American Dream
- EnSt 335 Introduction to Environmental Ethics
- Anthro 361 Culture and Environment
- Anthro 4211 Paleoethnobotany and Ethnobotany

Advanced science:
- Biol 4170 Population Ecology
- EPSc 408 Earth's Atmosphere and Global Climate
- EPSc 429 Environmental Hydrogeology
- EPSc 444 Environmental Geochemistry
- EPSc 484 Paleoenvironmental Reconstruction

Advanced political science or law:
- Econ 451 Environmental Policy

Environmental Studies

L82 EnSt 109A Quantitative Reasoning in Environmental Science
Introduction to practical mathematical methods for understanding environmental aspects of our planet, particularly how the environment changes with time through human interactions. Emphasis on intuitive approaches in devising simple relationships for understanding quantitative outcomes of natural processes. Introduction to basic statistical methods, including hypothesis testing, and how statistics can be applied to environmental problems.
Same as EPSc 109A
Credit 3 units. A&S : NS, QA A&S : IQ, NSM, AN BU : SCI FA : NSM

L82 EnSt 125 The Dinosaurs: “Facts” and Fictions
Overview and introduction to the group of related animals commonly referred to as the Dinosauria. Anatomy, evolutionary relationships, place in the world. Dinosaurs dominated every known terrestrial ecosystem for almost 150 million years — one of the most impressive success stories in the entire history of life on Earth, including the modern Age of Mammals. Beyond
the scales, feathers, teeth and claws, there is much to learn about the world in general and perhaps the place of humans in it by studying the Age of Reptiles. Examination of the dinosaurs themselves, the time in which they lived, their history and the ways in which we study them.
Same as EPSc 125
Credit 3 units. A&S : NS A&S : IQ, NSM BU : SCI

L82 EnSt 201 Earth and the Environment
Introduction to the study of the Earth as a dynamic, evolving planet. Emphasis on how internal and surface processes combine to shape the environment. Themes: Earth’s interior as revealed by seismic waves; Earth history and global tectonics shown by changes to ocean floors, mountain-building, formation of continents, earthquakes and volcanism; climate history and global biogeochemical cycles, influenced by circulation of atmosphere and oceans, ice ages and human activity. Composition and structure of rocks and minerals. Three class hours and one two-hour lab a week.
Same as EPSc 201
Credit 4 units. A&S : NS A&S : IQ, NSM BU : SCI

L82 EnSt 221A Human Use of the Earth
Same as EPSc 221A.
Credit 3 units. A&S : NS A&S : IQ, NSM BU : SCI FA : NSM

L82 EnSt 222 Topics in Japanese Literature and Culture: Environmental Consciousness in Modern Japanese Literature
The object of this course is to introduce ways that Japanese have interacted with nature and the environment both in literature and daily life. Though the focus of our attention is on literary works from the late 19th and 20th century, the course begins by introducing several earlier texts. Particular attention is paid to the relationship between historical context and literary production and how traditional aesthetics, religious thought, nostalgia, militarism, defeat, industrialization, environmental pollution and “environmentalism” have shaped the course of Japan’s relationship to the natural world. Literary works are considered alongside more recent accounts of postwar environmental issues. Students write four short papers, as well as take a midterm exam and final exam.
Same as Japan 221
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

L82 EnSt 272A Physics and Society
Same as Physics 171A
Credit 3 units. A&S : NS, QA A&S : IQ, NSM, AN BU : SCI FA : NSM

L82 EnSt 299 Directed Internship
Internship with an environmental organization (commercial, not-for-profit, governmental, etc.) where the primary objective is to obtain professional experience outside of the classroom. Student must have a faculty sponsor and must file a Learning Agreement with the Career Center, the faculty sponsor and the site supervisor. A final written project is agreed upon between the student and faculty sponsor before work begins, and is evaluated by the faculty sponsor at the end of the internship. Detailed supervision of the intern is the responsibility of the site supervisor.
Credit 3 unit.

L82 EnSt 3053 Nomadic Strategies and Extreme Ecologies
Same as home course L48 Anthro 3053.
Same as Anthro 3053
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA, IS FA : SSP

L82 EnSt 306B Africa: Peoples and Cultures
An anthropological survey of Africa from the classic ethnographies to contemporary studies of development. Emphasis on the numerous social and economic changes African peoples have experienced from precolonial times to the present.
Same as Anthro 306B
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD BU : HUM, IS FA : SSP

L82 EnSt 323 Biogeochemistry
Survey of biogeochemical interactions among Earth’s crust, oceans and atmosphere, including perturbations due to human activities. Carbon, nitrogen, phosphorus and sulfur biogeochemical cycles. Greenhouse warming of atmosphere from carbon dioxide and chlorofluorocarbons: effects of inorganic and organic wastes in groundwater systems. Introductory course for students of environmental science and nonscience majors.
Prerequisite: high school calculus or Math 131.
Same as EPSc 323
Credit 3 units. A&S : NS A&S : IQ, NSM BU : SCI FA : NSM

L82 EnSt 332 Environmental and Energy Issues
Same as Pol Sci 332B.
Same as Pol Sci 332B
Credit 3 units. A&S : SS    A&S : IQ, SSC    BU : ETH    FA : SSP

L82 EnSt 3322 Brave New Crops
Same as Anthro 3322
Credit 3 units. A&S : SS    A&S : IQ, SSC    BU : IS    FA : NSM

L82 EnSt 3326 Modern Third World
Same as Anthro 3326
Credit 3 units. A&S : SS    A&S : IQ

L82 EnSt 335F Introduction to Environmental Ethics
Same as Phil 235F.
Same as Phil 235F
Credit 3 units. A&S : TH    A&S : IQ, HUM    BU : ETH    FA : SSP

L82 EnSt 361 Culture and Environment
Introduction to the ecology of human culture, especially how “traditional” cultural ecosystems are organized and how they change with population density. Topics include foragers, slash and burn farming, intensive farming, warfare, population regulation, sexual division of labor.
Same as Anthro 361
Credit 3 units. A&S : SS    A&S : IQ, SSC

L82 EnSt 370 Biological Conservation
This course explores the science of understanding and conserving biodiversity. Fundamental principles from genetics, evolution and ecology are applied to issues such as species preservation, habitat restoration, refuge design and management. We get hands-on experience with a wide array of quantitative tools and methods. Examples and original research from diverse taxa and ecosystems are discussed. Format includes lecture, discussion of primary research articles, and cooperative work on quantitative problems.
Credit 3 units. A&S : NS    A&S : IQ, NSM    BU : SCI

L82 EnSt 372 Behavioral Ecology
Same as Biol 372
Credit 3 units. A&S : NS    A&S : IQ, NSM    FA : NSM

L82 EnSt 374 Social Landscapes in Global View
Same as Anthro 374
Credit 3 units. A&S : SS    A&S : IQ, SSC

L82 EnSt 379 Feast or Famine: Archaeology and Climate Change
This course examines the temporal, geographical and environmental aspects of past climate changes, and by using specific examples, explores how climate changes may have affected the evolution of human culture and the course of human history. Archaeological and documentary examples from the Americas, Africa, Asia, Europe and the Near East are used to explore if or how significant events in human history have been influenced by changes in climate.
Same as Anthro 379
Credit 3 units. A&S : SS    A&S : IQ, SSC

L82 EnSt 3793 Mississippi River Basin: Past, Present and Future
The purpose of this class is to engage and challenge freshman students in an open discussion about the prehistoric Mississippian community of Cahokia. The focus of this course is two-fold. The first is to study the way in which the archaeological evidence has been interpreted. The second is to examine other perspectives on Cahokia, especially from the Native American descendants who consecrated this landscape nearly a millennium ago. An underlying tenet of this seminar in understanding Cahokia can also be achieved through the traditions and literature of Native Americans. In the end we want to understand the basis for Cahokia’s organization as a prehistoric Native American community, and the role that ritual and religion played in the rather dramatic and dynamic history of this community and the surrounding region.
Same as Anthro 3793
Credit 4 units. A&S : SS

L82 EnSt 380 Applications in GIS
This introductory course in Geographic Information Systems (GIS) is designed to provide basic knowledge of GIS theory and applications using the existing state-of-the-art GIS software. The course is taught using a combination of lectures, demonstrations and hands-on, interactive tutorials in the classroom. The first week of the course provides a broad view of how you can display and query spatial data and produce map products. The remainder of the course focuses on applying spatial analytical tools to address questions and solve problems. As the semester develops, more tools are added to your GIS toolbox so that you can complete a final independent project that integrates material learned during the course. Students are encouraged to design individualized final projects using their own or other available data; however, some already-prepared final projects also are available.
Credit 3 units. A&S : NS    A&S : IQ, NSM

L82 EnSt 381 Introduction to Ecology
This course explores the science of ecology, including factors that control the distribution and population dynamics of organisms, the structure and function of biological communities,
how energy and nutrients flow across ecosystems, and what principles govern ecological responses to global climatic and other environmental changes. The class format includes lectures, discussions and small group exercises. Assignments include quantitative data analysis, ecological modeling and scientific writing.

Same as Biol 381
Credit 3 units. A&S : NS A&S : IQ, NSM

L82 EnSt 390 Independent Study
Independent study for undergraduates, supervised by a faculty member. Prerequisite: permission of instructor.
Credit -6 unit.

L82 EnSt 391 Directed Research in Environmental Studies
Research activities or project in environmental studies done under the direction of an instructor in the program. Permission of an instructor and the chair of the program is required.
Credit -6 unit.

L82 EnSt 392 Directed Fieldwork in Environmental Studies
Fieldwork carried out under the direction or supervision of an instructor in the Program. Permission of an instructor and of the chair of the program is required.
Credit -6 unit.

L82 EnSt 393 Practical Skills in Environmental Biology Research
This course provides students with an interest in research in environmental biology and a broad overview of the skills and tools needed for a successful career. Topics covered include: (1) developing ideas/approaches for research projects, (2) experimental design and analyses, (3) using the primary literature effectively, (4) writing successful small grant and fellowship proposals, and (5) writing/reporting results. In addition, students learn other important field biology skills, including a variety of field methods, as well as coping with rough field conditions. Some Saturday and nighttime field trips required. Grading is based primarily on class participation and take-home assignments. Prerequisites: permission of Professor Chase and at least one of the following courses: EnSt 370, EnSt 373, Biol 3501, Biol 372, Biol/EnSt 381, Biol/EnSt 4170, Biol/EnSt 419, Biol 4191, Biol/EnSt 4193.
Credit 2 units. A&S : NS A&S : IQ, NSM

L82 EnSt 408 Earth’s Atmosphere and Global Climate
Same as EPSc 408
Credit 3 units. A&S : NS A&S : IQ, NSM FA : NSM

L82 EnSt 413 Introduction to Soil Science
Physical, chemical and biological processes that occur within soil systems. Types of soils and how these relate to soil formation. Major components of soil, including soil water, minerals, organic matter and microorganisms. Soils in wetlands and arid regions. Cycling of nutrients and contaminants in soils. Soil quality, conservation and sustainability. Two one-day field trips required. Prerequisites: EPSc 323 or Chem 112A or permission of instructor.
Same as EPSc 413
Credit 3 units. A&S : NS A&S : IQ, NSM

L82 EnSt 419 Community Ecology
Basic principles of community ecology, including species interactions, spatial and temporal patterns of biodiversity, and ecosystem functioning. Analytical theory, statistical patterns and experimental approaches are emphasized. Intended for students wanting a rigorous overview of ecological principles. Prerequisite: at least one of the following courses: Biol 3501, Biol 372, Biol 381, Biol 4170, Biol 4193, EnSt 370 or permission of instructor.
Same as Biol 419
Credit 3 units. A&S : NS A&S : IQ, NSM FA : NSM

L82 EnSt 4193 Experimental Ecology Laboratory
Design and interpretation of ecological experiments, with an emphasis on hypothesis testing, sampling methodology and data analyses. Sessions address fundamental ecological questions and include field, greenhouse and laboratory (microcosm) studies on a variety of taxa and ecosystems. Includes occasional Saturday field trips to local sites (e.g., forests, wetlands, prairies, streams) for in-depth study. Fulfills the upper-level laboratory requirement for the Biology major. One hour of lecture and four hours of laboratory per week. Prerequisites: permission of instructor and at least one of the following: Biol 381 Introduction to Ecology, Biol 372 Behavioral Ecology, Biol 317A Conservation Biology, Biol 419 Population and Community Ecology or Biol 3501 Evolution. Credit is not awarded for both Biol 4191 and 4193. Enrollment is limited to 15 students.
Same as Biol 4193
Credit 4 units. A&S : NS, WI A&S : IQ, NSM, WI

L82 EnSt 428 Hydrology
Same as EPSc 428
Credit 3 units. A&S : NS A&S : IQ, NSM FA : NSM

L82 EnSt 432 Environmental Mineralogy
Same as EPSc 430
Credit 4 units. A&S : NS A&S : IQ, NSM FA : NSM

L82 EnSt 444 Environmental Geochemistry
Interaction of water with minerals and organic compounds at the low temperatures of many environmental settings. Emphasis on understanding groundwater compositions and capacity for transporting metals and organic solutes in the subsurface. Speciation, mass transport, surface reactions, contaminant sources and remediation methods. Prerequisite: EPSc 333 or permission of the instructor.
Same as EPSc 444
Credit 3 units. A&S : NS A&S : IQ, NSM FA : NSM

L82 EnSt 4491 Microbes in the Environment
Microorganisms are ubiquitous and have a large impact on the chemistry of the natural environment. This course covers the basic physiology of the microbial cell as it pertains to how microorganisms interact with the surrounding environment. Topics include cell structure, protein synthesis, gene regulation (how microbes respond to environmental changes), behavior and development, biofilm formation, and energy generation (how they use energy and impact changes in the geochemistry of the environment). Also the evolutionary relationships among microbes, the major groups of free-living microbes and the environments they inhabit, and how microbes have co-evolved with the changing chemistry of the Earth through time. Prerequisite: science majors with junior or senior standing, or permission of instructor.
Same as EPSc 449
Credit 3 units. A&S : NS

L82 EnSt 451 Environmental Policy
Relationship between environmental economics and environmental policy. Focus on air and water pollution and hazardous wastes. Biodiversity and global climate change. Economic prescriptions: (1) “balancing of benefits against costs” (benefit-cost analysis) and the use of risk analysis in evaluating policy alternative; (2) use of market incentive (prices, taxes or charges) or “property rights” instead of traditional command-and-control regulations to implement environmental policy. Prerequisite: Econ 103B.
Same as Econ 451
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA, ETH FA : SSP

L82 EnSt 479 Climate, Culture and Human History
Using a seminar format, this course examines the temporal, geographical and environmental aspects of past climate changes, and by using specific examples, explores how climate changes may have affected the evolution of human culture and the course of human history. Archaeological and historical examples from the Americas, Africa, Asia, Europe and the Near East are used to explore if or how significant events in human history have been influenced by changes in climate.
Same as Anthro 479
Credit 3 units. A&S : NS

L82 EnSt 480 Special Topics in Microbiology-Chemistry-Earth Science
Same as EPSc 480
Credit 3 units. A&S : NS

L82 EnSt 490 Senior Seminar
Provides an opportunity for students majoring in environmental science and environmental social science to communicate across interdisciplinary boundaries. Topics of current interest to environmental studies are presented and discussed by students in weekly sessions. Efforts are made to communicate ideas from environmental science, biology, economics, anthropology, geology, political science, chemistry and law in ways that are easily understood by all participants. Prerequisite: senior standing.
Credit 3 units. A&S : NS A&S : IQ, NSM

L82 EnSt 490W Senior Seminar: Writing-Intensive
This is a writing-intensive version of EnSt 490 Senior Seminar. Students participate in the regular EnSt 490 class and are responsible for all the assignments associated with EnSt 490. Students in EnSt 490W have one additional meeting each week — a writing workshop. Writing assignments are designed to provide students with the opportunity to dissect, reconstruct and reflect upon topics discussed in EnSt 490. Students also examine types of writing found in environmental studies. The class consists of extensive drafting and revising of the student work, including in-class editing workshops, peer reviews and individual meetings between students and the instructor.
Credit 5 units. A&S : NS, WI A&S : IQ, NSM, WI

L82 EnSt 498 Senior Honors Research
Independent research for undergraduate honors, supervised by a faculty member. Prerequisites: senior standing, eligibility for honors and permission of instructor.
Credit 3 units.

L82 EnSt 4980 Undergraduate Research Seminar
Provides an opportunity for advanced undergraduates to synthesize many of the diverse subdisciplines of Earth and Planetary Sciences while focusing on a research topic. Subject changes each offering. Each subject is unique and timely, but broad enough to encompass wide-ranging interests among students. Students conduct original research, make written
reports of the results, and make oral presentations of their projects in class. Prerequisite: senior standing or permission of instructor.
Same as EPSc 498
Credit 3 units. A&S : NS, WI A&S : IQ, NSM, WI FA : NSM

L82 EnSt 499 Senior Honors
Independent work for undergraduate Honors, supervised by a faculty member. Prerequisites: senior standing, eligibility for Honors and permission of instructor.
Credit 3 units.

European Studies
The major and minor in European Studies are part of the Program in International and Area Studies.

The European Studies concentration focuses on the New Europe and its historical and cultural contexts, attempting to understand the European contribution to world politics and cultural exchange. It involves study of both traditional and new European cultural products (literature, film, visual art and electronic media) and also of European institutions and contexts. This concentration will educate students interested in understanding Europe for its own sake, but also as the continent connects with other parts of the world. It is committed to interdisciplinary approaches, and students may take courses in the traditional language-and-literature disciplines, as well as in anthropology, art history, economics, history, philosophy and political science. The concentration defines the geography of modern Europe to include the Atlantic world, as well as its Eurasian and Mediterranean neighbors. We offer advanced course work in most major European languages (including French, German, Italian, Russian and Spanish) as well as study abroad opportunities in all these languages.

Contact Person: Toni Loomis
Phone: 314/935-5073
E-mail: aloomis@artsci.wustl.edu
Departmental website: http://ias.wustl.edu

Co-Directors
Lynne Tatlock
Hortense and Tobias Lewin Distinguished University Professor in the Humanities
PhD, Indiana University
(Germanic Languages and Literatures)

Seth Graebner
PhD, Harvard University
(Romance Languages and Literatures, IAS)

Endowed Professors
John R. Bowen
Dunbar-VanCleve Professor in Arts & Sciences
PhD, University of Chicago
(Anthropology)

James V. Wertsch
Marshall S. Snow Professor of Arts & Sciences
PhD, University of Chicago
(Anthropology, IAS)

Paul Michael Lützeler
Rosa May Distinguished University Professor in the Humanities
PhD, Indiana University
(German and Comparative Literature)

Professors
Lutz Koepnick
PhD, Stanford University
(Germanic Languages and Literatures)

Stamos Metzidakis
PhD, Columbia University
(Romance Languages and Literatures)

Akiko Tsuchiya
PhD, Cornell University
(Romance Languages and Literatures)

Associate Professors
Gaetano Antinolfi
PhD, Cornell University
(Economics)

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(Art History and Archaeology)

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PhD, University of California–Berkeley
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Rebecca Messbarger
PhD, University of Chicago
(Romance Languages and Literatures)

Peter Schmelz
PhD, University of California–Berkeley
(Music)

Michael Sherberg
PhD, University of California–Los Angeles
(Romance Languages and Literatures)

Corinna Treitel
PhD, Harvard University
(History)
The Major in European Studies / International and Area Studies

Total units required: 36 graded credits plus four semesters of a European language.

Required courses:
• 3 units of introductory course work
• 3 units of European history course work (300 level or above from History Department offerings on Europe)
• 3 units of non-European world area course work (any level)
• 27 units of advanced course work from a minimum of three academic disciplines (at least one course must focus on gender, race or class, and at least two must be at the 400 level)

A single course may satisfy more than one of these distribution requirements. Some of these requirements may be completed while abroad.

Regulations/requirements:
• Completion of all IAS course work with a grade of C+ or higher; all courses for the major must be taken for a letter grade.
• You must choose your upper-level course work from a minimum of three academic disciplines (for example, Anthropology, Art History, Economics, Film, History, Literature, Music, Philosophy and Political Science).
• No more than 6 credits may be from a semester of study abroad (9 credits from a year of study abroad, or a semester plus a summer of study abroad) (400-level credits must be earned on campus or in Washington University courses taught abroad).
• We strongly encourage students to study abroad. For those who do not study abroad, an additional 3 credits at the 300 or 400 level are required.
• Students must fulfill the standard IAS language requirement with a European language consistent with their study abroad location.
• No more than 3 credits may be from directed readings, research or internships excluding the honors thesis.
• The advanced credits must be unique to the IAS major.
• If your prime major is IAS, you must participate in a capstone experience. The options are Research and Editorial Methods in International Studies, a Senior Honors Thesis, a Senior Research Project, a Joint Senior Research Project, or an International Studies Portfolio. For more details, please see the IAS Capstone section on capstone experiences.

Introductory course work (choose one from this list, 3 units):
• IAS 344 Introduction to European Studies
• History 164 Introduction to World History: Theory and Practice
• History 102C Western Civilization

Non-European area course work (3 units):
We consider world areas to be Africa, East Asia, Latin America, Middle East or South Asia. Courses that may be used to satisfy this requirement may include advanced area specific courses or the following:
• IAS 165C Survey of Latin-American Culture
• IAS 208 History, Text and Identity: Introduction to Jewish Civilization
• IAS 209B African Studies: An Introduction
• IAS 210C Introduction to Islamic Civilization
• IAS 215C Introduction to Russian Civilization
• IAS 216 Introduction to South Asian Civilization
• IAS 223 Korean Civilization
• IAS 226 Japanese Civilization
• IAS 227 Chinese Civilization

**Advanced course work** (choose nine courses from current European focused course offerings in the following departments. All courses must be approved by your IAS adviser in order to count for the major):
- African and African-American Studies
- Anthropology
- Art History
- Economics
- Film and Media Studies
- History
- International and Area Studies
- Languages and Literatures
- Music
- Political Science
- Russian Studies
- Urban Studies
- Women, Gender and Sexuality Studies

**Additional Information**

**Language Requirement for the Major in European Studies/International and Area Studies:** All IAS majors and minors must satisfy a foreign language requirement, which entails the successful completion of four semesters of a language appropriate to their concentration while at Washington University. For some students, this may mean the first four semesters of a language; for others who place into advanced language classes this may include literature, culture, oral communications and linguistics courses in the target language, once they complete the basic language sequence. Advanced courses in literature, social sciences and culture used to satisfy this requirement may be counted as advanced credit for IAS majors and minors as long as they are cross-listed with IAS or approved for IAS study abroad credit and are not applied toward a language major or minor. A maximum of two of these classes may be completed while abroad on a Washington University-approved program in the target language (may be within the same semester abroad). Native speakers of a foreign language must satisfy the four-semester requirement in another language appropriate to their concentration. Heritage speakers must seek appropriate placement by the coordinator of the language program and complete the four-semester requirement.

**Study Abroad:** You are strongly encouraged to study abroad in one of Washington University’s Overseas Programs during your junior year or the summer. Some credit for courses taken abroad may be applied to the major. For those who do not study abroad, an additional 3-credit course at the 300 or 400 level is required.

**Senior Honors:** You must confidently expect to graduate with an overall GPA of 3.5 or higher. You must have maintained a 3.65 grade point average through the sixth semester in order to qualify for Senior Honors. You should enroll in IAS 485 Preparation for IAS Honors Thesis in the fall of your senior year (under the corresponding section number of the faculty member overseeing your thesis), and in IAS 486 IAS Senior Honors Thesis in the spring of your senior year in order to be properly tracked by the IAS capstone coordinator.

**The Minor in European Studies/International and Area Studies**

The minor in European Studies is part of the Program in International and Area Studies.

**Total units required:** 18 graded credits plus four semesters of a European language.

**Requirements:**
- European History course (3 credits)
- Non-European cultural area (or civilization) course (3 credits)
- At least 12 credits of advanced (300-plus) course work drawn from at least two different disciplines, all focused on Europe since 1750, as determined in consultation with the adviser.

**Regulations:**
- All minor course work must be completed with a grade of C+ or higher.
- No more than 3 credits may be from independent study or research.
- No more than 3 credits may be from a semester or summer of study abroad (6 credits from a year of study abroad, or a semester plus a summer).
- All advanced credits must be unique to the European Studies minor (i.e. not counted toward any other major or minor).

**Additional Information**

**Language Requirement for the Minor in European Studies/International and Area Studies:** All IAS minors must satisfy a foreign language requirement, which entails the successful completion of four semesters of a language appropriate to their concentration while at Washington University. For some students, this may mean the first four semesters of a language; for others who place into advanced language classes this may include literature, culture, oral communications and linguistics courses in the target language, once they complete the basic language sequence. Advanced courses in literature, social sciences and culture used to satisfy this requirement may be
counted as advanced credit for IAS majors and minors as long as they are cross-listed with IAS or approved for IAS study abroad credit and are not applied toward a language major or minor. A maximum of two of these classes may be completed while abroad on a Washington University approved program in the target language (may be within the same semester abroad). Native speakers of a foreign language must satisfy the four-semester requirement in another language appropriate to their concentration. Heritage speakers must seek appropriate placement by the coordinator of the language program and complete the four-semester requirement.

**Study Abroad:** You are strongly encouraged to study abroad in one of Washington University’s Overseas Programs during your junior year or the summer. Some credit for courses taken abroad may be applied to the minor.

### European Studies

**L79 EuSt 3024 International Institutions**
Same as Pol Sci 3024
Credit 3 units. A&S : SS A&S : IQ, SSC BU : IS

**L79 EuSt 3093 Politics of the European Union**
Same as Pol Sci 3093
Credit 3 units. A&S : SS A&S : IQ, SSC

**L79 EuSt 3112 French Culture and Civilization: the New Face of France**
Same as French 311C
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, LS BU : BA, HUM, IS FA : SSP

**L79 EuSt 313 Topics in English and American Literature**
Same as E Lit 313
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

**L79 EuSt 313E Introduction to Comparative Arts**
Same as Comp Lit 313E
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

**L79 EuSt 3191 Interdisciplinary Studies in the Humanities: The European Avant-Garde**
Same as Hum 3191
Credit 3 units. A&S : TH A&S : IQ, HUM

**L79 EuSt 320 British Cinema: A History**
Same as Film 320
Credit 3 units. A&S : TH A&S : IQ, HUM BU : IS

**L79 EuSt 321 Comparative European Politics**
Same as Pol Sci 321
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA, HUM, IS FA : SSP

**L79 EuSt 3221 The Jewish Experience in Italy, 1850–1945**
Same as Ital 3221
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

**L79 EuSt 323 The Cinema of Eastern Europe in the Cold War Era**
Same as Film 323
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : IS

**L79 EuSt 3250 French Film Culture**
Same as Film 325
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : IS

**L79 EuSt 3256 French Literature I: Dramatic Voices: Poets and Playwrights**
Same as French 325
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, LS BU : HUM

**L79 EuSt 3262 French Literature II: Narrative Voices: Fiction and Nonfiction**
Same as French 326
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, LS BU : IS

**L79 EuSt 328 History of German Cinema**
Same as Film 328
Credit 3 units. A&S : TH BU : IS

**L79 EuSt 3290 Italian Neorealism**
Same as Film 329
Credit 3 units. A&S : TH A&S : IQ, HUM BU : IS

**L79 EuSt 332 Topics in Film Studies: Italian Cinema**
Same as Ital 332
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD BU : IS FA : AH, Lit

**L79 EuSt 3331 The Holocaust: History and Memory**
Same as History 333
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Same As</th>
<th>Credit Units</th>
<th>A&amp;S Requirements</th>
<th>BU Requirements</th>
<th>FA Requirements</th>
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<tr>
<td>L79 EuSt 335</td>
<td>Topics in Italian Cinema: Pier Paolo Pasolini: Ideology, Sexuality, Representation</td>
<td>Ital 334</td>
<td>3</td>
<td>TH</td>
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<tr>
<td>L79 EuSt 3350</td>
<td>Becoming “Modern”: Emancipation, Anti-Semitism and Nationalism in Modern Jewish History</td>
<td>History 335C</td>
<td>3</td>
<td>TH, CD</td>
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<td>L79 EuSt 3356</td>
<td>Out of the Shtetl: Jews in Central and Eastern Europe Between Empire, State and Nation</td>
<td>History 3350</td>
<td>3</td>
<td>TH, CD, LCD</td>
<td>ETH, HUM</td>
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<td>L79 EuSt 336</td>
<td>Cinema and Ireland</td>
<td>Film 336</td>
<td>3</td>
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<td>L79 EuSt 340</td>
<td>History of World Cinema</td>
<td>Film 340</td>
<td>3</td>
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<td>L79 EuSt 3400</td>
<td>German Literature and the Modern Era</td>
<td>German 340C</td>
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<td>Introduction to European Studies</td>
<td>IAS 344</td>
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<td>L79 EuSt 3453</td>
<td>Modern Germany</td>
<td>History 3450</td>
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<td>L79 EuSt 3460</td>
<td>British Enlightenment Culture</td>
<td>E Lit 346</td>
<td>3</td>
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<td>L79 EuSt 3482</td>
<td>Masterpieces of Literature</td>
<td>E Lit 348</td>
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<td>L79 EuSt 3500</td>
<td>The 19th-Century Russian Novel</td>
<td>Russ 350C</td>
<td>3</td>
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<td>L79 EuSt 3520</td>
<td>Introduction to Postcolonial Literature and Theory</td>
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<td>3</td>
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<td>L79 EuSt 3553</td>
<td>French Revolution and Napoleon</td>
<td>History 3553</td>
<td>3</td>
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<td>The Politics of Terror: the French Revolution</td>
<td>History 3557</td>
<td>3</td>
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<td>L79 EuSt 3560</td>
<td>Russia and the West</td>
<td>Hum 3560</td>
<td>3</td>
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<td>L79 EuSt 3584</td>
<td>Music in the Holocaust: Portrayals in Sound from Past and Present</td>
<td>JNE 3584</td>
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<td>L79 EuSt 3598</td>
<td>The First World War and the Making of Modern Europe</td>
<td>History 3598</td>
<td>3</td>
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<td>L79 EuSt 359C</td>
<td>Topics in European History: Modern European Women</td>
<td>History 359C</td>
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<td>L79 EuSt 3601</td>
<td>The Traffic in Women and Contemporary European Cinema</td>
<td>Same as Hum 360</td>
<td>3 units</td>
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<td>L79 EuSt 364</td>
<td>Anarchism: History, Theory and Praxis</td>
<td>Same as IAS 364</td>
<td>3 units</td>
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<td>Literature and Ethics</td>
<td>Same as Comp Lit 364</td>
<td>3 units</td>
<td>TH</td>
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<td>L79 EuSt 366</td>
<td>Women and Film</td>
<td>Same as Film 366</td>
<td>3 units</td>
<td>TH, SD</td>
<td>A&amp;S : IQ, HUM, SD</td>
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<td>L79 EuSt 374</td>
<td>Russian Literature and Empire</td>
<td>Same as IAS 374</td>
<td>3 units</td>
<td>TH, CD, SD</td>
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<td>L79 EuSt 375</td>
<td>Screening the Holocaust</td>
<td>Same as Film 375</td>
<td>3 units</td>
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<td>Topics in Russian Culture</td>
<td>Same as IAS 3750</td>
<td>3 units</td>
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<td>Cinema and Society</td>
<td>Same as French 376C</td>
<td>3 units</td>
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<td>L79 EuSt 3783</td>
<td>Modern Art, Theory and Criticism, 1905–1960</td>
<td>Same as Art-Arch 3782</td>
<td>3 units</td>
<td>TH</td>
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<td>L79 EuSt 3833</td>
<td>Realism and Impressionism</td>
<td>Same as Art-Arch 3833</td>
<td>3 units</td>
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<td>Dada and Surrealism in Europe and the United States</td>
<td>Same as Art-Arch 3875</td>
<td>3 units</td>
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<td>L79 EuSt 3878</td>
<td>Britain and Its Empire From 1688 to 1870</td>
<td>Same as History 3878</td>
<td>3 units</td>
<td>TH</td>
<td>A&amp;S : IQ, HUM, BU : IS</td>
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<td>L79 EuSt 3879</td>
<td>Britain and Its Empire Since 1870</td>
<td>Same as History 3879</td>
<td>3 units</td>
<td>TH</td>
<td>A&amp;S : IQ, HUM, BU : IS</td>
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<td>L79 EuSt 3880</td>
<td>The Russian Revolution</td>
<td>Same as History 38R8</td>
<td>3 units</td>
<td>TH, WI</td>
<td>A&amp;S : IQ, HUM, WI</td>
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<td>L79 EuSt 3892</td>
<td>Modern Sculpture: Canova to Koons</td>
<td>Same as Art-Arch 3892</td>
<td>3 units</td>
<td>TH</td>
<td>A&amp;S : IQ, HUM</td>
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<td>L79 EuSt 399</td>
<td>To Russia and Return: Travel, Literature and History</td>
<td>Same as History 39X9</td>
<td>3 units</td>
<td>TH</td>
<td>A&amp;S : IQ, HUM</td>
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<td>L79 EuSt 404</td>
<td>Germany Today</td>
<td>Same as German 404</td>
<td>3 units</td>
<td>TH, CD</td>
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<tr>
<td>L79 EuSt 4101</td>
<td>German Literature and Culture: 1750–1830</td>
<td>Same as German 4101</td>
<td>3 units</td>
<td>TH, CD, WI</td>
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<tr>
<td>L79 EuSt 4102</td>
<td>German Literature and Culture: 1830–1914</td>
<td>Same as German 4102</td>
<td>3 units</td>
<td>TH, WI</td>
<td>A&amp;S : IQ, HUM, LCD, WI, LS</td>
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<th>Course Code</th>
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<tr>
<td>L79 EuSt 4103</td>
<td>German Literature and Culture: 1914 to the Present: East German Literature after 1989</td>
<td>3 units</td>
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<td>L79 EuSt 4104</td>
<td>Studies in Genre</td>
<td>3 units</td>
<td>A&amp;S : TH, CD, WI A&amp;S : IQ, HUM, LCD, WI, LS FA : SSP</td>
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<td>L79 EuSt 4105</td>
<td>Topics in German Studies</td>
<td>3 units</td>
<td>A&amp;S : TH, CD, WI A&amp;S : IQ, HUM, LCD, WI, LS FA : SSP</td>
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<td>L79 EuSt 4191</td>
<td>The French Islands: Isles and Exiles: Literature of the Francophone Tropics</td>
<td>3 units</td>
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<td>L79 EuSt 422</td>
<td>Europe, Questions of Identity and Unity</td>
<td>3 units</td>
<td>A&amp;S : TH, CD A&amp;S : IQ, HUM, LCD BU : BA</td>
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<td>L79 EuSt 4244</td>
<td>19th- and 20th-Century French Poetry</td>
<td>3 units</td>
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<td>3 units</td>
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<td>3 units</td>
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<td>L79 EuSt 4366</td>
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<td>3 units</td>
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<td>L79 EuSt 437</td>
<td>Caffe, Cadavers, Comedy and Castrati: Italy and the Age of the Grand Tour</td>
<td>3 units</td>
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<td>The Jewish Experience in Eastern Europe</td>
<td>3 units</td>
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<td>European Social History: 1750–1930</td>
<td>3 units</td>
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<td>Art and Culture in Fin-de-Siècle Europe</td>
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<td>L79 EuSt 4854</td>
<td>Paul Gauguin: the Late Career</td>
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<td>L79 EuSt 4861</td>
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<td>The Impressionist Landscape: Style, Place and Global Legacies 1870–1920</td>
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<td>Cold War Cultures, United States and Europe, ca. 1945–1955</td>
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<td>L79 EuSt 491</td>
<td>Postmodernism</td>
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<td>L79 EuSt 492</td>
<td>The Italian Detective Novel</td>
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<td>L79 EuSt 4945</td>
<td>Seminar</td>
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<td>L79 EuSt 4952</td>
<td>Seminar in Comparative Literature: 19th-Century European Novel: Ambition and Desire</td>
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<td>L79 EuSt 4994</td>
<td>Advanced Seminar in History: Religion and Society in Modern Europe, 1750–1930</td>
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<td>L79 EuSt 49EM</td>
<td>Advanced Seminar in History: the Collapse of Communism</td>
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**FOCUS**

FOCUS is a special, year-long seminar program open only to freshmen. Several FOCUS plans are offered every year, each built around a seminar topic reflecting the FOCUS faculty member’s particular area of expertise. All students in a FOCUS seminar also attend a companion course chosen by their professor to encourage exploration of the seminar topic from varying perspectives. The FOCUS program provides a coherent, group-oriented learning experience with out-of-classroom activities, while still allowing time for electives.
FOCUS seminars change each year and have included such topics as: Law and Society; Global Culture and the Individual; the Theater as a Living Art; Writers as Readers; Nationalism and Identity; and Cuba: From Colonialism to Communism. Enrollment in each FOCUS plan is limited to 16 students to ensure informal, personalized instruction. All FOCUS courses count toward degree requirements, and no major or preprofessional curriculum is precluded by enrolling in FOCUS.

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E-mail: jromney@wustl.edu  
Departmental website: http://college.artsci.wustl.edu/

**Participating Faculty 2012-2013**

**William Acree**  
Assistant Professor of Spanish  
PhD, University of North Carolina  
(Romance Languages and Literatures)

**Barbara Baumgartner**  
Senior Lecturer  
PhD, Northwestern University  
(Women, Gender and Sexuality Studies)

**Douglas Berg**  
Professor  
PhD, University of Washington  
(Molecular Microbiology)

**James Andrew Brown**  
Associate Professor of Spanish and Comparative Literature  
PhD, University of Virginia  
(Romance Languages and Literatures)

**Mary-Jean Cowell**  
Associate Professor; Coordinator, Dance Program  
PhD, Columbia University  
(Performing Arts Department)

**Sarah C.R. Elgin**  
Viktor Hamburger Professor in Arts & Sciences  
PhD, California Institute of Technology  
(Biology)

**Matt Erlin**  
Professor  
PhD, University of California  
(German)

**Joachim Faust**  
Lecturer  
PhD, University of Kansas  
(Linguistics)

**Erin Finneran**  
Lecturer  
PhD, Washington University  
(English)

**Robert Henke**  
Professor  
PhD, University of California–Berkeley  
(Performing Arts)

**Christine Knoblauch-O’Neal**  
Professor  
ABD, Texas Woman’s University  
(Performing Arts, Dance)

**Heidi Kolk**  
Academic Coordinator and Lecturer  
PhD, Washington University  
(American Culture Studies)

**Jeffrey Kurtzman**  
Professor of Music  
PhD, University of Illinois at Urbana–Champaign  
(Music)

**Petra Levin**  
Associate Professor  
PhD, Harvard University  
(Biology)

**Joe Loewenstein**  
Professor  
PhD, Yale University  
(English)

**David Marchant**  
Senior Lecturer  
MFA, University of Iowa  
(Performing Arts)

**Jeffery S. Matthews**  
Senior Artist in Residence  
MFA, Virginia Commonwealth University  
(Performing Arts)

**Rebecca Messbarger**  
Associate Professor of Italian  
PhD, University of Chicago  
(Romance Languages)

**Joseph Schraibman**  
Professor  
PhD, University of Illinois  
(Romance Languages and Literatures)

**Shane Seely**  
Senior Lecturer  
MFA, Syracuse University  
(English)

**Chris Shaffer**  
Lecturer  
PhD, Cornell University
FOCUS programs are special year-long seminar programs open to freshman students. There is no major available in this area.

FOCUS programs are special year-long seminar programs open to freshman students. There is no minor available in this area.

Focus

L61 Focus 1071 FOCUS: Memory and Memorialization in American Culture
What do Americans remember, and what do we choose to forget? Who decides? And what do our ever-proliferating memorials and at times obsessive acts of memorialization say about us? In this course, we study cultural memory in the United States from the Civil War to September 11, 2001 by looking at “official” and “vernacular” forms of memorialization, including monuments, roadside crosses, temporary memorials, reenactments, museum exhibits, etc. We seek to understand not only what public acts of memorialization look like and who gets to define them, but how memory is contested or reshaped by such practices. Along the way, we ask how controversies of memory are related to competing ideas of nation, citizenship and patriotism; debates about what happened in the past; problems of cultural representation and identity; and shame and erasure of memory. This exploration focuses on “crises of memory” that have fundamentally altered American practices of remembrance. Credit 3 units. A&S : TH A&S : IQ, HUM, LCD BU : HUM

L61 Focus 108 FOCUS: Constantinople, Queen of Cities: Part I
Constantinople, the capital of the Byzantine Empire (330 to 1453), was among the greatest marvels of the medieval world. Renowned for its wealth and sophistication, the city was one of the largest urban centers in the premodern era and the model that cultures both east and west sought to surpass. In this course, we explore the evidence behind this reputation, studying the architectural, social and artistic history of the Queen of Cities. Although renamed Istanbul when conquered in 1453 by the Ottomans, its fame did not fade, and some of its most impressive monuments preserved today, stand as witness to the remarkable achievements of Byzantine culture. Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : HUM

L61 Focus 1081 FOCUS: From Constantinople to Istanbul
This course is a continuation of the Freshman Focus Program, Constantinople, Queen of Cities, and is limited to those students who are completing the sequence. It is a requirement for students participating in the summer study trip to Constantinople (Istanbul). This 1-credit course expands upon material covered during the fall semester by considering the post-Byzantine history of Constantinople, both under Ottoman rule and in the modern era. Requirements for this companion course include regular attendance, active participation and the presentation of two oral reports on site in Istanbul, which are based on fall and spring semester research projects. Credit 1 unit. A&S : TH A&S : IQ, HUM

L61 Focus 1701 FOCUS: The Italian Renaissance I
The Renaissance was one of the most dynamic and influential periods in the history of Western Europe. The Renaissance is replete with contrasts and contradictions, preserving numerous aspects of medieval thought at the same time as developing dramatic new ways of viewing, understanding and expressing the world. While these factors affected all of Europe to different degrees, it was in Italy that these trends first appeared and from which they traveled north, east and west, to influence profoundly the entire continent. This course concentrate on the Italian Renaissance in an effort to gain a panoramic view of its many aspects and the essential characteristics of each subject studied. The fall term examines geography and political entities; wars and political realignments; forms of government and their rulers; social life; manufacturing, trade and economics; the humanist movement; philosophy; the Catholic Reformation and natural sciences and medicine. The spring term concentrates on the arts: architecture, painting and sculpture, literature and music. Prerequisite: admission into The Renaissance FOCUS program. Credit 3 units. A&S : TH A&S : IQ, HUM

L61 Focus 1702 FOCUS: The Renaissance: An Introduction II
The Renaissance saw a fundamental shift in the character and functions of the arts in western society. This course examines the basic aesthetics and features of Renaissance literature (poetry, epic poetry, drama), plastic arts (painting, illumination, sculpture, bas-relief), architecture (both sacred and secular)
L61 Focus 1910 FOCUS: Phage Hunters
A research-based laboratory class for freshmen. Students join a national experiment organized by HHMI, with the goal of isolating and characterizing bacteriophage viruses found in the soil in the St. Louis area. Laboratory work includes isolation and purification of your own phage, DNA isolation and restriction mapping, and EM characterization of your phage. Several WU phages are selected for genome sequencing over winter break, and are annotated in the spring in Biol 192 Phage Bioinformatics. Students who successfully isolate and annotate a phage may become co-authors on a scientific paper. Prerequisites: high school courses in biology and chemistry, at least one at the AP or International Baccalaureate level, and permission of the instructor. Limited to 40 students. One-hour lecture, one-hour discussion and three hours lab per week. Credit 3 units. A&S: NS A&S: IQ, NSM BU: SCI

L61 Focus 1920 FOCUS: Phage Bioinformatics
A research-based laboratory class for freshmen. Students join a national experiment organized by HHMI, with the goal of genomic characterization of a local phage. Laboratory work focuses on learning computer-based tools for genome analysis followed by annotation and comparative analysis of the genome of a phage (bacterial virus) that was isolated fall semester at WU and sequenced over winter break. Prerequisites: high school courses in biology, chemistry and physics, at least one at the AP or International Baccalaureate level; permission of the instructor. Limited to 40 students; preference given to those completing Biol 191 Phage Hunters. One-hour lecture, one-hour discussion and three hours lab per week. Credit 3 units. A&S: NS A&S: IQ, NSM BU: SCI

L61 Focus 2010 FOCUS: Nationalism and Identity: The Making of Modern Europe
This course is a reading-and-discussion seminar designed for students interested in an interdisciplinary program in history, literature and language. It covers a series of major topics in French and German history, beginning with the French Revolution and culminating in the origins of World War I. The unifying theme is the concept of the nation and development of nationalism. Major topics include Napoleon, the revolutions of 1848, and German unification; related topics include such issues as women and the concept of the nation. The seminar reads texts such as the Abbe Sieyes’ “What is the Third Estate?” (in translation) and review excerpts from such films as Abel Gances’s Napoleon and Jean Renoir’s La Marseillaise. Credit 3 units. A&S: TH A&S: IQ, HUM BU: IS FA: SSP

Exploration of cultural expressions and depictions of nationalism in France 1789-1914 with emphasis on literary forms — poetry, prose, drama — but including other symbolic modes of expression, against the background of social and political change and in particular against the background of Franco-German relations. Course includes investigation of the use of gender to construe the nation; founding myths; the roles of men, women and the family in the nation; the importance of language and other ethnic markers; the creation and function of heroes; versions of the past; cultural stereotyping of the French vs. the German, as well as contemporary critiques of nationalism. Taught in English. Course should be enrolled as 3 units, or 4 units with trip. Corequisite: each student should enroll in the level of French language instruction that follows his or her fall course. Credit 4 unit. A&S: TH A&S: IQ, HUM FA: SSP

L61 Focus 203 Focus on German Nationalism 1789–1914: The Formation of German National Identity
Exploration of cultural expressions and depictions of nationalism in Germany 1789-1914 with emphasis on literary forms — poetry, prose, drama — but including other symbolic modes of expression, against the background of social and political change and in particular against the background of Franco-German relations. Course includes investigation of the use of gender to construe the nation; founding myths; the roles of men, women and the family in the nation; the importance of language and other ethnic markers; the creation and function of heroes; versions of the past; cultural stereotyping of the German vs. the French; as well as contemporary critiques of nationalism. Course should be enrolled as 3 units, or 4 units with trip. Credit 4 unit. A&S: TH A&S: IQ, HUM FA: SSP

L61 Focus 206 Workshop: Readers as Writers
In the Readers as Writers workshop, we consider the role of influence and revision in the making of a poem. While examining a wide range of poetry in both finished and draft form, we study the ways in which influence and revision bring a poem into existence and reshape its form on the page. Exercises are designed to guide the writing process, using the readings to inspire and inform our own creative work. Guiding texts include, but are not limited to, those being studied in Writers as Readers, which must be taken concurrently. Credit 3 units. A&S: TH A&S: IQ, HUM BU: HUM FA: Lit

L61 Focus 2061 Workshop: Readers as Writers
In the spring Readers as Writers workshop, we move from the consideration and creation of poetry to the consideration and creation of prose. As a transition between the two genres, we begin by reading and writing the prose poem, a hybrid form that borrows from and is influenced by both genres. We move from there toward a progressive lengthening of line and narrative as
L61 Focus 2070 Writers As Readers
Writing as a creative response to reading is examined through this seminar. Just as modern students are students of literature, so too were writers in the past students of their literary heritage. How did major English writers — Chaucer, Shakespeare, Milton, Austen, Keats and Yeats, among others — respond to what they read? Students consider the ways these writers resisted, embraced and repudiated the efforts of those who had written before them. Readings and discussions elicit each student’s own creative and critical responses. As happened in the past, the reading writer is answered by the writing reader.
Credit 2 units. A&S : TH A&S : IQ, HUM BU : HUM

L61 Focus 2080 FOCUS: Global Culture and the Individual: Intercultural Skills for the 21st Century
The emergence of a global society continues to create vast changes in all cultures. How do these changes impact our lives and the way we view ourselves and our place in the world? Students in this FOCUS seminar use the study of language, culture and literature to examine how they, as individuals, relate to self, community and culture. Students also learn to apply the skills needed to live and work most effectively within the university community and beyond. CBTL course.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : IS FA : SSP

L61 Focus 2081 FOCUS: Global Culture and the Individual: Intercultural Skills for the 21st Century
During the spring semester, we continue to find ways to practically apply the skills and knowledge gained during the fall semester. The course is built around projects proposed by students at the end of the fall semester. By the end of the academic year, you have gained a greater understanding of how you relate to, and affect, one another within your own immediate environment, your community, your culture and beyond. The companion course for this FOCUS seminar continues as a two-semester language sequence at your level of proficiency as determined by a placement test. CBTL course.
Credit 3 units. A&S : SS A&S : IQ, SSC

L61 Focus 215 FOCUS: The Theater as a Living Art
Moving in and out of practice and theory, this FOCUS plan interweaves a traditional introductory acting course with discussions of dramatic theory and visits to rehearsals where directors and actors work to shape the play. Must be taken concurrently with Drama 228C. Prerequisite: admission into The Theater FOCUS program.
Credit 3 units. A&S : LA A&S : IQ, HUM BU : HUM FA : AH

L61 Focus 216 FOCUS: The Theater as a Living Art
Continuation of the FOCUS program: The Theater as a Living Art. Topic varies by year, please see Course Listings for a description of current offering. Prerequisite: admission to the Theater as a Living Art FOCUS Program.
Credit 3 units. A&S : LA A&S : IQ, HUM FA : AH

L61 Focus 2170 FOCUS: Women in Science
Throughout the centuries, women were interested and involved in the sciences. Their scientific contributions, however, have often been overlooked and their abilities questioned. In this year-long course, we read biographies of famous women scientists and mathematicians, in addition to scholarly articles, to examine women's involvement in science and mathematics from the 19th century to the present. We explore the ways in which women have pursued scientific knowledge, look at the cultural factors that affected them, and investigate the impact of scientific theory and social conditions on their opportunities and identities. In addition to reading about women in science, we hear a variety of women talk about their careers. Visiting lecturers may include faculty from chemistry, biology, engineering, earth and planetary sciences, medicine, physics, medical administration may visit, as well as female scientists who work in industry. This course is restricted to Women in Science FOCUS Program participants, who must have concurrent enrollment in WGSS 100B Introduction to Women and Gender Studies.
Credit 1.5 unit. A&S : TH A&S : IQ, HUM BU : BA

L61 Focus 2172 FOCUS: Women in Science: Contemporary Issues
Following the history of women in science that we explored in the fall semester, this class begins a discussion and analysis of current issues in gender and science. We look at the feminist critique of science and scientific objectivity before turning to women's careers in science. Several questions are central to our inquiry: Do women “do” science differently? Could alternative science and mathematics education help increase women's representation in fields that continue to be male-dominated such as physics, engineering and computer science? How do social expectations of men and women affect career choices and retention? In addition to exploring these issues, we hear from a number of women scientists. Drawing from both the Danforth and Medical School campuses, our visitors include faculty members from chemistry, biology, engineering, earth and planetary sciences, medicine, physics, medical administration, among others, who share their reflections about women and science. This course is restricted to Women in Science FOCUS program participants.
L61 Focus 221 FOCUS in Law and Society
The legal system has assumed a major role in contemporary American life, a role that locates it as an essential governing authority that articulates the general rights and restraints for American citizens. The Law and Society FOCUS centers its attention on a few of the social controversies that depict the changes and diversity in the present-day American social order. The seminar particularly spotlights issues that are associated with status of America’s youth and on the privileges and restraints that our legal system extends to its young people. Regular topics for our inquiry include: students’ freedom of expression, privacy in the educational environment, religion in schools, abortion rights of minor females, juvenile criminality, and affirmative action in education. Combining students’ exposure to shaping the law in the abstract with the application of the law in live controversies is an important element of the year’s experiences. Thus the first semester’s course work exclusively involves reading major opinions of the appellate courts, while the second semester’s work entails an extensive commitment to observing the adjudication of disputes in trial court. Prerequisite: admission to the Law and Society FOCUS plan.
Credit 3 units. A&S : SS, SD A&S : IQ, SSC BU : BA, HUM FA : SSP

L61 Focus 222 Seminar in Law and Society
The Law and Society FOCUS is designed to expose students to some contemporary legal debates in American society and to expand their understanding of those issues as they are adjudicated in our legal system. We explore these current topics within the basic liberal arts tradition, which emphasizes the view that the legal system is a social instrument for seeking a “just society.” The seminar, accordingly, is an introduction to legal controversies as questions of public policies that have philosophical, social, political and economic implications, as well as legal ones. Prerequisite: admission to the Law and Society FOCUS plan.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA, HUM FA : SSP

L61 Focus 2341 FOCUS: Italy’s Temples of Knowledge: The History and Controversies of Museums
This course investigates the history of museums in Italy and the political and ethical issues that have developed alongside the institutions themselves to the present day. Our study during the fall semester unfolds chronologically, beginning with such ancient precursors to the modern museum as the Roman House of Pompeii. We study how the museum in Italy developed from ancient precursors to the modern museum as the Roman House of Pompeii. The course culminates at the end of the spring semester with a trip to Italy to tour the sites we have studied throughout the year. This course is restricted to Italy’s Temples of Knowledge Focus program participants.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM

L61 Focus 2342 FOCUS: Theaters of Knowledge, Part II
This Freshman FOCUS course divided its scope over two semesters. In the fall students studied the history of museums and in the spring students study the ethical, political, cultural and interpretive issues that surrounded these institutions. Students also prepare for the spring trip to Italy.
Credit 3 units. A&S : TH A&S : IQ, HUM

L61 Focus 2351 FOCUS: Moving and Being Moved: Human Movement in Art, Culture, Sport and Health
This course investigates the significance of movement, individually and collectively, in human experience. Movement can signal a wide variety of states of being — gender, age, ethnicity, mental and physical health — in addition to its stylized expressions as social and concert dance. We use readings, discussions, lectures and correlated movement work to deepen our understanding of what and how movement communicates. The course is team-taught by members of the dance faculty and guest instructors. Concurrent registration in a dance or somatics course is recommended but not required. This course is restricted to Moving and Being Moved Focus program participants.
Credit 3 units. A&S : LA A&S : IQ, HUM

L61 Focus 2352 FOCUS: Moving and Being Moved: Further Explorations
Continuation of Fall Focus program. Students continue to explore a broad range of topics. At the same time each student deepens his or her experience of a specific movement discipline by enrolling in one of the many dance or somatic practices courses offered by Washington University. The weekly seminar meetings focus on connections between dance and other disciplines: for example, lighting and costume design for dance, arts management, movement and Native American culture, dance and literary theory that treats “the body” metaphorically. However, our weekly meeting also includes time periodically for students to share their experience in their chosen movement centered courses. In-class content continue to be supplemented by field trips and related practical applications. This course is restricted to Moving and Being Moved Focus program participants.
Credit 2 units. A&S : LA A&S : IQ, HUM

L61 Focus 2601 FOCUS: The Argentine Experience: History, Literature, Culture
How have foreigners viewed Argentina over time? What was the meaning of bloodshed among gauchos? What are the origins of tango? And at one point, one third of Argentina’s population consisted of Afro-descendants — what happened to them? This FOCUS course helps students find answers to such questions and more. A history of Argentina from Spanish settlement to the present, focusing on the wars of independence; economic growth and urbanization; immigration; gauchos and popular culture; Juan and Evita Peron; the “Dirty War”; and the transition to democracy and neo-liberalism. The course complements an offering on Argentine Culture in the spring semester. It also provides historical background for a field trip by the students to Buenos Aires, Argentina. It covers the history of one of Latin America’s largest and most important countries and gives students the chance to compare processes of cultural, political and economic development with the United States and other countries in the Americas. Prerequisite: admission to the FOCUS Argentina program.
Credit 3 units.  A&S : TH  A&S : IQ, HUM, LCD  BU : IS

L61 Focus 2602 FOCUS: Buenos Aires and the Construction of Argentine Culture
In this course, we examine the various expressions of Argentine culture that have given us gauchos, tango, Jorge Luis Borges and one of the most prolific and honored cinematic traditions of Latin America. In particular, we explore the ways in which history and culture interact to express the experience of Argentina and Buenos Aires. We study films, popular music, dance, literature, sport and theater to gain insight into that experience. This course is part of the Buenos Aires FOCUS program; it includes a trip to Buenos Aires and is intended to be taken after Focus 2601 Argentina: Past and Present.
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L61 Focus 267 FOCUS: Cuban Transitions: From Colonialism to Communism
This course examines the Cuban experience from its beginnings as a Spanish colony to its independence. We emphasize happenings in contemporary Cuba and its relations to other countries. Topics studied include, among others, the Tainos, slavery, the preeminence of sugar and tobacco as an economic and cultural force, social structures, race, the “Spanish-American war,” the press, the military and education. We screen documentaries, examine the paintings of Wilfredo Lam and the photographs of Walker Evans, and study the contribution of music to the Cuban ethos. We concentrate on biographies and documentary films of Che Guevara and Fidel Castro. All topics studied also are put into contemporary contexts. Requirements: three short papers (four to six pages) and an oral report.
Credit 3 units.  A&S : SS  A&S : IQ, SSC  BU : IS  FA : SSP

L61 Focus 2671 Stranger than Paradise: Cuban Experience of the Revolution
The word “Cuba” strikes a resonant chord with many of us — a mix of curiosity, anxiety and hope — shaped by many years of controversy and stereotyping, on one hand, and myth making, on the other. Whether you want to develop an understanding of Cuban literature on and off the island, or to learn about music and dance history that led up to the Buena Visa Social Club phenomenon, this is a seminar for you. Organized chronologically and thematically as a companion course to Focus 267 FOCUS: Cuban Transitions: From Colonialism to Communism, it covers a comprehensive range of topics related to contemporary Cuba. Faculty with ample firsthand knowledge of Cuba and invited speakers encourage wide-ranging discussions about the interplay of such issues as the politics of race and sexuality, repression and exile, censorship and dissent. African cultural heritage and syncretic religious practices are presented as both a source of pride for Cubans and a symbol of their unique Caribbean experience. By examining a variety of ideological perspectives in prose fiction, poetry, political speeches, artwork, musical forms, personal testimonies and film, this seminar allows students to exchange perceptions across various disciplines, question myths and erase the distance between theory and context-based critical practice. Prerequisite: successful completion of the first-semester course, Focus 267.
Credit 3 units.  A&S : TH  A&S : IQ, HUM  FA : SSP

L61 Focus 2811 FOCUS: Literary Culture of Modern Ireland
This course examines the literature of Ireland from the fall of Parnell to the outbreak of World War II. This is the period of an emerging cultural nationalism, a great efflorescence of literature in many genres, and some of the most important political, social and military events in modern Irish history. One of the remarkable things about the period is the close relationship between prominent figures in the literary and artistic world and those in the realm of politics and social change. The result was a rich cross-fertilization of ideas and attitudes that had enormous implications for the future of this embattled island nation. We explore this vital and transformative exchange by close attention to some primary texts of the period. Writers studied include: Yeats, Gregory, Wilde, Synge, Shaw, Joyce, O’Casey and Bowen.
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : IS

L61 Focus 2812 FOCUS: Literary Culture of Modern Ireland II
This course explores the intersection of literature and culture in Ireland from the establishment of the Fianna Fail government of de Valera in 1932, through the lean years of the 1940s to ‘70s, to the economic boom of the Celtic Tiger in the 1990s and beyond. To appreciate this small nation’s rocky road to a successful entrance into the European Union, economic security and national confidence, we closely read how Ireland’s rich and diverse literature casts a cold but feeling eye on its hard-earned independence and fraught nationalism. For the fiction, poetry and drama of Ireland not only mirrors but often moves the story
of this nation’s growth and transformation over the decades of economic, social and political strife. Credit 3 units. A&S : TH A&S : IQ, HUM

L61 Focus 2813 Focus: Literary Culture of Modern Ireland & Irish America: Irish-Amer. Writers, Fitzgerald-Kennedy
Credit 1.5 unit. A&S : TH A&S : IQ, HUM

L61 Focus 2814 FOCUS: Literary Culture of Modern Ireland and Irish America: Modern and Contemporary Irish Drama
Building on students’ coverage of the early days of Dublin’s Abbey Theatre, this segment focuses on (mostly) living Irish playwrights whose work develops familiar themes in unfamiliar ways. Brian Friel, whose long career recently was recognized by an elite council of Irish Arts, is represented by Translations and Dancing at Lughnasa. We read plays by Marina Carr, the most important Irish woman playwright since Lady Gregory, often described as “Greek” for her scorching fatalism. Continuity with Synge is evident in work by Martin McDonagh, as is his transformation of Irish stereotypes into grotesques and deep resources of dark humor. Conor McPherson’s Shining City is not yet ready to banish a ghost from a psychiatrist’s office. Other playwrights represented may include Tom Kilroy and Christina Reid. It is notable that the work of three of these playwrights was produced in New York recently and nominated for Tony awards. Credit 1.5 unit. A&S : TH A&S : IQ, HUM

L61 Focus 287 Focus: Writers As Readers Seminar
Participants in this seminar examine how writing serves as a creative response to reading. Just as modern students are students of literature, so too were writers in the past students of their literary heritage and of their contemporary literary moment. We examine how writers, both poets and novelists, responded to, elaborated on, rebelled against and paid homage to their predecessors. Among the writers we consider are Jane Austen and Henry James, Charles Dickens and Dostoevsky, Tennyson and Keats, Kipling and Isaac Babel. Credit 3 units. A&S : TH A&S : IQ, HUM FA : Lit

Film and Media Studies
In the 21st century, as our national and global cultures become increasingly dominated by the visual in ubiquitous modes of technology-based communication, the need to become critical viewers, knowledgeable in the history of the most popular art forms of our time and possessing the analytical skills to understand and interpret mass media, is acute.

To address this need, the undergraduate major in Film and Media Studies requires the rigorous study of history and aesthetics so that students come to understand the creative force of moving image texts, whether digital, electronic or filmic. Courses examine the place of these texts in culture and how their production of meaning relates to industrial and business practices as well as to other artistic endeavors. Complementing the critical studies undergraduate curriculum in Film and Media Studies, courses in production and screenwriting provide — through acts of creation and collaboration — an understanding of the aesthetic and ethical choices that artists confront in working with moving image-based media. Such practical experience integrates theoretical and historical awareness to further enhance students’ understanding of the ways in which visual culture makes meaning with established and emergent technologies in contemporary society. This major will benefit any student interested in gaining an intellectual perspective on the relationship between art and technology, culture and industry, history and theory. This major trains students in rigorous analytical thinking and provides them with research skills and historical knowledge that will assist them in becoming effective participants in the mediated culture of the 21st century.

The Program of Film and Media Studies’ academic mission is focused on the intellectual and professional development of students, but our faculty regard educating the larger Washington University and St. Louis communities about our field of study to be another important element of our work. To that end, we are committed to sponsoring events, whether film festivals, academic lectures or symposia that further discussion of and intellectual engagement with all forms of moving image media.

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PhD, University of Wisconsin–Madison

Philip Sewell
PhD, University of Wisconsin–Madison

Senior Lecturer
Richard Chapman

Lecturer
Brendan Leahy
The Major in Film and Media Studies

Total units required: 30

Required courses:

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>Film 220</td>
<td>Introduction to Film Studies</td>
<td>3</td>
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<tr>
<td>Film 225</td>
<td>Making Movies</td>
<td>3</td>
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<tr>
<td>or Film 230</td>
<td>Moving Images and Sound</td>
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<td>or Film 352</td>
<td>Introduction to Screenwriting</td>
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<tr>
<td>Film 330</td>
<td>History of American Cinema</td>
<td>3</td>
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<tr>
<td>Film 340</td>
<td>History of World Cinema</td>
<td>3</td>
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<td>Film 350</td>
<td>History of Electronic Media</td>
<td>3</td>
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<tr>
<td>Film 420</td>
<td>Film Theory</td>
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Elective courses:

12 credits of advanced electives (300 level or above) are required. A student must take one elective that focuses on a national cinema other than that of the United States. (Courses on national cinemas offered in various foreign language departments are cross-listed and coordinated with courses in Film and Media Studies. Please check Course Listings for cross-listings.) Students with an interest in production may count two additional production courses toward the major, including courses in video production or courses in screenwriting.

Additional Information

Senior Honors (Film 499) is intended for majors pursuing honors in Film and Media Studies. In order to enroll for this course, students must apply in advance for honors and be approved by a faculty committee.

The Minor in Film and Media Studies

Units required: 15

Required courses:

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<tr>
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<tr>
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<td>History of World Cinema</td>
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<tr>
<td>Film 350</td>
<td>History of Electronic Media</td>
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Elective courses:

In addition to required courses, students must also take a 3-credit advanced elective (300 level or above) course to complete the minor. Elective courses change every academic year, so please see our website for current course listings.

Additional Information

Internships and independent study are not available for the minor.

Film and Media Studies

L53 Film 110 Freshman Seminar: Race and Ethnicity on American Television

This course presents a historical overview of the forms that racial and ethnic representations have taken in American television. The course attempts to chart changes in public perception of racial and ethnic difference in the context of sweeping cultural and social transformations. The course examines notions of medium and ponders the implications for these identities of the contemporary practice of “narrowcasting.” Required screenings. Credit 3 units. A&S: TH, CD, SD A&S: IQ, HUM, LCD BU: BA FA: SSP

L53 Film 112 Freshman Seminar: Race and Ethnicity in American Cinema

From the early documentary roots of cinema through the Civil Rights movement and to the recent democratization of the means of media production, questions of race and ethnicity have proved crucial both to the content of American films and also to the perspective from which they are made. This class looks at the representation of historical moments from the Civil War to Hurricane Katrina, the production of cinematic stereotypes as well as their appropriation for subversive purposes, and the gradual evolution of multiculturalism as a central factor in the stories told and the telling of stories on the American screen. Students use film texts to develop a critical understanding of one of the most important issues in American history. Required screening TBA. Credit 3 units. A&S: TH, SD A&S: IQ, HUM, SD BU: BA

L53 Film 115 Freshman Seminar: Reality on Screen

This course explores the complex relationship between moving images and ideas of the real in both movies and television. It explores theories of representation, surveillance, authenticity, truth and realism in this context. From the earliest “actuality” films to the recent phenomenon of reality television programming, it asks if screen images capture what is “really” happening in front of the camera or if conventions of representation, genre and narrative mediate the reality of these images. More significantly, it inquires into why such questions matter. At issue is the role that moving images on both the big and the small screen have in our understanding of the world as it is and ourselves as we experience it. Credit 3 units. A&S: SS EN: S

L53 Film 116 Freshman Seminar: Cult TV: Critical Approaches to Fans and Fictions
What do such disparate television series as Dr. Who, Star Trek, The Avengers, Monty Python's Flying Circus, The X-Files, Buffy the Vampire Slayer, Xena: Warrior Princess, and Sealab 2021 have in common? They all attract loyal audiences, stimulate “subcultural” sensibilities, lend themselves to “textual poaching,” and thus qualify as examples of “Cult TV,” a term that has become increasingly salient within critical studies of the medium. In this course we explore the subject of cult television from a variety of social, cultural and thematic perspectives, so that by the end of the semester students have gained a deeper understanding of its historical importance as a barometer of both popular and oppositional tastes. We examine how these and other examples of genre-based network and cable programming complicate distinctions between lowbrow and highbrow tastes while sustaining worldwide “interpretative communities” years after their original airdates. Students also examine the importance of syndication, home video technologies, ancillary markets, publishing and the Internet in the construction of fan cultures. Required screenings.
Credit 3 units. A&S : TH A&S : IQ, HUM

L53 Film 117 Freshman Seminar: Asians in American Film
This course surveys the history of Asian representations in American cinema from the silent period to the contemporary era. Throughout the semester we focus on images of Chinese, Japanese, Koreans, Filipinos and Vietnamese that have become most ingrained in American popular culture over the past century, from Fu Manchu and Madame Butterfly stereotypes popular during the classical studio era to more recent reconfigurations of racialized imagery in Jackie Chan and Jet Li films. We also examine selected works by Asian-American independent writer-directors; films and videos such as Chan is Missing, History and Memory, and Better Luck Tomorrow that challenge the stereotypes and normative tropes of “Orientalism” still permeating mainstream media. Students are asked to frame textual analyses of key films (such as The Cheat, Daughter of Shanghai, Battle Hymn, Flower Drum Song, and Enter the Dragon) within various political, social, cultural and industrial contexts (e.g. anti-Asian immigration and labor policies; U.S. foreign policies; the practice of "yellowface;" censorship codes; wars in East and Southeast Asia; anti-miscegenation laws; grassroots campaigns to stem the tide of stereotypes and hate-crimes; etc.).
Credit 3 units. A&S : TH

L53 Film 118 Freshman Seminar: Mr. Kiss Kiss Bang Bang: James Bond in Film, Literature and Popular Culture
Originally a character in Cold War spy literature, James Bond has emerged as an international pop culture phenomenon. In this course, we explore the evolution of James Bond from Ian Fleming to the "spy" parodies in international cinema. We read several of Fleming's novels and short stories, including Casino Royale (1953), Octopussy (1966) and The Property of a Lady (1967), and discuss these texts in light of post-war spy literature. We screen numerous Bond films, and compare and contrast James Bond the literary and cinematic character, how Bond emerged as a franchise hero through the vision of producers Harry Saltzman and Albert "Cubby" Broccoli, and critical aspects of the film franchise, including its storytelling roots in Hollywood serials, its use of gadgets and special effects, and the role of stardom in their marketing (Sean Connery, Ursula Andress, Roger Moore, Madonna, Pierce Brosnan and Daniel Craig). Finally, we explore the re-envisioning of Bond in various media and art forms in global popular culture, including music, DC and Marvel Comics, games, children's television and in Asian cinema (Stephen Chow's 1994 From Beijing with Love). Required screening time: 7 p.m. Wednesday. Open only to freshmen. Credit 3 units. A&S : TH A&S : IQ, HUM

L53 Film 121 Freshman Seminar: Youth Culture and Visual Media
Since the advent of cinema through the recent development of online social networking, visual media in the United States and around the world have been identified with a market of youthful consumers and producers. This course looks at the development of youth culture in the United States and its unique relationship to visual media, including film, television, comic books, video games and the Internet, in the 20th and 21st centuries. We examine youth culture as a social phenomenon generated by the young, a means of representing the experience of being youthful, and as part of the ongoing debates over the effects of media on the young. As alternately mass culture, popular culture, counter culture and participatory culture, youth culture holds a privileged place in the history of American visual media and continues to influence production and innovation within the media marketplace.
Credit 3 units. A&S : TH A&S : IQ, HUM

L53 Film 200 Special projects
This course is intended for freshmen and sophomores who wish to register for internships. Students must receive program approval prior to beginning the internship. Please consult the program guidelines governing internships.
Credit -3 unit.

L53 Film 220 Introduction to Film Studies
How do film images create meaning? What are the tools the film artist uses to create images? This course introduces students to basic techniques of film production and formal methodologies for analyzing film art. Students learn the essential components of film language — staging, camera placement, camera movement, editing, lighting, special effects, film stock, lenses — to heighten perceptual skills in viewing films and increase critical understanding of the ways films function as visual discourse. The course is foundational for the major in Film and Media Studies. Required screenings.
Credit 3 units. A&S : LA A&S : IQ, HUM BU : HUM
L53 Film 225 Making Movies
This course introduces the core concepts and skills for producing dramatic narrative film and video, building on the Hollywood paradigm. No previous technical experience is required, but students should have taken or be concurrently enrolled in Film 220. This course teaches students how films are put together to tell stories, negotiating between the possibilities of cinematic language and the practicalities of working with machines and other people. In order to develop an understanding of filmic narration, students learn the basics of camera operation, lighting, digital video editing, sound design and recording, casting and directing actors, visual composition and art direction, and production planning and organization. These concepts are put into practice through a series of exercises culminating in a creative, narrative short digital video. This course fulfills the prerequisite for 300- and 400-level video and film production courses in Film and Media Studies and the production requirement in the FMS major. Admission by wait-list only. Prerequisite: Film 220. Credit 3 units. A&S : LA A&S : IQ, HUM

L53 Film 230 Moving Images and Sound
Special Note: Admission by wait-list only. Preference is given to Film and Media Studies majors and minors. This introductory video production course explores how images and sounds function as cinematic building blocks and purveyors of content. Through creative assignments involving at times personal inquiry, at other times the understanding of elementary semiotics, the components of film and video are examined. Students learn the basics of key sound and editing software to produce, outside of class time, an original two-minute narrative piece. This course is a prerequisite to all other Film and Media Studies video courses. Prerequisite: Film 220 or consent of instructor. Credit 3 units. A&S : LA A&S : IQ, HUM

L53 Film 310 Video Production
An advanced course exploring the creative and technical aspects of video production. Students sharpen their knowledge of cameras, directing, lighting, sound recording, nonlinear systems and narrative structures. In addition to acquiring a theoretical understanding of the production process, students gain practical experience by producing, outside of class time, a short project reflecting their visual and conceptual maturity. Prerequisite: Film 230 Moving Images and Sound or permission of the instructor. Credit 3 units. A&S : LA A&S : IQ, HUM

L53 Film 311 Documentary Production
In parallel with an overview of various documentary genres, ranging from the personal, the poetic, the agitprop and cinema verité, this course offers students the opportunity to produce a short documentary piece on the topic of their choosing. Aesthetic and ethical issues are explored by considering the overall methodology in terms of subjectivity, content, structure and the possible usage of music and/or voice-over. For the sake of completing the project in time, it is recommended that students be familiar with the subject matter of their investigation before taking the course. Prerequisite: Film 230 Moving Images and Sound or permission of the instructor. Credit 3 units. A&S : LA A&S : IQ, HUM BU : HUM

L53 Film 315 Visual Music
The cinema took more than 30 years to emerge with fully synchronized sounds. Since then, sound and picture have continued to be more and more integrated and interdependent. Current music video artists such as Michel Gondry and Chris Cunningham constitute only one expression of that desire to merge image and sound. Earlier, many explorers such as Oskar Fischinger, Peter Kubelka and Norman McLaren conceived films in which images and sounds surprise the viewer. In the process of producing similarly challenging four- to five-minute video pieces, we examine how synesthesia in the arts has functioned to energize the two media. A variety of software is explored in that context. Prerequisite: Film 230 Moving Images and Sound or permission from the instructor. Credit 3 units. A&S : LA A&S : IQ, HUM BU : HUM

L53 Film 320 British Cinema: A History
In cinema, as in politics, Britain is caught awkwardly between America and Europe, never quite knowing how to position itself. Should it try to compete seriously with Hollywood, or develop a smaller-scale and more distinctive national cinema on the French or Swedish model? This uncertainty has commonly been seen as a weakness but it can be seen, conversely, as a strength, fostering a rich diversity and complexity both in the output overall and in the work of key British filmmakers such as Michael Powell, David Lean, and, in the first half of his career, Alfred Hitchcock. This course traces the fortunes of British cinema from its lively beginnings through a switchback history of slump and recovery, giving equal attention to the work of high-profile directors such as Hitchcock and to important genres such as 1930s documentary, Ealing comedy and Hammer horror. A continuing theme is the complex economic relationship between British cinema and Hollywood: co-productions, trade barriers, the drain of talent to Hollywood, and the intermittent success of British films like The King’s Speech in the American market. Required screening time: 4 p.m. Thursday. Credit 3 units. A&S : TH A&S : IQ, HUM BU : IS

L53 Film 322 Contemporary East Asian Cinema
This course focuses on films made in Japan, Mainland China, Taiwan, Hong Kong and South Korea over the past three decades. Students examine how the global/local geopolitics specific to the post-Cold War period, the passing of authoritarian regimes, the boom and bust of the Asian economy, and...
international film festivals have influenced the shaping of New East Asian cinemas across borders. The first section of our course investigates the ways in which historical traumas (wars, massacres, revolutions and uprisings) have been revisited in the cinemas of Japan, China, Taiwan and South Korea. What is the relationship between history and national cinema? How do such concepts as imperialism, nationalism, postcolonialism, guilt and trauma figure in films shouldering the “burden of history” and representing the “unrepresentable”? The second section explores selected auteurs and stars familiar to international cinephiles, such as Zhang Yimou, Kim Ki-duk, Park Chan-wook, Nagisa Oshima, Maggie Cheung, Stephen Chow, John Woo, Chow Yun-fat, Gong Li and Takeshi Kitano. In the process, we identify the themes, styles, genres and ideological/cultural content of East Asian film canons in the West. The final weeks are devoted to border-crossing films such as Ang Lee’s Wedding Banquet, Wong Kar-wai’s Happy Together, the Korean-Japanese co-production Asako in Ruby Shoes, and the pan-Asian horror film Three Extremes, which highlight the critical concerns of diaspora, hybridity, transnationalism and globalization. Required screenings.
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD  BU : IS

L53 Film 328 History of German Cinema
This course explores the major developments of German cinema throughout the 20th century. More specifically, this course engages with issues relating to German film culture’s negotiation of popular filmmaking and art cinema, of Hollywood conventions and European avant-garde sensibilities. Topics include the political functions of German film during the Weimar, the Nazi, the post-war, and the post-wall eras; the influence of American mass culture on German film; the role of German émigrés in the classical Hollywood studio system; and the place of German cinema in present-day Europe and in our contemporary age of globalization. Special attention is given to the role of German cinema in building and questioning national identity, to the ways in which German feature films over the past hundred years have used or challenged mainstream conventions to recall the national past and envision alternative futures. Films by directors such as Murnau, Lang, Fassbinder, Herzog, Tykwer and many others. All readings and discussions in English. May not be taken for German major or minor credit. Required screenings.
Credit 3 units.  A&S : TH  BU : IS

L53 Film 329 Italian Neorealism
This course explores the visual language of one of the most influential film movements of the 20th century. We concentrate on the origins of neorealism in Italian post-war cinema and history, and focus on the works of filmmakers such as Roberto Rossellini, Vittorio De Sica and Luchino Visconti. We also consider the longer-term influence of the movement both in Italy and elsewhere. Throughout this course, we reflect on the possibilities of mimesis in cinema, on the social and political engagement of neorealist film, and on the factors that caused its decline.
Credit 3 units.  A&S : TH  BU : IS
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1970s. As in, for instance, Australia and New Zealand, growth
Like many other Anglophone and Francophone countries, Ireland
only even started to develop a robust national cinema in the
1970s. As in, for instance, Australia and New Zealand, growth
had previously been blocked by the dominance of local screens
by films from, on the one hand, the overbearing "imperial" power,
Britain, and, on the other, Hollywood, center of an even stronger
cultural imperialism. Increased national self-assertion coincided
with the weakening of the grip of those two cinemas in the post-
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this. Like Ireland itself, Irish cinema is deeply marked by, and
preoccupied with, the political and cultural struggles of the past,
and recent cinema is illuminated by seeing it in the context of
earlier films: Hollywood and British versions of Ireland, whether
shot on location or in the studio, as well as the isolated earlier
landmarks of an indigenous Irish cinema. We also look at the
rich topic of the representation of Irish immigrants in Hollywood
films. Required screenings Tuesdays at 4 p.m.
Credit 3 units. A&S : LA, CD A&S : IQ, LCD BU : IS

L53 Film 340 History of World Cinema
The course surveys the history of cinema as it developed in
countries other than the United States. Beginning with the initially
dominant film producing nations of Western Europe, this course
considers the development of various national cinemas in
Europe, Asia and Third World countries. The course seeks to
develop an understanding of each individual film both as an
expression of a national culture as well as a possible response to
international movements in other art forms. Throughout,
the course considers how various national cinemas sought
ways of dealing with the pervasiveness of Hollywood films,
developing their own distinctive styles, which could in turn
influence American cinema itself. Required screenings.
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : HUM, IS FA : AH

L53 Film 341 Transnational Cinema(s): Film Flows in a
Changing World
Across a century of extreme nationalism, Cold War imperialism
and increased globalization, moving image culture remains
deeply tied to the evolution of global economics, shifting notions
of local identity, and human migration. Recent changes in the
dynamic of international economics and cultural flow have
led to new critical approaches that reassess international
cinema as being constructed by relationships that transcend
national borders. This course examines multiple ways in
which cinema works "transnationally," focusing on recent
theories of modernism, globalization and borderless cultures.
Exploring a range of contexts from American domination of the
eyear international market, to the recent evolution of Chinese
blockbuster action films, to contemporary Palestinian video art,
this course looks at the way in which material developments,
narrative and aesthetic conventions, and film professionals
have circulated over the past century. We also look at how
new technologies of production, distribution and exhibition
challenge traditional notions of cultural borders. Required
screenings and in-class textual analysis are used to complement
industrial studies of how transnational flows have come to define
contemporary audiovisual media practices. Required screenings
Tuesdays at 7 p.m.
Credit 3 units. A&S : LA A&S : IQ, HUM

L53 Film 345 Sexual Politics in Film Noir and Hard-boiled
Literature
Emerging in American films most forcefully during the 1940s, film
noir is a cycle of films associated with a distinctive visual style and
a cynical worldview. In this course, we explore the sexual
politics of film noir as a distinctive vision of American sexual relations every bit as identifiable as the form’s stylized lighting and circuitous storytelling. We explore how and why sexual paranoia and perversion seem to animate this genre and why these movies continue to influence “neo-noir” filmmaking into the 21st century, even as film noir’s representation of gender and sexuality is inseparable from its literary antecedents, most notably, the so-called “hard-boiled” school of writing. We read examples from this literature by Dashiell Hammett, James Cain, Raymond Chandler and Cornell Woolrich, and discuss these novels and short stories in the context of other artistic and cultural influences on gendered power relations and film noir. We also explore the relationship of these films to censorship and to changing post-World War II cultural values. Films screened in complete prints or in excerpts likely include many of the following: The Maltese Falcon, Double Indemnity, Murder My Sweet, Phantom Lady, Strangers on a Train, The Big Sleep, The Killers, Mildred Pierce, The High Wall, Sudden Fear, The Big Combo, Laura, The Glass Key, The Big Heat, Kiss Me Deadly, The Crimson Kimono, Touch of Evil, Alphaville, Chinatown, Taxi Driver, Devil in a Blue Dress, The Bad Lieutenant and Memento.

Required screenings Tuesdays at 4 p.m.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM

L53 Film 349 Media Cultures
This course is an introduction to the interdisciplinary field of cultural and media studies. Through a focus on television and new media, it analyzes current theoretical ideas and debates about culture. Main topics include the relationship between new technologies and everyday life and popular culture; analysis of media messages and images; how media help construct new identities and mark differences between groups; analysis of the globalization of the production and circulation of media culture; the rise of multimedia cultural industries; and the role of the audience. Required screenings.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : BA

L53 Film 350 History of Electronic Media
This course traces the history of electronic media as they have become the dominant source for entertainment and information in contemporary culture, starting with over-the-air broadcasting of radio and television through to cable and the “narrowcasting” achieved by digital technologies. While some attention is paid to other national industries, the chief focus of the course is on electronic media in the United States to determine, in part, the transformative role they have played in the cultural life of the nation. The course explores the relationship of the electronic media industries to the American film industry, determining how their interactions with the film industry helped mutually shape the productions of both film and electronic media. Required screenings.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM

L53 Film 352 Introduction to Screenwriting
Writers explore the various elements, structures and styles used in crafting a motion picture screenplay. They experience this process as they conceive, develop and execute the first act of a feature-length script. Writers create a screenplay story, present an outline for class discussion and analysis, then craft Act One. Writers are encouraged to consult with the instructor at various stages: concept, outline, character and scene development, and dialogue execution. While the students fashion their screenwriting independently, the class also explores the general elements of theme, genre and voice.

A more specific examination of mechanics, the nuts-and-bolts of story construction, plotting, pacing, etc. follows to support the ongoing writing process. In-class exercises aid the writer in sharpening skills and discovering new approaches to form and content. Writers’ work is shared and discussed regularly in class. Screening of film scenes and sequences provides students with concrete examples of how dramatic screenwriting evolves once it leaves the writer’s hands.
Credit 3 units. A&S : LA A&S : IQ, HUM BU : HUM

L53 Film 353 Writing Episodic Television
This class focuses on all the factors that go into preparing and writing an episode for a network TV series (dramas only). Students begin with a “pitch” (verbally or in short outline form) for an idea for a show currently on a network schedule. Once the “pitch” is accepted, the student then completes a “beat sheet,” and ultimately a spec script that can run from 62 to 75 pages. Two drafts of the script are required. During the course of this process, students also learn how to research their narrative premises by contacting legal, medical and law enforcement experts in order to guarantee the accuracy of their scripts. In addition to learning the actual writing process, students are expected to watch several television shows and to read books, scripts and industry trade papers as they pertain to the craft and business of television writing. Finally, students also meet agents, producers, directors and other television industry professionals in order to gain their insights into the scriptwriting process and to gain a more global view of the steps involved in bringing their ideas to the screen.
Credit 3 units. A&S : LA

L53 Film 356 Television Culture and Cult TV: Critical Approaches to Fandom
Why do television series inspire passionate involvement on the part of some viewers? What are the differences among being a viewer, an audience member, and a fan? How can we make scholarly sense of cultural practices such as learning to speak Klingon or building a “replicar” of the General Lee? Studies of fandom have attempted to answer such questions and continue to explore issues that are crucial to understanding contemporary television culture. The phenomenon of “Cult TV” offers fertile ground for examining the complex dynamics at play among fans, popular culture, the institutions of American media,
individual programs. In its exploration of cult television and fans, this course engages with key issues in contemporary media such as the proliferation of new media technologies and the repurposing of existing media forms, the permeable boundaries between high and low mass and oppositional culture, and the fragmentation and concentration of media markets. The class combines close textual analysis with studies of fan practices to examine a variety of television programs, from canonical cult texts such as *Star Trek* and *Doctor Who* to “quality” fan favorites such as *Designing Women* and *Cagney & Lacey* to contemporary cult/quality hybrids such as *Lost* and *Heroes*. In mapping out this cultural territory, we develop a set of critical perspectives on audience identities and activities and examine the continuing and conflicted imagination of fans by media producers, distributors, regulators and critics. Required screenings. Prerequisite: Film 220 or Film 350, or consent of instructor.

**L53 Film 357 Quality Television and the “Primetime Novel”**

Over the past four decades, the cultural status of television in the United States has been reconfigured and complicated with changes in industrial structures, audience formations, regulatory presumptions and production techniques and strategies. This course examines these interrelated forces, particularly as they have fostered a set of programs and practices often hailed as “Quality Television.” The class surveys the institutional paradigms that gave rise to particular generations of programming celebrated as “quality” and analyze the systems of distinction and cultural value that make the label socially and industrially salient. We critically investigate the role of audiences and the conceptions of viewer choice at play in these developments. In addition, the course analyzes the textual features that have come to signify narrative complexity and aesthetic sophistication. We examine foundational historical examples of this phenomenon from *The Mary Tyler Moore Show* to *Hill Street Blues* and *Cagney & Lacey* to *Northern Exposure* as well as more contemporary broadcast and cable fiction such as *Lost*, *The Wire* and *Mad Men*. In addition, students are expected to watch a complete series, chosen in consultation with the instructor, as part of their final research project. Required screenings. Prerequisite: Film 220 or Film 350, or consent of instructor.

Credit 3 units. A&S : TH A&S : IQ, HUM BU : BA

**L53 Film 360 The History of the Film Score**

This course looks at the role of music in Hollywood films from the beginning of the sound era to the present. Larger themes include the importance of technology, industry structures shaping the nature of scores, notable film music composers, the relationship between music, gender and genre, music’s role in the adaptation of literary texts to film, the power of directors to shape the content of film scores, and the importance of popular music as a driving economic and aesthetic force in film music history. Films to be screened include *From Here to Eternity*, *Stagecoach*, *High Noon*, *The Night of the Hunter*, *Butch Cassidy and the Sundance Kid*, *Born on the Fourth of July*, *Casino*, *Jarhead* and *The Social Network*. Required screening time: 4 p.m. Thursdays.

Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : AH

**L53 Film 361 Film Sound**

Although film critics and theorists tend to think of cinema as a “visual art,” this shorthand description of the medium overlooks the importance of film sound in cinematic storytelling. This course is intended to provide a general overview of the way in which film theorists have treated the issue of sound in the cinema. Among the issues addressed in the course are: the contribution sound technology and practice make to film form; the various possible formal relationships between sound and image; the effects of sound technologies on notions of realism and verisimilitude; the importance of sound to particular genres, such as the horror film; and, lastly, the role of sound in film spectatorship. The course also showcases the work of the most important sound stylists in film history, such as Fritz Lang, Orson Welles, Alfred Hitchcock, Robert Altman and David Lynch. Required screenings.

Credit 3 units. A&S : TH

**L53 Film 363 Video Post-Production**

While post-production of the soundtrack has been around for years, post-production of the “visual track” has increasingly become a major phase in the video and movie-making process. It often allows filmmakers to enhance existing footage with potentially dazzling results. As in all our production courses, we are concerned with developing strong content. The focus is not on special effects per se, but rather on how they may be used to enhance the message. Students find a nonprofit organization of vital importance in need of exposure and produce a Public Service Announcement to be broadcast. Key post-production software such as Commotion, AfterEffects and Motion are explored throughout the semester. Prerequisite: Film 230 Moving Images and Sound or consent of instructor.

Credit 3 units. A&S : LA A&S : IQ, HUM

**L53 Film 366 Women and Film**

Film musicals were crucial to the success of the American film industry from the dawn of sound film in the late 1920s to the demise of the studio system in the late 1950s. This course examines the American film musical from a variety of aesthetic, critical and historical perspectives, with particular attention to how the genre interacted with popular music and dance and the major political and social trends of the 1930s, ’40s, and ’50s. Required screenings.
The aim of this course is primarily to familiarize students with the work of prominent women directors over the course of the 20th century, from commercial blockbusters to the radical avant-garde. Approaching the films in chronological order, we consider the specific historical and cultural context of each filmmaker’s work. In addition we discuss the films in relation to specific gender and feminist issues such as the status of women’s film genres, representations of men and women on screen and the gender politics of film production. Required screenings.
Credit 3 units. A&S : TH A&S : IQ, HUM, SD BU : HUM

L53 Film 370 American Horrors
Horror movies. Fright films. Scream marathons. Blood and gore tests. Why should we want to look at movies that aim to frighten us? What is the attraction of repulsion? Is there an aesthetics of ugliness? Except for some early prestigious literary adaptations such as Dr. Jekyll and Mr. Hyde, the horror film began as a low-class genre, a notch above exploitation movies. In the 1970s and 1980s, it became the dominant commercial genre by offering increasingly graphic images of violence and mayhem. The horror film had arrived: lavish budgets, big stars and dazzling special effects in mainstream major studio films competed with low-budget, no frills productions that helped establish artistically ambitious and quirky filmmakers such as George Romero and David Cronenberg. By a chronological survey of the American horror film, this course explores how differing notions of what is terrifying reflect changing cultural values and norms. Throughout, we consider the difficult questions raised by horror’s simple aim of scaring its audience. In addition to weekly screenings, work for the course includes analytical and theoretical essays on the horror film. Written analyses of films with a close attention to visual style is required. Prerequisite: Film 220. Required screenings.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM

L53 Film 371 Making War
This course examines the cinematic representation of war. Using World War II as a case study, students examine a series of combat pictures, documentaries and “home front” films from the 1940s to the present. Several key questions guide the class discussion: How do war films respond to and shape the political worlds in which they are produced? How do these films confront the aftermath of war and the soldier’s homecoming? Where is the line between the home front and the front line? More broadly, what does it mean to portray the violence and suffering that war inevitably brings? At the close of the semester, students participate in an in-class symposium presenting their research on the cinematic treatment of other conflicts, from the Civil War to the “War on Terror.” Films include: The Boat, Saving Private Ryan, The Thin Red Line, Why We Fight and Mrs. Miniver. Readings include works by Susan Sontag, Kaja Silverman and W.G. Sebald. Required screenings.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : BA

L53 Film 375 Screening the Holocaust
The course surveys ways in which the story of the Holocaust is conveyed through film. Focusing on the individual and aesthetic pleasure, modern Western film seems to be an inappropriate genre to depict the German mass murdering of 6 million Jews. But since the broadcasting of the NBC series Holocaust in 1975, feature films have replaced documentaries and historiographies in educating the public about the traumas of the unprecedented genocide. With the continuing impact of the Holocaust on Jewish, American and German identity and politics, Holocaust films are more scrutinized than any other genre. We examine these aesthetic and philosophical controversies as well as the narrative and editing strategies filmmakers use to relate collective history and individual trauma. Special attention is given to the complex cinematographic perspectives on human agency in a world of bureaucratically administered killing. In the course, we try to close the gap between reading film theory and watching a Holocaust movie: we analyze the properties of cinematic language, reconstruct the sociohistorical and psychological formation of memory and imagination, and even question our own evaluation of a film. Screenings include Shoah; The Wannsee Conference; Europa, Europa; Enemies, A Love Story; Jakob the Liar, Schindler’s List; and Life Is Beautiful. Required screenings.
Credit 3 units. A&S : TH BU : BA FA : AH

L53 Film 376 French New Wave
French cinema from 1958 to 1968 offered La Nouvelle Vague or The New Wave, one of the most innovative, influential and critically discussed movements in film history. The New Wave marked a major turning point in the relationship between film, thought and politics in France, as well as a unique bridge between art cinema and pop culture. Speaking for more than just the youth generation of its own country, it had a major influence on new approaches in subsequent European, American and Asian cinemas. This course offers a detailed look at the social values, artistic motivations and aesthetic experiments embodied in the French New Wave through the films of Jean-Luc Godard, Agnes Varda, Francois Truffaut, Alain Resnais, Claude Chabrol, Eric Rohmer and others, positioning their work within the larger social, political and cultural environment of this period. As many of these directors collaborated as filmmakers and also were active as film critics and theorists, this class provides a unique insight into the overlapping between visual theory and practice, film and other media, culture and society. Weekly screening required.
Credit 3 units. A&S : TH A&S : IQ, HUM

L53 Film 379 Expressionism in Theater and Film
Same as Drama 379
Credit 3 units. A&S : TH A&S : IQ, HUM
L53 Film 390 Taboo: Boundary and Transgression in American Cinema
Almost from the first public exhibition of motion pictures in the United States, concerns were expressed about the content of film. Denied the First Amendment protection of free speech by a 1915 Supreme Court decision, movies were repeatedly subject to various attempts at regulating content by government at federal, state and even municipal levels. Trying to stave off government control, Hollywood would eventually institute forms of self-regulation, first in the formation of the Production Code Administration and subsequently in the ratings system. Control of content in American movies may be seen as paternalistic, a top-down attempt to impose moral norms and standards of behavior on a diverse audience. But it also reflects changing standards of acceptable public discourse, most particularly with regard to violence, sexuality and race. That topics once barred from dramatic representation by the Production Code — misconception, non-normative sexuality and “lower forms of sexuality,” abortion, drug addiction — could eventually find a place in American movies speaks to changes in the culture at large. In trying to understand these cultural changes, this course explores films that challenged taboos, films from the early 1910s that brought on the first attempts to control film content to films released under the ratings system, which has exerted subtler forms of control over content. Required screenings. Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH

L53 Film 419 Theories of Mass Media
This course explores theories of the mass media with an emphasis on television as well as its convergences with other media and computer technologies. It starts by examining theories that posit the media as instruments of societal maintenance or transformation and then examines the ways in which various theorists have refined or rejected elements of these theories in a quest for both specificity and complexity. In particular, the course examines media and cultural studies’ attempts to synthesize critical paradigms ranging from political economy to semiotics to feminism. The course concludes with an examination of the challenges and opportunities posed to theorizations of the mass media by contemporary circumstances such as media conglomerations, niche marketing and microcasting, and global flows of information, capital and people. Required screenings. Credit 3 units. A&S : LA A&S : IQ, HUM BU : BA

L53 Film 420 Film Theory
This course is an introduction to both classical and contemporary film theory. Beginning with the earliest attempts to treat cinema as a new and unique art form, the course initially reviews the various ways in which film theory attempted to define cinema in terms of its most essential properties. The course then examines more contemporary developments within film theory, more specifically its attempt to incorporate the insights of other critical and analytical paradigms, such as semiotics, psychoanalysis, feminism, queer theory and postmodernism. Throughout the course, we consider questions regarding the ontology of cinema, its relation to spectators, and the various ways in which its formal properties create meaning. Readings for the course include the major works of Sergei Eisenstein, Andre Bazin, Christian Metz, Laura Mulvey and Fredric Jameson. Required screenings. Credit 3 units. A&S : TH, WI A&S : IQ, HUM, WI FA : Lit

L53 Film 421 Film Historiography
This course is a seminar on the writing of film history for advanced students. Through an engagement with the historiographical writings of scholars, such as Dominic LaCapra, Hayden White and Michel Foucault, students gain an understanding of various genres of film historical writing, an appreciation for the kinds of research that film historians do, and a familiarity with the ways in which film historians delimit their field of study, form research questions and develop hypotheses. In addition to reading and classroom discussions, students are expected to write a fairly lengthy paper (17 to 20 pages) that involves original historical research and the close examination of trade press, professional journals, fan magazines and news articles. As preparatory assignments leading up to the final project, students also prepare project descriptions, bibliographies and outlines that are shared and discussed in a workshop format. Credit 3 units. A&S : TH A&S : IQ, HUM

L53 Film 422 Film Stardom, Performance and Fan Culture
This course focuses the Hollywood star system. We explore stars in relation to celebrity and consumerism, especially how “stardom” is created by a system that seeks to create effects in film viewers whether conceived as audiences, fans or spectators. We examine the performance element of stardom and its relationship to genre, style and changing film technology. Also of concern is how stars and the discursive construction of stardom intersect with gender representation, race, ideology, sexuality, age, disability, nationality and other points of theoretical interest to and historical inquiry in contemporary film studies. While emphasis is placed on mainstream commercial U.S. cinema, students are encouraged to pursue questions beyond this framework within their own research. Required screening TBA. Credit 3 units. A&S : LA A&S : IQ, HUM BU : BA

L53 Film 423 Histories of Media Convergence
Entertainment and communications forms combine and blend, and they have done so across millennia. However, the phenomenon of media convergence has taken on a special salience over the last one-and-a-half-centuries, as exemplified by the growing intermixture of film, radio, television, gaming and the internet. In particular, critics, consumers, politicians and producers used convergence as structuring principle in understanding, regulating and planning for the future of media culture. This course engages with contemporary worries and
enthusiasms about convergence by considering the specific conditions in which the phenomenon has been understood and practiced. Tracing a historical arc though the 20th century, we first examine convergences of radio and film, film and music publishing, television and film exhibition, and disparate corporate entities as basis for understanding more recent media combinations. Building on that foundation, the majority of the course consists of case studies of media convergence since 1980, considering it in terms of industry, technology, regulation and audiences. These case studies also provide students with a survey of and inquiry into questions of historiographic theory and method. Note: This course satisfies the history and historiography requirement for the FMS Graduate Certificate. Required screening time: 4 p.m. Monday.
Credit 3 units. A&S : LA A&S : IQ, HUM EN : H

L53 Film 430 Clown Princes
“Dying is easy, comedy is hard,” runs an old theatrical adage. Nevertheless, some of the most popular actors in American film have chosen the hard path by typecasting themselves in comedy, playing repeated variations on the same character. “Comedian comedy,” representing films that showcase the distinctive skills of great clown-actors, is the central concern of this course. We analyze how individual comedians rework performance traditions through the distinctive concerns of their time and culture to create idiosyncratic comic personae. We look at films starring Charles Chaplin, Buster Keaton, Harold Lloyd, Laurel and Hardy, the Marx Brothers, Jack Benny, Peter Sellers, Jim Carrey and Eddie Murphy. Work for the course requires reading in comic theory and analytical essays. Required screenings.
Credit 3 units. A&S : TH A&S : IQ, HUM

L53 Film 432 Global Art Cinema
How do art films tell stories? The dominant storytelling genre of the contemporary festival circuit, the art film has since World War II combined “realist” and “modernist” impulses. Influenced by Italian neorealism, art films grant priority to characters from working class, sexual and other exploited and imperiled minorities. Drawing on the fine arts, literature and music, art films also experiment with modernist themes and formal principles, such as subjectivity, duration serial structure, denotative ambiguity and reflexivity. This course explores art cinema from a variety of national contexts, analyzing storytelling techniques and themes that challenge the “economical” and diverting forms associated with mainstream commercial filmmaking. Required screening time: 7 p.m. Tuesday.
Credit 3 units. A&S : TH A&S : IQ, HUM

L53 Film 444 Topics in Chinese Language Cinema
Variable topics associated with the shaping of Chinese-language cinema, whether originating from the PRC, Hong Kong or Taiwan. This course may take up themes, directors, film genres, special subjects (such as independent film), formal elements (such as cinematography or sound) or issues (the relationship of film to literature, specific cultural movements or political events).
Required screening time: 7 p.m. Wednesday.
Credit 3 units. A&S : TH A&S : IQ, HUM

L53 Film 450 American Film Genres
Questions of genre are central to any exploration of television’s texts, whether they are being analyzed as craft, commerce or cultural phenomenon. Genre has been used by critics and historians to ascribe “social functions” to groups of programs and to diagnose cultural preoccupations, while genre has been used industrially to manage expectations among audiences, advertisers, programmers, producers and creative professionals. Investigating genres ranging from the soap opera to the Western, workplace situation comedies to sports, and game shows to cop shows, this course explores the role of genre in the production, distribution and reception of American television. Students gain a critical understanding of genre theory and key arguments about the form and function of television texts; they develop a set of tools for analysis of televusual narrative and style; the social uses and meanings of genre; the institutional practices and presumptions of the American television industry; and the persistence of textual forms and audience formations in the face of structural changes such as deregulation, media convergence and globalization. Required screening time: 4 p.m. Tuesday.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : BA

L53 Film 452 Advanced Screenwriting
This course is intended for students who already have taken Film 352 Introduction to Screenwriting. Building on past writing experiences, students explore the demands of writing feature-length screenplays, adaptations and experimental forms. Particular attention is paid to the task of rewriting.
Credit 3 units. A&S : LA A&S : IQ, HUM FA : Lit

L53 Film 4529 Seminar in Cultural Theory
L53 Film 454 American Film Melodrama and the Gothic
American film melodrama has been considered both the genre of suffering protagonists, incredible coincidences and weeping spectators as well as a mode of action, suspense and in-the-nick-of-time rescues. In this course, we examine American film melodrama as a dialectic of sentiment and sensation that draws heavily on Gothic tropes of terror, live burial and haunted internal states. We trace the origins of film melodrama and the cinematic Gothic to their literary antecedents, the horrors of the French Revolution, and classical and sensational stage melodramas of the 19th century. In addition to the 1940s Gothic woman’s film cycle, we excavate the Gothic in the maternal melodrama, the suspense thriller, film noir, domestic melodrama, the slasher film and the supernatural horror film. Credit 3 units. A&S : TH A&S : IQ, HUM

L53 Film 458 Major Film Directors
What does the film director do? In the earliest movies, film directors modeled themselves on their theatrical counterparts: they chiefly focused on how to stage an action in a confined space for a stationary camera that represented an ideal member of the audience. As the camera began to be used to direct audience attention, first through cutting, then through actual movement, the film director evolved from a stager of events to a narrator. By analyzing the work of one or more major film directors, this course explores the art of film direction. We learn how film directors may use the camera to narrate a scene, to provide their own distinctive view of the actions playing out on the movie screen. May be repeated for credit with permission of the instructor. Required screenings. Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM

L53 Film 495 Special Projects
This course is intended for juniors and seniors who wish to register for internships. Students must receive program approval prior to beginning the internship. Please consult the program guidelines governing internships. Credit 3 unit.

L53 Film 499 Study for Honors
This course is intended for majors pursuing honors in Film and Media Studies. In order to enroll for this course, students must apply in advance for honors and be approved by a faculty committee. Please consult the Program guidelines for application deadlines and other requirements. Credit 3 units.

French
For fans of Le Petit Prince, art lovers, aspiring chefs and those who wish to see the world, the French major and minor offer preparation in language, literature, culture and film and opportunities for study abroad. Our undergraduate program features a rich variety of courses for students interested in studying French in relationship to philosophy and politics as well as to the sciences and the arts. Our summer-, semester- and year-long study abroad programs in the Loire Valley, Nice, Toulouse, Paris and various Francophone countries around the globe enable students to deepen their understanding and appreciation of French culture by taking courses in the French university system, living with French families, shadowing doctors in French hospitals, holding internships in French businesses, and traveling extensively. Such experiences are the perfect preparation for careers in international business, international medicine, international law, international relations or diplomacy.

We also provide our students with a range of linguistic, analytical and theoretical tools necessary for a comprehensive understanding and appreciation of French and Francophone literature and culture, to prepare them for a variety of careers or further study. French majors who plan to apply to professional schools or to pursue graduate studies in French literature, comparative literature, philosophy, history, art history, music, film or other related fields are strongly encouraged to pursue independent research in their senior year. Writing a Senior Honors thesis provides students with a unique opportunity to combine the study of French language, literature and culture with their other interests and to work closely with a member of our faculty. Our faculty takes an active interest in our students, providing support and encouragement throughout their studies in order to prepare them to become dynamic, conscientious and informed members of today’s global community. We are pleased to offer our students an ongoing series of lectures, films and artistic performances, as well as a weekly French table, which contribute to the intellectually dynamic and personally rewarding social environment of our section. We also regularly invite scholars of international repute to speak or teach on campus and host international colloquia that attract scholars from around the world.

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For a list of affiliated faculty, please see the Department of Romance Languages and Literatures faculty (p. 666) page.

The Major in French
Total units required: 30 units (27 units for second majors).*
Required courses:

French 307 Advanced French
French 308 Introduction to Literary and Cultural Analysis
French 325 French Literature I: Dramatic Voices: Poets and Playwrights
French 326 French Literature II: Narrative Voices: Fiction and Nonfiction
French 411 Intensive Writing in French or French 4131 Advanced French and Translation
French 4xx. Upper-level seminar before the Revolution (Medieval, Renaissance, 17th- or 18th-Century)
French 4xx. Upper-level seminar after the Revolution (19th- or 20th-Century or Francophone)

* Students who take French 201 at the university may count it as one course toward the major (out of nine for the second or 10 for the prime). Students may also count one 3-credit course toward the major that is taught in English by a member of the French faculty either within or beyond the bounds of the department at Washington University.

Additional Information

Students must maintain an average of B– or better. Both 400-level courses required for the major must be taken at Washington University. All primary majors must complete a capstone experience by achieving a B+ or better in one of the 400-level seminars.

Study Abroad: You are encouraged to participate in a study abroad program. Summer programs are available in the Loire Valley, Nice and Senegal and semester abroad programs are available in Toulouse and Paris. Up to 6 from each program can count toward the major.

Senior Honors: You are encouraged to work toward Latin Honors (cum laude, magna, summa). To qualify for Latin Honors in the major by thesis, you must complete special literary research and prepare and orally defend an honors thesis, which is judged by an honors faculty committee. To qualify for Latin Honors by course work, you must complete four literature courses at the 400 level, including two in literature before 1800, and present two critical essays written for those courses to be judged by an honors faculty committee. Recommendations for honors are based on your performance and the quality of the thesis or critical essays, plus your cumulative grade point average.

Transfer Credits: 21 of the 30 units required for the major must be taken in residence. Non-WUSTL courses may count toward the major only with departmental permission.

The Minor in French

Units required: 21*

Required courses:

French 307D French Level 4: Advanced French 3
French 308D French Level 5: Introduction to Literary and Cultural Analysis 3
French 325 French Literature I: Dramatic Voices: Poets and Playwrights 3
French 326 French Literature II: Narrative Voices: Fiction and Nonfiction 3
French 311C French Culture and Civilization: The New Face of France 3
French 318D Preparation for Year in France 3
French 321 Topics I (Interdisciplinary course, subject changes yearly) 3
French 376C Cinema and Society 3
French 4xx Upper-level writing-intensive courses and seminars (if prerequisites satisfied) 3

* Students who take French 201 at the university may count it as one course toward the minor (out of seven). Students may also count one 3-credit course toward the minor that is taught in English by a member of the French faculty either within or beyond the bounds of the department at Washington University.

Additional Information

Six credits can count toward the minor from the Summer French Language Institute in the Loire Valley and from the French for Pre-medicine Program in Nice. Literature and Medicine, a survey course offered at the Pre-Med Program in Nice, can replace French 325 or 326.

We strongly recommend that students who spend a semester in Toulouse or Paris take French 318D before going abroad. Students spending a semester abroad may take French 318 instead of 308. Any student who completes French 318 and does not go abroad should take French 308 as well.

Courses taken credit/no credit do not count toward the minor. Students must complete courses taken for the minor with a grade of B– or above and are expected to maintain a B average or better in all French courses.

French

L34 French 1011 Essential French 1 Workshop
Application of the curriculum presented in French 101D. Pass/fail only. Grade dependent on attendance and participation.
Credit 1 unit. A&S : LA A&S : IQ, LCD BU : IS
L34 French 101D French Level 1: Essential French 1
This first course in the French language stresses rapid acquisition of spoken French, listening comprehension, reading and writing skills. It is designed to immerse students as much as possible into French language and culture. The five-day-a-week course is taught in French to impart communicative competence through the acquisition of everyday grammar and vocabulary. The textbook works with a feature-length French film in order to create a meaningful and culturally relevant context for the grammatical and thematic structures studied. While not required, it is strongly recommended that students enroll in French 1011, a one-credit, pass-fail practice session.
Credit 5 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L34 French 102D French Level 2: Essential French 2
This second course in the French language program focuses on more advanced language skills to stress further rapid acquisition of spoken French, listening comprehension, reading and writing skills. It is designed to immerse students as much as possible into French language and culture. The five-day-a-week course is taught in French to impart communicative competence through the acquisition of everyday grammar and vocabulary. The textbook works with a feature-length French film in order to create a meaningful and culturally relevant context for the grammatical and thematic structures studied. While not required, it is strongly recommended that students enroll in French 1021, a 1-credit, pass-fail practice session. Prerequisite: French 101D or the equivalent (usually recommended for students with four years of high school French [seventh and eighth grades counting as one year]).
Credit 5 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L34 French 105D Advanced Elementary French
This course provides an intensive, five-day-a-week review of elementary French, covering in one semester the entire French 101-102 program. It is designed to immerse students as much as possible into French language and culture. The course is taught in French to impart communicative competence through the acquisition of everyday grammar and vocabulary. The textbook works with a feature-length French film in order to create a meaningful and culturally relevant context for the grammatical and thematic structures studied. While not required, it is strongly recommended that students enroll in French 1051 (01), a 1-credit, pass/fail practice session. This course is often recommended for students with three years of high school French.
Credit 5 units. A&S : LA A&S : IQ, LCD BU : HUM, IS

L34 French 1021 Essential French 2 Workshop
Application of the curriculum presented in French 102D. Pass/fail only. Grade dependent on attendance and participation.
Credit 1 unit. A&S : LA BU : IS

L34 French 105D Advanced Elementary French
This course provides an intensive, five-day-a-week review of elementary French, covering in one semester the entire French 101-102 program. It is designed to immerse students as much as possible into French language and culture. The course is taught in French to impart communicative competence through the acquisition of everyday grammar and vocabulary. The textbook works with a feature-length French film in order to create a meaningful and culturally relevant context for the grammatical and thematic structures studied. While not required, it is strongly recommended that students enroll in French 1051 (01), a 1-credit, pass/fail practice session. This course is often recommended for students with three years of high school French.
Credit 5 units. A&S : LA A&S : IQ, LCD BU : HUM, IS

L34 French 1021 Essential French 2 Workshop
Application of the curriculum presented in French 102D. Pass/fail only. Grade dependent on attendance and participation.
Credit 1 unit. A&S : LA BU : IS

L34 French 101D French Level 1: Essential French 1
This first course in the French language stresses rapid acquisition of spoken French, listening comprehension, reading and writing skills. It is designed to immerse students as much as possible into French language and culture. The five-day-a-week course is taught in French to impart communicative competence through the acquisition of everyday grammar and vocabulary. The textbook works with a feature-length French film in order to create a meaningful and culturally relevant context for the grammatical and thematic structures studied. While not required, it is strongly recommended that students enroll in French 1011, a one-credit, pass-fail practice session.
Credit 5 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L34 French 202 French Level III At the Summer Institute
This Summer Institute course focuses on the major features of French 201D. Students improve speaking, writing and reading skills in French by combining study of grammatical forms with exercises designed to mirror many experiences they encounter while in France. The location abroad and contact with French host families and other French people facilitate the student’s learning experience. Students enrolled in this course also take French 353 and are prepared to enroll in French 307D upon their return to St. Louis. Open only to students attending the Summer Institute in France. Prerequisite: French 102D or 105D.
Credit 3 units. BU : IS

L34 French 101D French Level 1: Essential French 1
This first course in the French language stresses rapid acquisition of spoken French, listening comprehension, reading and writing skills. It is designed to immerse students as much as possible into French language and culture. The five-day-a-week course is taught in French to impart communicative competence through the acquisition of everyday grammar and vocabulary. The textbook works with a feature-length French film in order to create a meaningful and culturally relevant context for the grammatical and thematic structures studied. While not required, it is strongly recommended that students enroll in French 1011, a one-credit, pass-fail practice session.
Credit 5 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L34 French 202 French Level III At the Summer Institute
This Summer Institute course focuses on the major features of French 201D. Students improve speaking, writing and reading skills in French by combining study of grammatical forms with exercises designed to mirror many experiences they encounter while in France. The location abroad and contact with French host families and other French people facilitate the student’s learning experience. Students enrolled in this course also take French 353 and are prepared to enroll in French 307D upon their return to St. Louis. Open only to students attending the Summer Institute in France. Prerequisite: French 102D or 105D.
Credit 3 units. BU : IS

L34 French 202 French Level III At the Summer Institute
This Summer Institute course focuses on the major features of French 201D. Students improve speaking, writing and reading skills in French by combining study of grammatical forms with exercises designed to mirror many experiences they encounter while in France. The location abroad and contact with French host families and other French people facilitate the student’s learning experience. Students enrolled in this course also take French 353 and are prepared to enroll in French 307D upon their return to St. Louis. Open only to students attending the Summer Institute in France. Prerequisite: French 102D or 105D.
Credit 3 units. BU : IS

L34 French 202 French Level III At the Summer Institute
This Summer Institute course focuses on the major features of French 201D. Students improve speaking, writing and reading skills in French by combining study of grammatical forms with exercises designed to mirror many experiences they encounter while in France. The location abroad and contact with French host families and other French people facilitate the student’s learning experience. Students enrolled in this course also take French 353 and are prepared to enroll in French 307D upon their return to St. Louis. Open only to students attending the Summer Institute in France. Prerequisite: French 102D or 105D.
Credit 3 units. BU : IS

L34 French 215 Conversation, Culture, Communication 1: Pop Culture
The course examines popular culture through a focus on what is said and performed, viewed especially but not exclusively through French film. Five thematic units focus on everyday occurrences and themes that mark both French and Francophone experience: the intersection of French History with the lives of ordinary people; the role of the French family in modern life; the motto of the French Revolution and how it applies today; the notions of community and the individual in modern French and Francophone society; the role of the French in the world at large. Active student participation is required; student is required to do at least two oral presentations on the
films we see, and in some of the versions, to make their own film. An optional film-viewing is scheduled from 2 to 4 p.m. Fridays. Prerequisite: French 201D or the equivalent; may be taken before or after French 216.
Credit 3 units. A&S: LA A&S: IQ, LCD BU: ETH

L34 French 216 Conversation, Culture, Communication 2: French Culture Through French Film
This course enables students to pursue their exploration of French culture through French film. Though not a history of French cinema, it introduces some of France’s most celebrated actors and directors. We focus on excerpts that illustrate important life themes, including childhood, coming of age, existential crises, the search for happiness, the need for laughter, the threat of crime and violence, the complexities of love, and attitudes toward death. Students are asked to contrast their expectations of how such themes are to be treated with the way in which the French choose to portray them. Students write film reviews as though they were, alternately, an American or a French critic. As a final project, they write their own screenplay and imagine how it might be filmed in France. By the end of the course they have begun to view French culture with a French eye. Prerequisite: French 201D or the equivalent; may be taken before or after French 215.
Credit 3 units. A&S: LA A&S: IQ, LCD BU: ETH

L34 French 247 Freshman Seminar
Taught in English. Small group seminar devoted to readings and study of other texts such as films, paintings, etc., discussion, writing. Topics vary; interdisciplinary focus. Prerequisite: AP in English, French or History, or permission of the instructor. Does not substitute for any other French course.
Credit 3 units. A&S: TH A&S: IQ, LCD BU: ETH

L34 French 250C Voyages and Discoveries: French Masterpieces
Taught in English. Novels and short stories about voyages and discoveries — real and symbolic — where young people confront themselves and crises in their lives. A discussion course with short writing assignments and viewing of films of several works studied. Masterpieces selected from writers such as Voltaire, Balzac, Flaubert, Maupassant, Gide, Colette, Camus, Sartre, Duras and Ernaux, among others. No French background required; students who have completed the English Composition requirement are welcome.
Credit 3 units. A&S: TH BU: HUM FA: Lit

L34 French 257 From Champagne to Champlain: French Culture in North America
Taught in English. Following Champlain’s founding in 1604 of the first French settlement in Nova Scotia (formerly Acadia), the French began to build what they hoped would be a vast empire, from Quebec to the Gulf of Mexico. Over the next 200 years, French culture and language spread throughout North America and could well have been the dominant one in this country had history moved in different directions. This course examines the history, literature, religion, architecture, music and cuisine of the vast territory known as “New France.” Through use of conventional textual documents, as well as films, slides, CDs and field trips to Missouri historical sites, it exposes the student to the continuing richness of French culture all around us. Drawing on local resources (e.g., Fort de Chartres, Cahokia Courthouse and Sainte Genevieve), students learn about many fundamental connections between America and France. Topics include early explorations, Jesuit missions, literary representations of the New World, colonial architecture, the French and Indian War, the Louisiana Purchase, Cajun and Mississippian culture.
Credit 3 units. A&S: TH BU: ETH FA: SSP

L34 French 299 Undergraduate Independent Study
Prerequisites: French 201D and permission of the Director of Undergraduate Study.
Credit 3 unit.

L34 French 307D French Level 4: Advanced French
Thorough review of French grammar with intensive practice in writing. Conversation and development of vocabulary are based on the reading of three short novels. Essential for further study of French language and literature. Three class hours per week. Prerequisite: French 201D or the equivalent (usually recommended for students with five years of high school French [7th and 8th grades count as one year]).
Credit 3 units. A&S: LA A&S: IQ, LCD, LS BU: HUM, IS

L34 French 308D French Level 5: Introduction to Literary and Cultural Analysis
In this course we explore French literature and culture through a broad range of texts, including short stories, films, songs, poems and theater. Development of creative and analytical writing skills in preparation for upper-level French courses. Should be taken before French 325C or French 326C. Prerequisites: French 307D or the equivalent.
Credit 3 units. A&S: LA A&S: IQ, LCD, LS BU: HUM, IS FA: Lit

L34 French 311C French Culture and Civilization: The New Face of France
We study the life and culture of France with the aim of improving written and spoken French. Special emphasis is placed on the changes that are slowly but radically transforming French society: the increasing influence of the European Union; the influx of immigrants from Africa and other parts of the world; the growing role of Arabs and other French citizens born of foreign parents; the increasingly dominant position of women; the globalization of French culture; technological progress, etc.
L34 French 318D Preparation for Year in France
Designed to prepare students for the experience of studying abroad (for either a year or a semester, on Washington University-sponsored or -approved programs), this course emphasizing improved oral discussion and writing skills through readings, papers, language lab practice and active class participation. The course provides an introduction to the techniques of explication de texte, commentaire compose and dissertation litteraire. The class discusses various aspects of modern French society as well as topics related to the student's experience abroad, such as the university system, the French family, French social mores, etc. May replace French 308D for candidates attending semester and year abroad programs in a French-speaking country. Required for students planning to study in Toulouse and Paris and recommended for other programs in France. 
Credit 3 units.  A&S : LA  A&S : IQ, LCD, LS  BU : IS  FA : SSP

L34 French 321 Topics I
Same as IAS 3212. Focusing on topics of cultural and social importance, this course offers students the opportunity to learn about defining moments in the French tradition. The specific topic of the course varies from semester to semester and may include works from different disciplines, such as art, film, gender studies, history, literature, music, philosophy, politics, science. Prerequisite: French 307D. 
Credit 3 units.  A&S : LA  A&S : IQ, HUM, LCD, LS  BU : IS

L34 French 322 Topics II
Focusing on topics of cultural and social importance, this course offers students the opportunity to learn about defining moments in the French tradition. The specific topic of the course varies from semester to semester and may include works from different disciplines, such as art, film, gender studies, history, literature, music, philosophy, politics, science. Prerequisite: French 307D. 
Credit 3 units.  A&S : LA  A&S : IQ, LCD  BU : ETH

L34 French 325 French Literature I: Dramatic Voices: Poets and Playwrights
An interpretation of cultural, philosophical and aesthetic issues as presented in influential works of French poetry and drama from the Middle Ages to the present. May be taken before or after French 326. Prerequisite: French 308D or French 318D. 
Credit 3 units.  A&S : TH  A&S : IQ, HUM, LCD, LS  BU : HUM

L34 French 326 French Literature II: Narrative Voices: Fiction and Nonfiction
An investigation of cultural, philosophical and aesthetic issues as presented in influential works of French prose from the Middle Ages to the present. May be taken before or after French 325. Prerequisite: French 308D or French 318D. Section 09. Prosaic Greatness. The title of this course emphasizes both the artistic value of certain major prose texts in French and the everyday facets of knowledge about French culture they convey. From the Middle Ages to the present, influential writers such as Montaigne, Pascal, Sand, Flaubert and Gide have demonstrated how important political, philosophic, literary and artistic concepts have been skillfully passed down from one generation to another through a masterful usage of French prose. By looking closely at the aesthetic and social questions raised by works such as theirs, so characteristic of their times, students come to appreciate better the evolution of French prose and its true place within the general history of France. 
Credit 3 units.  A&S : TH  A&S : IQ, HUM, LCD, LS  BU : IS

L34 French 350 Undergraduate Seminar in French Literature and Culture
An exploration of a variety of cultural icons, objects, myths and traditions that define the French experience throughout the centuries. Topics vary. Prerequisite: French 308. 
Credit 3 units.  A&S : TH  BU : HUM  FA : Lit

L34 French 352 French Institute Project
Students investigate an important aspect of French life by conducting interviews with French natives and by observing them at work. Supplementing this direct experience with further research, students prepare a presentation on their selected topic for the Institute participants and for their French hosts. Open only to students enrolled in the French Summer Institute. 
Credit 2 units.  A&S : LA

L34 French 353 Project Plus
This Summer Institute course combines (1) a course that examines French culture as it is represented in the evocative history of French châteaux, the arts and contemporary lifestyle; (2) the student’s project; and (3) the student’s experiences as part of the community abroad (excursions, visits, group discussions). In class students gain background for appreciating the primary sites of the Institute: in the Loire Valley, Paris and Brittany. The classroom experience is discussion-oriented, with small writing assignments and readings. The project is an individual research program that students conduct with a French native on a particular aspect of French culture. In the past students have dealt with serious topics such as the deportation of the Jewish community in Amboise during World War II; with less grave subjects such as the work of a local wine grower or goat cheese producer, and the culinary repertoire of French and American families; and current topics concerning the political situation in Europe and the euro. Following weekly conferences with the teaching staff, students present a formal report on their experiences to an audience comprising other members of the group and the students’ host families. Students at the Institute are expected to speak French in all group settings. Assignments in this course are level-appropriate (students enrolled in French 385 complete longer papers and projects than those enrolled in French 202; expectations for conversations are likewise adjusted accordingly). Required of all students attending the Summer Institute in France.

L34 French 355 North American Francophone Literature in Translation
Taught in English. The world of French language and literature is not restricted to France alone. It includes several other countries and former colonies whose cultural traditions and productions have grown in global significance as the West has increasingly understood and reacted to its own prejudices and exclusions. This course, the first in a three-semester sequence, focuses on the literature of our closest French-speaking neighbors: French Canadians, Acadians (from Nova Scotia, New Brunswick and northern Maine) and Louisiana Cajuns. That French is the main language of all these groups results, of course, from the early colonial history of North America. Representative writers of these different French-speaking groups, including Antonine Maillet, Gerald Leblanc, Zachary Richard, Philippe Hemon, Michel Tremblay and Marie-Clair Blais, are studied closely in their historical, literary and cultural contexts.

Credit 3 units.  A&S : TH

L34 French 370 French Social History
Studying L’Histoire des Mentalités, this course explores how the concept of sickness, the perception of medicine, the role of the doctor, etc. evolved throughout the centuries. Texts are supplemented by a series of lectures offered by doctors in different specialties. Students complete a project on one area of related research. Open only to students enrolled in the Nice Pre-Med Summer Program.

Credit 3 units.  A&S : TH  A&S : IQ, HUM, LCD  FA : SSP

L34 French 375C Biography of a City: Paris
This class has a dual focus: to trace the political and cultural history of Paris throughout the ages since its founding; to highlight Paris as a theme or topos in works of art and in the popular imagination. Thus, we examine both Paris’ role as an important historical center as well as its function as a vital cultural symbol. Guest speakers from the departments of Romance Languages, Art History, History, Music, Philosophy and others. Course taught entirely in English.

Credit 3 units.  A&S : TH  BU : IS  FA : Lit

L34 French 376C Cinema and Society
This survey of French and Francophone cinema examines the history of the medium from its origins through some of its more recent trends, focusing on its socially activist tendencies. Films viewed have explicit social and political messages, oftentimes highly critical of established ideological currents. Among the auteurs studied are Gance, Clair, Renoir, Truffaut, Godard, Varda, Sembene and Jaouli. There is an optional extra session for group film viewing. Films are on reserve in Olin Library. Grading consists of presentations of the films and directors, a midterm exam and a final paper. Taught in French. Prerequisite: French 307D.

Credit 3 units.  A&S : LA  A&S : IQ, LCD, LS  BU : IS  FA : AH

L34 French 383C Literature and Society: Ailing Body/Ailing Mind in French Autobiographical Writings
Illness and suffering have inspired a great variety of literary texts from the Middle Ages to the modern era. This course considers works ranging from Montaigne’s influential Essais through contemporary novels that focus on autobiographical writings in which the author gives a personal account of his or her own direct experience with illness. Open only to students enrolled in the Nice Pre-Med program.

Credit 3 units.  FA : Lit

L34 French 385C French Cultural Differences
By examining how the French perceive Americans and how the Americans perceive the French, students interrogate stereotypes, biases and differences in values, behaviors and beliefs between the two cultures. The class also examines the misunderstandings that occur as a result of these differences. Students also look within the American culture and within the French culture to evaluate how minorities and marginal groups exist within them. Texts include works by contemporary authors whose different professions (journalist, anthropologist, novelist, etc.) offer different perspectives on the questions of cultural difference. Open only to students enrolled in the Summer Institute in France. Prerequisite: French 307D.
Arts & Sciences

Credit 3 units. A&S : TH A&S : IQ, HUM, LCD FA : SSP

L34 French 400 Intensive Translation for Graduate Students I
The first part of a two-semester course sequence in reading and translating French. For graduate students in the humanities, social and natural sciences. Non-graduate students may enroll with permission of the department. Must be followed by French 401.
Credit 3 units. A&S : LA A&S : IQ, LCD

L34 French 401 Intensive Translation for Graduate Students II
Continuation of French 400. For graduate students in the humanities, social and natural sciences. Prerequisite: French 400; credit for French 400 is contingent on completion of French 401.
Credit 3 units. A&S : LA A&S : IQ, LCD

L34 French 411 Intensive Writing in French
Refinement and expansion of writing skills, mastering of complex grammatical structures and intensive training in the analysis of rhetorical issues are the goals of this course. It focuses on the acquisition of a personal style through creative exercises in composition, including the study of parody, autobiographical forms and short story writing, as well as the practice of formal *explication de texte* and dissertation. Students complete a series of short papers, each with required revisions. Meets WI requirement. Prerequisite: French 307D, French 308D or equivalent, or permission of instructor. Required for all majors except those who have spent two consecutive semesters in a French-speaking country. Required for master's candidates in French unless waived by director of graduate studies.
Credit 3 units. A&S : LA WI A&S : IQ, LCD, WI, LS

L34 French 4131 Advanced French and Translation
Building on the foundation established in the third year, this course aims at an in-depth knowledge of the French language and accuracy in its use. A comparative approach (linguistic and cultural) and systematic exercises are used to attain this goal and assist students in the demanding task of translating, both from English to French and from French to English. This course is mainly devoted to practical training using a wide range of document types, developing strategies of translation and sensitizing students to the problem of cultural transfer. Prerequisites: French 307D and French 308D or French 318D. Writing-intensive. May be taken in place of 411 toward the completion of the French major.
Credit 3 units. A&S : LA WI A&S : IQ, LCD, WI, LS

L34 French 415 The 19th-Century Novel: From Realism to Naturalism to Huysmans
In this seminar we read some of the great realist novels of the 19th century, by the four masters of the genre: Balzac, Stendhal, Flaubert, Zola. We also examine Huysmans' *A Rebours*, which was written in reaction to the excesses of Realism. We determine what characterizes the realist novel and how it has evolved from Balzac to Zola. We consider its theoretical orientation, but we also focus on the major themes it addresses: the organization of French society throughout the 19th century, Paris vs. the province, love, money, ambition, dreams, material success, decadence, etc. Prerequisites: French 325 and 326 (or, for students who have completed the Paris Business Program, completion of either course). One-hour preceptorial required for undergraduates.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD FA : Lit

L34 French 416 Renaissance Poetics
An examination of key authors and themes in various genres of the period. Prerequisite: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial for undergraduates.
Credit 3 units. A&S : TH FA : Lit

L34 French 4161 Special Topics in 19th-Century Literature
Prerequisite: French 325 and French 326 or one of these courses and the equivalent WU transfer literature course from Toulouse or Paris. One-hour preceptorial required for undergraduates.
Credit 3 units. A&S : TH FA : Lit

L34 French 417 Poetry and Prose of the Renaissance
During the Renaissance, poetry in France manifested a close relationship to the visual arts, sharing expressive means as well as ends. This course considers the main poetic and philosophical currents of the Renaissance with special emphasis on formal innovation. Poets studied includes Clément Marot, Louise Labé, Maurice Scève, Pierre de Ronsard, Joachim

This course, taught in English, provides a critical survey of various components of linguistics and a second (including foreign) language program. It explores dimensions of second language teaching, acquisition, use and testing. Theoretical, empirical and practical dimensions of linguistics and language learning are treated; note that supervised teaching practice is to be found elsewhere. This course is a required course for the Graduate Certificate in Language Instruction and an elective for the undergraduate minor in Applied Linguistics. Prerequisite: Ling 170 is recommended but not required.
Same as Span 413
Credit 3 units. A&S : LA A&S : IQ, SSC FA : SSP

L34 French 417B Linguistics and Language Learning

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Du Bellay, etc. The visual arts, mainly paintings from the 15th to the early 17th century, serve to elucidate poetic images, mythological references and philosophical concepts, and hopefully stimulate reflection on the relationship between the verbal and the visual. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial required for undergraduates.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD FA : Lit

**L34 French 4171 Travel Abroad in Early Modern Times**
This course addresses such questions as national identity; international relations; migration, cultural differences and integration; cultural interactions and influences. It concerns more specifically the important role humanism played in the spectacular development of vernacular languages and traveling abroad in Early Modern times. It is organized around the following themes: (1) Humanism, nationalism and the growing interest in the vernacular; (2) Humanism and the ongoing project of translation (translatio studii); (3) Humanism and travel abroad; (4) views on foreign cultures and one's own after returning home; (5) "La France" (including at least one session on Lyons and another on Italian artists living in France); and integration and conflicts. Readings include major authors (Rabelais, Montaigne, Marguerite de Navarre, Du Bellay) as well as lesser-known figures (Pasquier, Lery, Thevet), diaries and travelogues. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial required for undergraduates.
Credit 3 units. A&S : TH FA : SSP

**L34 French 4172 Travel in the Renaissance and the Literature of Discovery**
Improved modes of transportation under King Francis I facilitated travel in the Renaissance. Men and women were able to view famous cultural monuments on their continent and explore parts of the world where no one had ventured before, returning home with vivid tales of distant lands and exotic peoples. With the advent of the printing press, such fascinating stories were made available to a wider audience. This course examines this literature of discovery, paying special attention to the multiple genres that flourished at the time (historical narratives, diaries, correspondences, travelogues, elegiac poetry, adventure novels) as well as the historical and cultural contexts of these works.
Other questions addressed include national identity and cultural differences, cultural interactions and influences, international relations, the impact of humanism, and the concept of curiositas. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial required for undergraduates.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

**L34 French 4173 Renaissance Poetry and Visual Arts**
During the Renaissance, poetry in France manifested a close relationship to the visual arts, sharing expressive means as well as ends. This course considers the main poetic and philosophical currents of the Renaissance with special emphasis on formal innovation. Poets studied include Clément Marot, Louise Labé, Maurice Scève, Pierre de Ronsard, Joachim Du Bellay, etc. The visual arts, mainly paintings from the 15th to the early 17th century, serve to elucidate poetic images, mythological references and philosophical concepts, and hopefully stimulate reflection on the relationship between the verbal and the visual. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial required for undergraduates.
Credit 3 units.

**L34 French 4178 Literature of the 16th Century**
Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial required for undergraduates.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

**L34 French 4181 Humanism in Crisis: Marguerite de Navarre**
The second half of the French 16th century was a time of profound upheaval in politics and religion, as well as of economic and social unrest. The very nature of reason and knowledge, their place and reliability were in serious question. These various "crises" culminated in what is known today as "the collapse of French Humanism." This course focuses on two writers of the mid-century, Marguerite de Navarre and Montaigne, and the solutions that they offered. Special attention is given to the forms of expression adopted by these writers in order to reflect the newly discovered complexity of their world. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial required for undergraduates.
Credit 3 units. A&S : TH FA : Lit

**L34 French 4182 Humanism in Early Modern France: From Rabelais to Montaigne**
This course focuses on major aspects of Humanism as exemplified by two of the greatest writers of the 16th century: François Rabelais and Michel de Montaigne. Humanism designates the great intellectual movement of the Renaissance. Initially focused on the recovery of ancient authors and a renewed confidence in man's ability to grasp higher meanings, Humanism became a dynamic cultural program that influenced every aspect of 16th-century intellectual life. As the political and religious turmoil of the Reformation spread, however, Humanist assumptions (the very nature of reason and knowledge, their
place and reliability) were in turn questioned. This “crisis” culminated in what is known today as “the collapse of French Humanism.” We examine the importance of Humanism by focusing on the themes of education, self-inquiry, religion, gender roles, marriage, travel, health and medicine. We pay special attention to the forms of expression that Rabelais and Montaigne adopt to reflect the newly discovered complexity of their world. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial required for undergraduates.
Credit 3 units.  A&S : TH

L34 French 419 Feminist Literary and Cultural Theory
Same as WGSS 419
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L34 French 4191 The French Islands: From “Code Noir” to Condé
This course studies a sampling of poetry, drama and prose from Guadeloupe, Martinique, Haiti and Réunion. Our readings concentrate on the ways in which this literature has fostered inter-island cultural relations in and against its links with mainland France. Principal authors include Aimé Césaire, Suzanne Césaire, Patrick Chamoiseau, Daniel Maximin, Simone Schwartz-Bart and Maryse Condé. We also consider a variety of other works that helped form the relationship between the islands and France; the Code Noir, Bernardin de Saint Pierre, Victor Segalen and Frantz Fanon. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial for required for undergraduates.
Credit 3 units.  A&S : TH  A&S : IQ, HUM, LCD

L34 French 4192 Tragedy and Farce in African Francophone Literature
This course explores the literary construction of nationalist opposition in colonial Africa and the subsequent disillusionment with its artificiality in tragic or farcical literature from the independent era to the present. In 1960, most of the French colonies in Africa gained independence in a largely peaceful transfer of power. Since then, this development has been viewed alternatively as the triumph of self-determination and as a hollow act undermined by neocolonial French ministries, multinational companies and corrupt governments. Reading authors such as Chraibi, Kourouma, Kane, Tansi and Lopes, we consider the ways that literature entered into dialogue with political discourses that seem to call for tragic or farcical portrayal. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial for undergraduates. Taught in French.
Credit 3 units.  A&S : TH  A&S : IQ, HUM, LCD  FA : Lit

L34 French 4201 The Novel in the Feminine (Le Roman au feminin)
Informed through feminist criticism (Beauvoir, Cixous, Kristeva), this course examines the deconstruction of the novel as a traditional genre by 20th-century women writers such as Colette, Nathalie Sarraute, Marguerite Duras, Marguerite Yourcenar, Annie Ernaux and Mariama Bâ. We place special emphasis on the representation of the writing woman in the text itself and on the issue of “écriture féminine” in its sociocultural context. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial for undergraduates.
Credit 3 units.  A&S : TH

L34 French 4202 Ingenues and Libertines: Writing the Feminine in 19th-Century French Prose
Informed by a close reading of theoretical texts dealing with the paradoxes of “la femme auteur” (the woman author), as Balzac coined it, this seminar explores the many ways of writing the feminine in the margins of 19th-century French fiction. Opposing “dames de cour” (ladies of the court) and “femmes de tête” (women of the mind), we focus on the representation of women as “voeuxes de langue” (tongue snatchers) in the works of Mme de Staël, Claire de Duras, George Sand and Marie d’Agoult, among others. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial for undergraduates.
Credit 3 units.  A&S : TH

L34 French 421 The 20th-Century Novel
In this seminar we examine the evolution of the French novel in the 20th century. We closely read five great novels, by Proust, Gide, Céline, Robbe-Grillet and Ernaux. We determine what characterizes the 20th-century French novel and how it has evolved from Proust to Ernaux. We consider its technical aspects but also focus on the major themes it addresses: love, art, memory, time, death and the general problem of the human condition. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial for undergraduates.
Credit 3 units.  A&S : TH  A&S : IQ, HUM, LCD  FA : Lit

L34 French 4211 The Novel of the 1930s: The Human Condition and the Meaning of Life
Most French novelists of the 1930s were no longer satisfied simply to entertain their readers, to bring formal innovations to their writing, to depict society or to represent human consciousness. Technological advances, economic
transitions and, above all, the unspeakable horrors of World War I challenged traditional beliefs. Authors therefore dedicated themselves to examining the human condition and the meaning of life. In this seminar we read five major novels of the period by Saint-Exupéry, Mauriac, Malraux, Céline and Sartre. We determine how each author approaches the fundamental questions of human existence and what, if any, answers he provides. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial required for undergraduates.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

L34 French 422 French Theater From 1800 to the Present
We study selected plays of Hugo, Musset, Feydeau, Jarry, Claudel, Giraudoux, Anouilh, with particular attention to Romanticism, Symbolism, Existentialism and absurdist drama. Close attention is paid to the sociopolitical, philosophical and aesthetic contexts within which these plays were written, performed and received by the public. Videos of selected scenes also are shown and serve as points of departure for several classroom discussions, as do various influential critical theories about the nature and structure of modern French theater. Prerequisites: French 325 and 326. One-hour preceptorial required for undergraduates.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD FA : AH, Lit

L34 French 4221 19th- and 20th-Century French Novel
Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial required for undergraduates.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD FA : AH, Lit

L34 French 423 Contemporary Theater
Readings, analysis and discussion of French theater from Sartre to the present. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial required for undergraduates.
Credit 3 units. A&S : TH FA : Lit

L34 French 4231 Visualizing 19th-Century Poetry
At the very end of the 19th century and the beginning of the 20th, Mallarmé and Apollinaire begin to compose seemingly original works that create a host of simultaneous and different meanings through a heightened use of what can be called the “concrete aspects” of the texts themselves: their layout on the page; the imagery they present; even the shape of the particular words and stanzas they employ. But a close reading of earlier 19th-century literature (mostly poetry) composed by various Romantic, Parnassian and Symbolist authors (Victor Hugo, Théophile Gautier, Mari Krysinska, Marceline Desbordes-Valmore, Charles Baudelaire, Arthur Rimbaud and Paul Verlaine) reveals that experimentation in the visualization (as opposed to “mere” reading or writing) of a literary work was already under way. The latter coincided with the evolution of sculpture, photography and, later on, cinema. This course is designed to introduce students to both the production and reception of such works, and to examine their multiple historical and aesthetic causes and effects. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial required for undergraduates.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD
these plays suggest how the dramas played out on stage mirror the historic spectacle of the court over the course of the century as it develops an increasingly centralized authority culminating in the image of an all-powerful Louis XIV. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial required for undergraduates. Credit 3 units. A&S : TH A&S : IQ, HUM, LCD FA : AH

L34 French 4281 Order in the Court: Classical Struggles During the Reign of Louis XIV
Beginning with a study of Versailles, we examine the spectacular dimensions of artistic production under Louis XIV, including architecture, visual arts and landscapes, in addition to literature. The recent historical novel L’aïeue du Roi, which details the romance between the king and his mistress and then second wife Mme. de Maintenon, and the Memoires de Saint-Simon help to set the stage for us to appreciate the intrigues at court. Situating the king at the head of a hierarchical and orderly court structure, we examine some of the less harmonious elements of court-dominated life offered in representations by Corneille (Surenne), Molière (Les Femmes Savantes), Racine (Mithridate, Phedre), La Rochefoucauld, La Bruyère, La Fontaine, Mme. de Sévigné, Pascal. We consider the ways in which the court assures its power through primogeniture, the right of the eldest born son to inherit power, as well as through strict codes of etiquette and the generosity of the crown to its loyal and productive followers. We examine how these factors are insufficient to protect the monarchy against the contravening forces of political ambition, family struggles, the emerging role of women, religious faith and the devastating effects of war and disease. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial for undergraduates. Credit 3 units. A&S : TH FA : SSP

L34 French 431 Literature of the 18th Century
UNDERGRADUATES ONLY REGISTER FOR THIS SECTION. Prereq: Fr 325 and Fr 326 or one of these courses and the equivalent WU transfer literature course from Toulouse or Paris. One-hour preceptorial required for undergraduates. Credit 3 units. A&S : TH A&S : IQ, HUM, LCD FA : Lit

L34 French 4311 Voices of Dissent: Enlightenment Principle and Social Protest
The 18th century saw a rise in overtly moralizing texts, on the one hand, and unapologetically immoralist philosophies on the other. We focus on texts that avoid these extremes, allowing multiple voices to be heard. With the aid of excerpts from Genette, Bakhtine, Todorov and Barthes, we identify the voices of dissent in several 18th-century genres, including satire, the tale, the novella, the philosophical dialogue, theater, autobiography and the epistolary novel. By reading authors such as Voltaire, Montesquieu, Prévoist, Diderot, Cazotte, Rousseau, Beaumarchais and Charrière, students come to appreciate a third tendency in 18th-century texts that is crucial to our understanding of the Enlightenment: the tendency to validate conflicting perspectives. We consider whether a moral can be derived from a text that consistently questions the voice of authority. We analyze the implications of such questioning in the years before the Revolution. Finally, we consider the extent to which the overzealous censorship laws of the period may have obliged authors to couch socially controversial ideas in narrative forms that seem to deny their own assertions. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One hour preceptorial required for undergraduates. Credit 3 units. A&S : TH A&S : IQ, HUM, LCD FA : AH

L34 French 4321 Art, Revolution and Society
This course examines major 18th-century aesthetic treatises and literary texts that explore solutions for aesthetic quandaries. Authors include d’Alembert (Preface a l’Encyclopedie), Rousseau (Discours sur les Sciences et les Arts, Lettre a d’Alembert), Diderot (Entretiens sur le Fils Naturel, Le Paradoxe du Comedien, Le Neveu de Rameau), Cazotte (Le Diable Amoureux), Beaumarchais (Le Barbier de Seville, Le Mariage de Figaro), Stael (De la Litterature, Corinne). These works allow us to study some of the major insights into the aesthetics of music, painting and the performing arts with an eye to how these aesthetic “revolutions” expanded the scope and influenced the form of the French language and literary texts. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial for undergraduates. Credit 3 units. A&S : TH A&S : IQ, HUM, LCD FA : SSP

L34 French 4331 Women of Letters
We investigate the representation of women in 18th-century texts. Why did the novel and epistolary fiction become so closely associated with women as writers, heroines and readers in the course of the century? Why were women considered exemplary and yet, at the same time, a threat? The 18th century saw the last of the salons led by women well-versed in philosophy, literature, art and politics. It saw the reinforcement of the opposition between the public and the private sphere. Woman was the incarnation of the ideal of liberty and yet excluded from the “rights of man.” Rousseau praised women’s role as nurturers and peacemakers but cast into doubt their capacity for genius. Literary texts that feature women became a sparring ground for two of the century’s major literary trends: Sensibilité and Libertinage, for a woman’s sensitivity was thought to contain the seeds of virtue and licentiousness. We investigate philosophical discourses on the senses and emotions and political discourses on republican responsibility. We read these texts in conjunction
with the literary works of men and women authors, including Prévoit, Marivaux, Graffigny, Riccoboni, Diderot, Rousseau, Charrière, Laclose, Sade and Staël. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One hour preceptorial required for undergraduates. Credit 3 units. A&S : TH FA : Lit

L34 French 4341 Enlightenment Energy: Comedy, Eroticism and the Grotesque
In this course we examine works in which the comic, the erotic and the grotesque — base urges that 18th-century audiences deplored yet found entertaining — made inroads into the literature of the time. The Enlightenment was highly suspicious of impulses and intuitions that challenged or escaped the bounds of virtue, sentiment and reason. French philosophers debated whether genius lay in the supreme mastery or the spontaneous creation of art, whether talent was inborn or could be acquired through practice. Reading texts that span the long 18th century, by authors such as Molière, Marivaux, Crébillon fils, Voltaire, Diderot, Restif de la Bretonne, Beaumarchais, Sade and Hugo, we investigate how the satirical, the bawdy and the profane served as the wellspring of Enlightenment inspiration, giving rise to visions of an ideal society. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial for required for undergraduates. Credit 3 units. A&S : TH

L34 French 4351 Philosophical Fictions
The French Enlightenment witnessed a veritable explosion of short fiction, including philosophical, oriental, moral and libertine tales bearing such self-conscious titles as A Thousand and One Follies and This is Not a Tale. Though written by the literary elite and not considered children’s literature, the genre enjoyed widespread popular appeal and had the power to shape mentalities. Often satirical in tone, these tales served to convey and question contemporary political, philosophical, scientific, religious and moral trends. They inspired some of the most vivid illustrations of the day and were often circulated as part of the literary underground. We read works by Crébillon fils, Voltaire, Diderot, Cazotte, Charrière, Sade and Staël alongside excerpts from French cultural history on 18th-century mentalities, salons and print culture. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial for required for undergraduates. Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

L34 French 436 Romanticism
This course studies pre-Romantic themes in the works of Madame de Staël and Chateaubriand and of their evolution in the poems of Lamartine, Musset and Vigny, the theater of Victor Hugo, and the novels of George Sand and Victor Hugo. Emphasis is placed on the emergence of a “littérature du moi” (literature of the self), the redefinition of the place of the artist in society after “la bataille romantique,” and the stylistic innovations that lead to “modernism.” Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial required for undergraduates. Credit 3 units. A&S : TH FA : Lit

L34 French 4391 Classicism/A-Classicism
Among the hallmarks of 17th century, French classicism celebrated reason, order, balance and a power often associated with the great achievements of Ancient Greece and Rome. Reason, however, coexisted with dreams and madness; order encountered threats both political and sexual; disharmony persisted despite longings for justice; and depictions of Antiquity flourished alongside those of the Orient, the exotic other world of the East. The course explores these “a-classicisms,” or countervailing forces, by studying the challenges that ground the struggles and seductions in dramas by Corneille, Molière and Racine as well as in the novels of Madame de Lafayette. We read Graffigny’s Lettres d’une Peruvienne, Prévost’s Manon Lescaut, Laclos’ Liaisons Dangereuses to understand classicism retrospectively, through the “a-classicism” of the 18th century’s treatment of identity, alienation, desire and societal tensions. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial for required for undergraduates. Credit 3 units. A&S : TH

L34 French 4392 Commemorating the King
The court of Louis XIV at Versailles was remarkable for its grandeur, its consolidation of power and its celebration of the Sun King. Arguably, all aspects of court life were regulated by the crown and all things produced — whether wars or monuments; art or science; novels or histories — were tributes to the king. All reflected a certain “ideology of commemoration,” that is, an implicit or explicit validation of the monarch’s privilege and prestige, both for his contemporaries and for posterity. We explore how authors (including Louis XIV, La Bruyère, La Rochefoucauld, Perrault, La Fontaine), artists (Lebrun, Rigaud, Poussin, Félibien) and historiographers/memorialists (Racine, Saint Simon) support the ambitions of the crown through their works. Modern critics Elias, Marin, Burke and Merlin guide our research into the activities of the royal family, the ideology of absolutism and the role of art in affirming the power of Versailles as we continue to memorialize it through surviving texts, monuments and images. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial for required for undergraduates.
L34 French 440 Parnassian and Symbolist Literature
This course offers an examination of key writers and texts of the Parnassian and Symbolist schools of the 19th century. Readings include poetry, drama and prose. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial for required for undergraduates.
Credit 3 units.  A&S : TH  FA : Lit

L34 French 441 From Symbolism to Surrealism
This course presents a survey of major prose and poetry from 1870 to 1919, including writers such as Maupassant, Daudet, Anatole France, Loti, Valery, Peguy and Claudel. We discuss several key philosophical and literary movements of the period (e.g., naturalism, idealism, experimental novel). Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial required for undergraduates.
Credit 3 units.  A&S : TH  FA : Lit

L34 French 443 Contemporary Francophone Literature
A general survey of Francophone literature. This course examines representative texts of Quebec, “Acadia,” Africa and West Indies. Authors to include Antonine Maillet, Louis Hémon, Michel Tremblay, Gérard Leblanc, Anne Hébert, Maryse Condé, along with the influential poets of “négritude,” Senghor and Césaire. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial for undergraduates.
Credit 3 units.  A&S : TH  A&S : IQ, HUM, LCD  FA : Lit

L34 French 444 Modern Francophone Poetry
The first half of this course consists of close readings of the founders of Négritude: Césaire, Senghor and Damas. While the political and historical impact of these poets is discussed in some depth, we analyze their poetry primarily in terms of its aesthetic value and concerns. We study American influences such as jazz and the poetry of the Harlem Renaissance along with French influences. The second half of this course focuses on the contemporary poetic scene in Africa and the Caribbean. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial required for undergraduates.
Credit 3 units.  A&S : TH  FA : Lit

L34 French 447 The Medieval Literary Arts
How do medieval French writers understand the structures and functions of the human body? What kinds of bodies are considered disabled? Are womanhood, childhood and old age construed as disabilities? In this course we read texts of varied genre — farces, saints’ lives, fabliaux, poems, romances, journals and chronicles — as we consider how, if at all, disability exists as a social or literary construct in the Middle Ages. Texts include Philippe de Beaumanoir’s Manékinke, Courtebarbe’s Trois Aveugles de Compliègne, Guillaume de Machaut’s Voir Dit and the farce Le Garçon et l’Aveugle; excerpts from Jean de Meun’s Roman de la Rose, from the Ovide Moralisé and from Christine de Pizan’s Mutacion de Fortune; and poems by Rutebeuf, Deschamps and Molinet, as well as critical and theoretical texts from the emerging discipline of disability studies. Texts are available in modern French; no prior study of Old French language is necessary. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial for undergraduates.
Credit 3 units.  A&S : TH  BU : HUM  FA : AH, Lit

L34 French 448 From Arthur to the Grail
Conducted in English. A broad survey of the Arthurian legend: its origins; its elaboration in French, English and other medieval literatures; and its expression in modern literature (especially English and American) and in the visual arts, film and music. All readings available in English. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial required for undergraduates.
Credit 3 units.  A&S : TH  BU : HUM  FA : AH, Lit

L34 French 450 Women and the Medieval French Literary Tradition
The Middle Ages constitute a beginning — a period when new languages and literatures came into being, along with Romanesque book — illumination and stained glass, Gothic cathedrals, Gregorian chant, Troubadour song, Crusades for the Holy Land and quests for the Holy Grail. Medieval French Literature is therefore a new literature, defining itself against antique models and its own rich multilingual, highly visual and oral culture. This course provides an overview of this diverse and fascinating French literary tradition while focusing on the status of women in the literary production of the Middle Ages. Particular attention is given to women’s role in the creation of texts as authors and patrons. We also examine how gender roles are constructed and challenged through the literary representation of female characters. Readings include examples from major genres: Marie de France’s Lais, Chrétien de Troyes’ Lancelot, Rutebeuf’s Vie de Sainte Elysabel, the anonymous Aucassin et Nicolette, as well as Fabliaux, poetry of the Trouvères and Trobairitz, excerpts of the Roman de la Rose, and works by Christine de Pizan. All readings and discussions are in modern French. Prerequisites: French 325 and French 326 or one of
these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial for required for undergraduates.
Credit 3 units. A&S : TH

L34 French 451 French Literature of the Middle Ages I
French literature from the beginning to 1250. The course emphasizes chansons de geste, courtly romance and lyric, and early drama. Most works read in modern French. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial required for undergraduates.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD FA : Lit

L34 French 452 French Literature of the Middle Ages II: Debating the Middle Ages
In this course we explore the function of debate in (and about) late medieval French literature, with particular attention to dialogue and polyphony in “querelles” of gender, language and readership. Readings include troubadour tensos, the Roman de la Rose, the Cite des Dames, the Belle Dame Sans Merci and responses to these poems, along with the Farcede Maistre Pathelin and selected texts by trouvères Guillaume de Machaut and François Villon. We supplement our readings with judicial documents, music and the theoretical perspectives of Zumthor, Bakhtin, Kristeva, etc. Texts are available in Modern French editions; no prior study of Old French language is necessary. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial required for undergraduates.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD FA : Lit

L34 French 453 History of the French Language
Study of phonetic and morphological evolution of the French language with side glances at historical events that shaped this development. No previous knowledge of Latin necessary. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial required for undergraduates.
Credit 3 units. A&S : LA

L34 French 456 Romance Philology
Study of the evolution of the major Romance languages from their common Latin origins. Knowledge of classical Latin not required, but acquaintance with phonetics of at least one Romance language extremely helpful. Conducted in English. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial for undergraduates.

L34 French 458 Nature, Landscape and Travel in the Middle Ages
Through an examination of the concept of nature in the Middle Ages, the course analyzes the importance of the presence or absence of landscapes in medieval literature, including chansons de geste, courtly romances, Roman de la Rose, accounts of travel and pilgrimages, poetry and theater. We examine the movements of medieval men and women from one place to another; their concepts of the relation between the nature and culture; their emotions when confronting nature; the various means they use to describe space and travel; the function of nature and landscapes within individual works. Each text is situated within the general framework of the history of the language and the literature of the period. The thematic focus of the course is informed through theological, philosophical and anthropological perspectives essential to an appreciation of all medieval texts. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial for undergraduates.
Credit 3 units. A&S : TH FA : SSP

L34 French 459 Writing North Africa
This seminar studies French travel writing related to North Africa, as well as the major works of literature from and about Algeria, Morocco and Tunisia, as a prelude for reading the texts of those countries’ Francophone literature now considered canonical. We
consider how colonial-era writing by authors such as Eugène Fromentin and Pierre Benoît defined the colonial “exotic.” We then examine the way the former empire wrote its own literature in the language of the former colonizer, in the works of post-independence authors such as Kateb Yacine, Assia Djebar and Abdelkebir Khatibi, who both observe and revise the conventions of post-colonial literature. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial for undergraduates.
Credit 3 units.  A&S : LA  A&S : IQ, LCD

L34 French 461 Topics in French Literature and History
How genre affects both the production of a given literary text and its perception by the reader. Representative texts from different centuries and movements. Prerequisites: French 325C and 326C (or, for students who have completed the Paris Business Program, completion of either course). One-hour preceptorial for undergraduates only.
Credit 3 units.  A&S : TH  A&S : IQ, HUM, LCD  FA : Lit, SSP

L34 French 466 Second Language Acquisition
Same as Ling 466
Credit 3 units.  A&S : LA  A&S : IQ, HUM

L34 French 469 Reading and Writing in a Second Language
In the past decade the process of becoming literate in a second language has received considerable attention by researchers and instructors. This course, taught in English, extends issues in L2 literacy beyond pedagogy by examining the wide range of theoretical and research issues, both historical and current. Literacy acquisition among second language learners involves a number of variables including both cognitive and social factors. Topics discussed in class include: individual learner differences; the extent to which reading and writing are interrelated; text types and literary forms; literacy and social power; and universal cognitive operations. Students discuss how to bridge research and practice, and they create activities that are included in a reading and writing portfolio. Course counts toward the Graduate Certificate in Language Instruction.
Credit 3 units.  A&S : LA  A&S : IQ, LCD

L34 French 470 Suffering and Self-Expression in Early Modern French Literature
How did early modern people cope with disease, suffering and death? With the advancement of medical science, in particular with Ambroise Paré, who saw it as his mission to ease his patients’ pain, a new sensitivity toward man’s suffering began to develop. Working within the historical and scientific context of the time, this course examines old and emerging attitudes toward man’s suffering with special emphasis on the relationship between suffering and artistic expression. Topics discussed include: suffering as part of the human condition; suffering and faith; suffering and early modern medicine; medicine and religion; gendered views of illness; disease/suffering as a vehicle of relief and self-expression; literary treatment of suffering and disease, including melancholia, depression, suicide, kidney stone, mourning, aging, etc.; images of the ailing body and the ailing mind in early modern texts; disease as a theme and a metaphor. Various genres are covered (fiction, poetry, drama, essay, travelogue). Authors likely include Maurice Scève, Helisenne de Crenne, Louise Labé, Joachim Du Bellay, Pierre de Ronsard, Marguerite de Navarre, Jean-Baptiste Chassignet, Gabrielle de Coignard and Michel de Montaigne. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial for undergraduates only.
Credit 3 units.

L34 French 481 Sartre and Existentialism
This course studies French existentialism in light of recent intellectual developments, especially postmodernism; detailed study of Sartre’s major literary and critical works. Conducted in French, nonmajors may do written work in English. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial required for undergraduates.
Credit 3 units.  A&S : TH  FA : Lit

L34 French 482 Avant-Garde, Postmodern and Modernity
We study the history and evolution of an avant-garde in French literature, possible definitions of the postmodern, description of the different areas of modernity. Readings both theoretical and literary. Prerequisites: French 325 and French 326 or one of these courses and the equivalent WU transfer literature course from Toulouse or Paris. One-hour preceptorial required for undergraduates.
Credit 3 units.  A&S : TH  FA : Lit
L34 French 483 Gender and Genre
A sampling of the diverse contributions made by French women to literary history, this course examines what prompted women to write in the 16th century; what they wrote about; which genres they chose; how these women were viewed by their contemporaries, etc. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial required for undergraduates. Credit 3 units. A&S : TH, SD A&S : IQ, HUM, LCD, SD FA : Lit

L34 French 492 Contemporary French Literary Criticism
The first half of the course deals with works of Roland Barthes; the second examines relationship of philosophy to literature and explores how the ideas of Foucault, Lacan, Derrida, Deleuze, Girard and Baudrillard can be applied to the study of literary texts. Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial required for undergraduates. Credit 3 units. A&S : TH FA : Lit

L34 French 493 Selected French Writers
Prerequisites: French 325 and French 326 or one of these courses and the equivalent Washington University transfer literature course from Toulouse or Paris. One-hour preceptorial required for undergraduates. Credit 3 units. A&S : TH FA : Lit

L34 French 495 Honors
To be considered for graduation with Honors, students must: (1) participate satisfactorily in two 400-level literature courses and (2) enroll in French 495 and submit an Honors Thesis approved by the department at least two months before graduation. Prerequisite: 3.0 grade point average. Qualified students should consult the department. Credit 3 units. A&S : TH

L34 French 4951 Honors
To be considered for graduation with Honors, students must: (1) participate satisfactorily in two 400-level literature courses and (2) enroll in French 495 and submit an Honors Thesis approved by the department at least two months before graduation. Prerequisite: 3.0 grade point average. Qualified students should consult the department. Pass/fail. Credit 3 units. A&S : TH

Germanic Languages and Literatures
Germanic Languages and Literatures offers a diverse and challenging program of study in the language, literature and culture of the German-speaking countries. In this program you study the German language intensively and explore German literature and culture from the Middle Ages to the present. You also have the opportunity to learn business German and to study contemporary Germany.

As a beginning student, you are taught German through a combination of main classes and subsections. You rapidly acquire speaking skills through intensive interactive classroom activities. Intermediate German combines a three-hour main class with a subsection to enable you to work steadily on speaking, writing, listening and reading skills. Advanced language courses help you to polish your basic German and to improve your facility to use complicated grammatical structures and to express complex ideas orally and in writing.

In Washington University’s German program, you take courses from internationally recognized faculty members who are leaders in their fields and who have been recognized for their expertise in undergraduate teaching. Faculty areas of interest include literature and history, film, prose narrative, gender studies, philosophy, the history of German cultural institutions, the history of literary genres, literature before 1700, contemporary literature and German-Jewish literature. All German classes are small, thus facilitating lively faculty-student interaction. Our collection of contemporary German literature, housed in Olin Library, is the largest in North America and attracts many visiting scholars to our campus.

As a student of German, you can choose among several study abroad programs, and you can take advantage of an array of co-curricular activities including film series, the German honorary society Delta Phi Alpha, lectures by guest speakers, and readings by visiting authors. Many German students also elect to assist with the annual German Day for high school students from Missouri and Illinois and thus to transmit their interest in German to the next generation of students.

A degree in German prepares you for graduate study in German language, literature and culture; language education; comparative literature; and linguistics. You also may choose to combine a degree in German with another major in the college and upon graduation to pursue graduate degrees in, for example, art history, business, environmental studies, international and area studies, law or medicine. In addition to careers in academia, our graduates have pursued careers in diverse fields, including international banking, diplomacy, publishing and law.

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The Major in Germanic Languages and Literatures

Total units required: 24

Required courses:

German 340C and the Senior Assessment (undertaken in conjunction with a 400-level seminar) are required of all majors. German 340C is required for admission to all 400-level courses except German 401, 404 and 408D. Admission to 400-level courses (except German 401, 404 and 408D) without completion of German 340C is by departmental permission only.

Elective courses:

Students interested in studying German may declare German as their major or second major. Majors or second majors are required to complete 24 credit hours of upper-level courses (300 and 400), at least 12 of which are on the 400 level. If you begin German at Washington University and follow the regular sequence of courses (German 101D-102D-210D), you will be ready to begin your German major after three semesters. With the exception of German 340 OR 341, only courses taught in German will count toward the major. Students who wish to receive Honors in German will write an honors thesis and must sign up for German 497/498 (with departmental permission) in addition to the 24 hours required for the major (for a total of 30 credit hours). All majors and second majors are required in their senior year to participate in the senior assessment interview. Applications for admission to the honors program must be submitted by the first week of classes in the fall semester. Forms are available from Empress Sanders (Ridgley 324).

PLEASE NOTE: For both majors and minors, at least half of the courses on the 300 level and above must have been acquired either in residence at Washington University or in overseas programs affiliated with Washington University.

Additional Information

Study Abroad: As a German major or minor, you are encouraged to participate in one of the overseas study programs. The German department sponsors a semester and a year abroad at the University of Tübingen, Germany. To participate in the Tübingen program you must complete German 301D (for the semester program) and German 302D for the year program) or the equivalent by the time the program begins. Upon returning to campus, German majors are required to take at least one 400-level course (other than German 497-498) during their senior year.

Washington University sponsors an eight-week summer program in Göttingen, Germany. If you have taken at least one semester of German, you may be eligible for this intensive language
program. Especially if you are interested in business, the department encourages you to apply for the Webster University International Business Internship or for the business internship in Koblenz, Germany, arranged by Washington University’s Olin Business School.

Senior Honors: You can earn honors in German by writing a thesis during your final year at Washington University. You choose a topic with the help of a faculty thesis adviser from the department. Upon acceptance of your thesis proposal (normally in the fall of your senior year), you register for the German 497-498 sequence. You present the thesis to your thesis adviser and a second reader approximately one month before the conclusion of your final semester at the university.

The Minor in Germanic Languages and Literatures

Units required: 15

Required courses: Students who intend to minor in German must complete 15 upper-level credit courses taught in German (300 and 400 level). With the exception of 340 OR 341, only courses taught in German will count toward the major. At least 3 of these units must be at the 400 level.

PLEASE NOTE: For both majors and minors, at least half of the courses on the 300 level and above must have been acquired either in residence at Washington University or in overseas programs affiliated with Washington University.

Additional Information

German 340C German Literature and the Modern Era (with discussion section) is strongly encouraged because it is a prerequisite for all 400-level courses except German 401, 404 and 408D. At least half of the courses at the 300 level and above must be acquired either in residence at Washington University or in an overseas program affiliated with Washington University. Any credits obtained at the 300 or 400 level during the summer institute program in Göttingen may count toward the minor.

German

L21 German 100D Continuing German for Students with High School German

Builds on students’ previous knowledge of German language and culture, reviewing and reinforcing the four language skills of listening, speaking, reading and writing in cultural contexts with special emphasis on communicative competence. In addition to the regular class meetings, students sign up after the semester begins for a once-weekly subsection (time to be arranged). Prerequisites: placement by examination and at least two years of high school German, or permission of instructor. Students who complete this course successfully may enter German 102D or 290D.

Credit 3 units. A&S : LA BU : HUM, IS

L21 German 101D Basic German: Core Course I

Introductory program; no previous German required. Students develop their competence in listening, speaking, reading and writing German by means of interpersonal, interpretive and presentational communicative practice. This first course serves as an introduction to German grammar and culture; goals range from developing the communicative skills necessary to find an apartment to being able to read modern German poetry. Students learn how to apply their knowledge of basic cases and tenses in order to hold a conversation or write a letter describing their interests, family, goals, routines, etc. and to discover personal information about others. In addition to the regular class meetings, students should sign up for a twice-weekly subsection. Students who complete this course successfully should enter German 102D.

Credit 5 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L21 German 102D Basic German: Core Course II

Continuation of German 100D or 101D. In preparation for more advanced academic study in German, this second course further introduces students to fundamental German grammar, culture and history. It comprises a combination of situational lessons and tasks that challenge students’ critical thinking abilities. Students in German 102 familiarize themselves with the language necessary to understand and give directions, apply for a job and speak with a doctor; students also read more advanced content such as Grimm’s fairy tales and a text from Franz Kafka. In addition to the regular class meetings, students sign up after the semester begins for a twice-weekly subsection. Prerequisites: German 100D, 101D, the equivalent, or placement by examination. Students who complete this course successfully should enter German 210D.

Credit 5 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L21 German 111D Elementary German I

Development of speaking, listening, reading and writing skills. Exposure to cultural topics. Laboratory work included. Offered during Summer School only.

Credit 4 units. A&S : LA A&S : IQ, LCD BU : IS

L21 German 112D Elementary German II

Continuation of Elementary German I. Further development of all skills. Exposure to cultural topics and to fiction and nonfiction texts. Laboratory work included. Prerequisite: German 111D Elementary German I or equivalent. Offered during Summer School only.

Credit 4 units. A&S : LA A&S : IQ, LCD BU : IS

L21 German 210D Intermediate German: Core Course III
Continuation of German 102D. Reading and discussion in German of short literary and nonliterary texts combined with an intensive grammar review. Further development of writing skills. In addition to the regular class meetings, students sign up after the semester begins for a subsection (time to be arranged). Prerequisite: German 102D or equivalent, or placement by examination. Students who complete this course successfully should enter German 301D or 313.
Credit 4 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L21 German 240 Mad Science? The Ethics of Knowledge, Technology and Knowledge in the German World
This interdisciplinary lecture course explores the long pursuit of ethical questions concerning science, technology and medicine in the German-speaking world. Beginning with the medieval period and extending into the present, the class examines a range of texts in order to track the transition from pre-Enlightenment notions of the human to the modern concept of the reasoning subject, from the embrace of technology in the 19th century to its murderous implementation under fascism in the 20th, from post-war debates about human nature to 21st-century debates about bioethics — asking how a culture that once espoused reason, knowledge and technology as forces that could direct our inner and outer nature devolved in the early 20th century into myth, irrationalism and genocide, and how in the aftermath of the Nazi period, German culture continues to wrestle with the quandaries of scientific and technological advancement in ways that raise more universal questions about the ethics of progress. Led by a faculty member from the German department with regular guest lectures by faculty from across the disciplines, including literature, history, the arts, medicine and philosophy. In conjunction with the lectures, students read literary, critical and historical writings that address the broader topics of the course. Possible session topics include: Medieval Concepts of Race; the Science of Witchcraft; Early Modern Midwifery; Nietzsche Reads Darwin; the Birth of Science as a Discipline; Making the Forensic Case for Ritual Murder; Sex in Vienna; Nazi Medicine Then and Now; Machine Monsters of the Modern Age; Body Worlds and Contemporary Bioethics. Twice-weekly lecture with one one-hour discussion section. Lectures, readings and discussions in English. Open to freshmen.
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD EN : H

L21 German 299 An Internship for Liberal Arts Students
An Internship for Liberal Arts Students: A course for students participating in a pre-approved internship program. Students work together with a faculty adviser to determine the exact nature and scope of the work to be undertaken to receive German credit. All credit is subject to the approval of the department.
Credit 1 unit.

L21 German 301D Advanced German: Core Course IV
Discussion of literary and nonliterary texts combined with an intensive grammar review. Systematic introduction to the expressive functions of German with an emphasis on spoken and written communication. In addition to the regular class meetings, students should sign up for a twice-weekly subsection. Prerequisite: German 210D, the equivalent or placement by examination. Students who complete this course successfully should enter German 302D.
Credit 4 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L21 German 302D Advanced German: Core Course V
Continuation of German 301D. Refinement and expansion of German communication skills (speaking, listening, writing, reading), deepening understanding of German grammatical structures, acquisition of more sophisticated and varied vocabulary, introduction to stylistics through discussion and analysis of literary and nonliterary texts. In addition to the regular class meetings, students should sign up for a twice-weekly subsection. Prerequisite: German 301D or equivalent or placement by examination. Students completing this course successfully may enter the 400 level.
Credit 4 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L21 German 313 Conversational German
Practice in speaking and vocabulary development in cultural contexts. Prerequisite: German 210D or equivalent, or placement by examination. Two hours a week. May be repeated for credit.
Credit 1 unit. A&S : LA A&S : IQ, LCD BU : IS

L21 German 314A The Legend of King Arthur in the Middle Ages
This course examines the medieval tradition of King Arthur that arose in northern Europe from the “dark ages” to the invention of printing. The objective of this course is to achieve a thematic, historical and structural insight into some of the best examples of medieval storytelling and understand why they continue to cast a spell over readers today. You may want to try your own hand at Arthurian storytelling after you have learned the building blocks. The course also lays a foundation for the study of premodern literature, the medieval and early modern world, and the national cultures of France, Germany and Britain. Same as Hum 313A
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM

L21 German 328 Topics in German Studies
Content variable.
Credit 3 units.

L21 German 329 Topics in German Literature I
Content variable.
German and write four one-page reaction papers (in German; to distinguished visiting professor. Students present class notes in four lectures in German on German literature and culture by a Culture instructor.

Prerequisite: German 302D or the equivalent or permission of

Students develop advanced proficiency in German through and idiomatic expression in spoken and written German. Encountered by English speakers and on subtleties of style specificity and on developing expertise in textual interpretation. Discussions, readings and papers focus on questions of style, rhetoric and cultural sensibilities as they are posed in predominantly literary texts and in relation to the changing political and cultural faces of Germany over the past 250 years. Readings include works in translation by some of the most influential figures of the German tradition, such as Goethe, Nietzsche, Freud, Kafka, Thomas Mann, Brecht and Christa Wolf. Open to first-year students, nonmajors and majors. Required for admission to 400-level courses (except German 404 and 408D). Qualifies for major or minor credit when taken in conjunction with a one-hour discussion section in German. The discussion section provides an introduction to critical German vocabulary and is open to students with prior knowledge of German (German 210D or equivalent or placement by examination).

This course introduces students to concepts and issues relevant to German business and economics and helps them to develop the language skills necessary to succeed in the German business world. We concentrate on the basic elements of the German economic system, looking at Germany as a site of production and exchange, the legal structure of German firms, the relations between labor and management, and strategies for product development and marketing in national and international contexts. Students also are introduced to specific German business practices, including forms of communication, management styles and general corporate culture. Students learn business vocabulary, writing skills for business correspondence, oral presentation techniques, and reading and comprehension strategies for German newspapers and news reports. All discussions, readings and assignments are in German. Prerequisite: German 302D.

Same as Comp Lit 393
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

L21 German 408D German as a Language of Business
This course introduces students to concepts and issues relevant to German business and economics and helps them to develop the language skills necessary to succeed in the German business world. We concentrate on the basic elements of the German economic system, looking at Germany as a site of production and exchange, the legal structure of German firms, the relations between labor and management, and strategies for product development and marketing in national and international contexts. Students also are introduced to specific German business practices, including forms of communication, management styles and general corporate culture. Students learn business vocabulary, writing skills for business correspondence, oral presentation techniques, and reading and comprehension strategies for German newspapers and news reports. All discussions, readings and assignments are in German. Prerequisite: German 302D.

Credit 4 units. A&S : LA A&S : IQ, LCD, LS

L21 German 4100 German Literature and Culture, 1150–1750
Exploration of medieval and early modern literature and culture within sociohistorical contexts. Genres and themes vary and may include visual culture; representation; the development of fictionality and historical writing; questions of race, gender and class; courtly culture; law; magic and marvels; and medical and scientific epistemologies. Readings may include such genres as the heroic epic, drama, “Minnesang,” the courtly novel, the Arthurian epic, fables, the novella, religious or devotional literature, witch tracts, pamphlets, political writings, the “Volksbuch,” the picaresque novel, and the essay. Discussion, readings and papers in German. Prerequisite: see Overview and Majors pages.

Same as Comp Lit 393
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

L21 German 4031 Lectures on German Literature and Culture
Four lectures in German on German literature and culture by a distinguished visiting professor. Students present class notes in German and write four one-page reaction papers (in German; to be revised) as well as a final three- to five-page reaction paper (in German). Attendance is required for those taking the course for credit. Credit/No Credit only.

Credit 1 unit. A&S : TH A&S : IQ, HUM, LCD FA : Lit

L21 German 404 Germany Today
Introduction to the history, politics and culture of contemporary Germany (1945 to the present). Topics include the cultural construction of identity in post-unified Germany; European integration and post-wall economy; the German constitution, electoral system and current elections; current debates and controversies; political parties and leading political figures; the role of literature, film, music, the visual arts, media and popular culture; the role of universities. Discussion, readings and papers in German. Required for candidates for the Overseas Study Program in Tübingen (Germany). Prerequisite: German 302D (may be taken concurrently with German 404), or permission of instructor.

Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD, LS

Same as Comp Lit 393
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD BU : HUM FA : Lit

L21 German 334C Masterpieces of Modern German Literature in Translation
Content variable.
Credit 3 units. A&S : TH BU : IS FA : Lit

L21 German 340C German Literature and the Modern Era
Introduction in English to German writers from 1750 to the present. Discussion focuses on questions such as the role of outsiders in society, the human psyche, technology, war, gender, the individual and mass culture, and modern and postmodern sensibilities as they are posed in predominantly literary texts and in relation to the changing political and cultural faces of Germany over the past 250 years. Readings include works in translation by some of the most influential figures of the German tradition, such as Goethe, Nietzsche, Freud, Kafka, Thomas Mann, Brecht and Christa Wolf. Open to first-year students, nonmajors and majors. Required for admission to 400-level courses (except German 404 and 408D). Qualifies for major or minor credit when taken in conjunction with a one-hour discussion section in German. The discussion section provides an introduction to critical German vocabulary and is open to students with prior knowledge of German (German 210D or equivalent or placement by examination).

Credit -4 unit. A&S : TH, CD A&S : IQ, HUM, LCD BU : ETH, IS FA : Lit

L21 German 401 Advanced German Core Course VI
Designed to foster advanced proficiency in German through analysis and discussion of a wide variety of high-level texts and through practice in advanced composition. Discussions and papers focus on questions of style, rhetoric and cultural specificity and on developing expertise in textual interpretation. Additional emphasis on problems of advanced German grammar encountered by English speakers and on subtleties of style and idiomatic expression in spoken and written German. Prerequisite: German 302D or the equivalent or permission of instructor.

Credit 3 units. A&S : LA A&S : IQ, LCD, LS

L21 German 331 Topics in Holocaust Studies
Content variable.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD BU : HUM FA : Lit, SSP

L21 German 331 Topics in Holocaust Studies
Content variable.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD BU : HUM FA : Lit, SSP

L21 German 333C New German Women's Literature
Content variable.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD BU : HUM FA : SSP

L21 German 408D German as a Language of Business
This course introduces students to concepts and issues relevant to German business and economics and helps them to develop the language skills necessary to succeed in the German business world. We concentrate on the basic elements of the German economic system, looking at Germany as a site of production and exchange, the legal structure of German firms, the relations between labor and management, and strategies for product development and marketing in national and international contexts. Students also are introduced to specific German business practices, including forms of communication, management styles and general corporate culture. Students learn business vocabulary, writing skills for business correspondence, oral presentation techniques, and reading and comprehension strategies for German newspapers and news reports. All discussions, readings and assignments are in German. Prerequisite: German 302D.

Credit 4 units. A&S : LA A&S : IQ, LCD, LS

L21 German 4100 German Literature and Culture, 1150–1750
Exploration of medieval and early modern literature and culture within sociohistorical contexts. Genres and themes vary and may include visual culture; representation; the development of fictionality and historical writing; questions of race, gender and class; courtly culture; law; magic and marvels; and medical and scientific epistemologies. Readings may include such genres as the heroic epic, drama, “Minnesang,” the courtly novel, the Arthurian epic, fables, the novella, religious or devotional literature, witch tracts, pamphlets, political writings, the “Volksbuch,” the picaresque novel, and the essay. Discussion, readings and papers in German. Prerequisite: see Overview and Majors pages.

Same as Comp Lit 393
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

L21 German 404 Germany Today
Introduction to the history, politics and culture of contemporary Germany (1945 to the present). Topics include the cultural construction of identity in post-unified Germany; European integration and post-wall economy; the German constitution, electoral system and current elections; current debates and controversies; political parties and leading political figures; the role of literature, film, music, the visual arts, media and popular culture; the role of universities. Discussion, readings and papers in German. Required for candidates for the Overseas Study Program in Tübingen (Germany). Prerequisite: German 302D (may be taken concurrently with German 404), or permission of instructor.

Credit 3 units. A&S : TH A&S : IQ, HUM, LCD BU : HUM FA : SSP

L21 German 408D German as a Language of Business
This course introduces students to concepts and issues relevant to German business and economics and helps them to develop the language skills necessary to succeed in the German business world. We concentrate on the basic elements of the German economic system, looking at Germany as a site of production and exchange, the legal structure of German firms, the relations between labor and management, and strategies for product development and marketing in national and international contexts. Students also are introduced to specific German business practices, including forms of communication, management styles and general corporate culture. Students learn business vocabulary, writing skills for business correspondence, oral presentation techniques, and reading and comprehension strategies for German newspapers and news reports. All discussions, readings and assignments are in German. Prerequisite: German 302D.

Credit 4 units. A&S : LA A&S : IQ, LCD, LS

L21 German 401 Advanced German Core Course VI
Designed to foster advanced proficiency in German through analysis and discussion of a wide variety of high-level texts and through practice in advanced composition. Discussions and papers focus on questions of style, rhetoric and cultural specificity and on developing expertise in textual interpretation. Additional emphasis on problems of advanced German grammar encountered by English speakers and on subtleties of style and idiomatic expression in spoken and written German. Prerequisite: German 302D or the equivalent or permission of instructor.

Credit 3 units. A&S : LA A&S : IQ, LCD, LS

L21 German 4031 Lectures on German Literature and Culture
Four lectures in German on German literature and culture by a distinguished visiting professor. Students present class notes in German and write four one-page reaction papers (in German; to be revised) as well as a final three- to five-page reaction paper (in German). Attendance is required for those taking the course for credit. Credit/No Credit only.

Credit 1 unit. A&S : TH A&S : IQ, HUM, LCD FA : Lit
L21 German 4101 German Literature and Culture, 1750–1830
Exploration of the literature and culture of the Enlightenment, Storm and Stress, Weimar Classicism, and Romanticism within sociohistorical contexts. Genres and themes vary and may include the representation of history, absolutism and rebellion, the formation of bourgeois society, questions of national identity, aesthetics, gender, romantic love, and the fantastic. Reading and discussion of texts by authors such as Lessing, Goethe, Schiller, Kant, Novalis, Günderode, the Brothers Grimm, Kleist, E.T.A. Hoffmann, Eichendorff, Bettina von Arnim. Discussion, readings and papers in German. Prerequisite: see Overview and Majors page.
Credit 3 units. A&S : TH, WI A&S : IQ, HUM, LCD, WI, LS
FA : Lit

L21 German 4102 German Literature and Culture, 1830–1914
Exploration of 19th-century literature and culture within sociohistorical contexts. Genres and themes vary and may include the representation of history, liberalism and restoration, nationalism, industrialization, colonialism, class, race and gender conflicts, materialism, secularization and fin-de-siècle. Reading and discussion of texts by authors such as Büchner, Heine, Marx, Storm, Keller, Meyer, Fontane, Droste-Hülshoff, Nietzsche, Ebner-Eschenbach, Schnitzler, Rilke. Discussion, readings and papers in German. Prerequisite: see Overview and Majors page.
Credit 3 units. A&S : TH, CD, WI A&S : IQ, HUM, LCD, WI, LS
FA : Lit

L21 German 4103 German Literature and Culture, 1914 to the Present
Exploration of modern and contemporary literature within sociohistorical contexts. Genres and themes vary and may include the representation of history, the crisis of modernity, the two World Wars, the Weimar Republic, the Third Reich, generational conflicts, the women's movement and postmodern society. Reading and discussion of texts by authors such as Wedekind, Freud, Mann, Kafka, Brecht, Seghers, Böll, Bachmann, Grass, Wolf. Discussion, readings and papers in German. Prerequisite: see Majors page.
Credit 3 units. A&S : TH, CD, WI A&S : IQ, HUM, LCD, WI, LS
FA : Lit

L21 German 4104 Studies in Genre
Exploration of the definition, style, form and content that characterize a specific genre. Investigation of the social, cultural, political and economic forces that lead to the formation and transformation of a particular genre. Examination of generic differences and of the effectiveness of a given genre in articulating the concerns of a writer or period. Topics and periods vary from semester to semester. Discussion, readings and papers in German; some theoretical readings in English. Prerequisite: see Majors page.
Credit 3 units. A&S : TH, CD, WI A&S : IQ, HUM, LCD, WI, LS
FA : SSP

L21 German 4105 Topics in German Studies
Focus on particular cultural forms such as literature, film, historiography, social institutions, philosophy, the arts or on relationships between them. Course examines how cultural meanings are produced, interpreted and employed. Topics vary and may include national identity, anti-Semitism, cultural diversity, construction of values, questions of tradition, the magical, the erotic, symbolic narrative and the city. Course may address issues across a narrow or broad time frame. Discussion, readings and papers in German. Prerequisite: see website.
Credit 3 units. A&S : TH, CD, WI A&S : IQ, HUM, LCD, WI, LS
FA : SSP

L21 German 4106 Studies in Gender
Investigation of the constructions of gender in literary and other texts and their sociohistorical contexts. Particular attention to the gendered conditions of writing and reading, engendering of the subject and indicators of gender. Topics and periods vary from semester to semester and include gender and genre, education, religion, politics, cultural and state institutions, science, sexuality and human reproduction. Discussion, readings and papers in German; some theoretical readings in English. May be repeated with different content. Prerequisite: see Overview and Majors pages.
Credit 3 units. A&S : TH, SD, WI A&S : IQ, HUM, LCD, SD, WI, LS

L21 German 411 German Language Seminar: History of the German Language
Treatment of the historical development of German phonology, morphology, syntax and lexicography. Focus on the emergence of New High German. Examination of the relationship of standard German to its dialects and to other Germanic languages, particularly English. Conducted in German; papers in German. Prerequisite: German 302D or the equivalent or permission of instructor.
Credit 3 units. A&S : LA

L21 German 414 German Language Seminar: Structure of the German Language
Advanced course for undergraduates that enables better understanding of the language and sublanguages of modern German in terms of linguistic theory. Particular attention to semantics and pragmatics, i.e., to German viewed as a “sign” of human communication, value, interaction. Conducted in German; papers in German. Prerequisite: German 302D or the equivalent or permission of instructor.
Credit 3 units. A&S : LA

L21 German 457 Introduction to Linguistics and the Structure of German
Introduction to the structure of the German language and to linguistic theory: phonology, morphology, syntax, semantics, as well as semiotic, pragmatic and sociolinguistic theories. Undergraduate students sign up for German 414.
Credit 3 units. A&S : LA  A&S : IQ, LCD

L21 German 493 The Task of the Translator
This course offers an introduction to the theory and practice of translation, consisting of three main components. First, students have the opportunity to translate a wide range of fiction and nonfiction texts from a variety of genres (short stories, philosophy, journalism, academic prose). The focus is on translation from German to English, but we also translate from English to German. Next, we read selections from key works on the theory of translation, from Martin Luther’s 16th-century treatise on his Bible translation to 20th-century essays by philosophers such as Walter Benjamin. Finally, we read and discuss excerpts from some of the most celebrated literary and philosophical translations of the past 200 years, including German translations of authors ranging from Shakespeare to J.K. Rowling as well as English translations of authors such as Goethe and Kafka. The course aims to give students a sense of the challenges and rewards of translation as well as a deeper understanding of the relationship between language, thought and culture.
Credit 3 units. A&S : TH  A&S : IQ, HUM, LCD

L21 German 497 Independent Work for Senior Honors
Research for an Honors thesis, on a topic chosen in conjunction with the adviser. Emphasis on independent study and writing. Open to students with previous course work in German at the 400 level, an overall 3.0 grade point average, and at least a B+ average in advanced work in German. Prerequisites: senior standing and permission of the undergraduate adviser.
Credit 3 units.

L21 German 498 Independent Work for Senior Honors
Continuation of German 497. Completion of thesis. Quality of the thesis determines whether the student receives credit only or Honors in German. Prerequisite: German 497.
Credit 3 units.

Greek
The Department of Classics offers course work in Greek language, history, literature, archaeology and culture. At Washington University, Greek is taught in the most progressive manner, using the latest innovations in textbooks and computer technology. The beginning student masters the grammar in two semesters and goes on immediately, in the third semester, to read Plato and Homer. We maintain a strong program in two semesters and goes on immediately, in the third semester, to read Plato and Homer. We maintain a strong program in Greek, from the textbook to graduate seminars, where our most advanced undergraduates are often working alongside graduate students in our vigorous and growing Master of Arts program. It is a remarkable and dynamic environment, one that the students find both rewarding and stimulating. The Department of Classics offers as well a variety of courses in Greek history, literature, archaeology and culture, addressed both to the general undergraduate population and to those pursuing majors and minors within the department.

Additional Information
Study Abroad: Study abroad for a semester in Rome or Athens is an option many Classics majors select. Washington University is a member of the Intercollegiate Center for Classical Studies (ICCS) consortium, and many majors attend the one-semester ICCS program in Rome. A knowledge of Latin or Greek to at least the intermediate level is required for admission to the Rome program. Students interested in studying at the Intercollegiate Center in Rome should consult Professor Tim Moore. Students interested in the College Year in Athens Program should consult Professor Robert Lamberton.

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Departmental website:  http://classics.artsci.wustl.edu
For a list of affiliated faculty, please see the Department of Classics faculty (p. 267) page.

There is no major in this area. Students interested in Greek should explore either the major in Classics (p. 267) or the major in Ancient Studies (p. 267) offered through the Department of Classics (p. 267).

There is no minor in this area. Students interested in Greek should explore either the minor in Classics (p. 268) or the minor in Ancient Studies (p. 268) offered through the Department of Classics (p. 267).

### Greek

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Credit Units</th>
<th>General Education Code(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L09 Greek 101D</td>
<td>Beginning Greek I</td>
<td>Intensive introduction to the morphology and syntax of classical (ancient) Greek, including extensive readings in literary texts.</td>
<td>Greek 101D or permission of the instructor.</td>
<td>4</td>
<td>A&amp;S : LA, A&amp;S : IQ, LCD, LS BU : HUM, IS</td>
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<tr>
<td>L09 Greek 102D</td>
<td>Beginning Greek II</td>
<td>Continuation and completion of the program begun in Greek 101D.</td>
<td>Prerequisite: Greek 102D or permission of the instructor.</td>
<td>4</td>
<td>A&amp;S : LA, A&amp;S : IQ, LCD, LS BU : HUM, IS</td>
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<tr>
<td>L09 Greek 190D</td>
<td>Intensive Beginning Greek I</td>
<td>An intensive study of Attic Greek.</td>
<td></td>
<td>5</td>
<td>A&amp;S : LA, A&amp;S : IQ, LCD, LS BU : IS</td>
</tr>
<tr>
<td>L09 Greek 210 Intensive Beginning Greek II</td>
<td>Completion of work begun in Greek 190D followed by readings in original Greek poetry and prose. Successful completion of Greek 210 with a grade of B+ or better allows the student to proceed directly to Greek 318C.</td>
<td>Prerequisite: Greek 210 or permission of the instructor.</td>
<td>5</td>
<td>A&amp;S : LA, A&amp;S : IQ, LCD, LS BU : HUM, IS</td>
<td></td>
</tr>
<tr>
<td>L09 Greek 215D</td>
<td>Intermediate Greek I</td>
<td>Reading of Greek prose texts accompanied by review of morphology and syntax and exercises in vocabulary building.</td>
<td>Prerequisite: Greek 102D or permission of the instructor.</td>
<td>3</td>
<td>A&amp;S : LA BU : HUM, IS</td>
</tr>
<tr>
<td>L09 Greek 301 Intermediate Greek: The New Testament in Context</td>
<td>A reading of texts from the New Testament as well as others of relevance to the religions of the Roman Empire.</td>
<td>Prerequisite: Greek 317C or permission of the instructor.</td>
<td>3</td>
<td>A&amp;S : LA, A&amp;S : IQ, LCD, LS BU : HUM</td>
<td></td>
</tr>
<tr>
<td>L09 Greek 316C</td>
<td>Intermediate Greek II</td>
<td>Readings in various forms of Greek poetry and prose as foundation for advanced study of Greek literature.</td>
<td>Prerequisite: Greek 215D or permission of the instructor.</td>
<td>3</td>
<td>A&amp;S : LA BU : HUM FA : Lit</td>
</tr>
</tbody>
</table>

L09 Greek 317C Introduction to Greek Literature
Introduction to Attic prose through the reading of Plato's Apology and related texts. Prerequisite: Greek 102D with a grade of B+ or higher or permission of the instructor.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, LS BU : IS FA : Lit

L09 Greek 318C Introduction to Greek Literature
Introduction to epic poetry through the reading of selections from Homer's Iliad and Odyssey. Prerequisite: Greek 210, Greek 316C or Greek 317C.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, LS BU : IS FA : Lit

L09 Greek 350W Writing about Greek Literature
Greek courses at the 300 level with enhanced writing requirements may be taken under this designation as writing-intensive courses. Required: permission of instructor.
Credit 3 units. A&S : LA, WI A&S : IQ, LCD, WI

L09 Greek 411 Homer: The Odyssey
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, LS BU : HUM FA : Lit

L09 Greek 413 Homer: The Iliad
Credit 3 units. A&S : TH A&S : IQ, LS BU : HUM FA : Lit

L09 Greek 416 Hesiod
Credit 3 units. A&S : TH A&S : IQ, LS FA : SSP

L09 Greek 418 The Epic Tradition
Intensive readings in Greek epic, including Homer, Hesiod, Apollonius Rhodius and a sampling of later hexameters (The Orphic Argonautica, Nonnus). The emphasis is on the continuities and the discontinuities in the evolution of the genre.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, LS

L09 Greek 420 Sophocles
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, LS FA : Lit

L09 Greek 422 Euripides
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, LS FA : Lit

L09 Greek 423 Aeschylus
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, LS FA : Lit
Hebrew (Biblical and Modern)

The Department of Jewish, Islamic and Near Eastern Languages and Cultures offers a major and a minor in Hebrew. As a major in Hebrew, students can expect to gain proficiency in the language, study the area’s literary and cultural landmarks, and gain familiarity with the historical context. Students majoring in Hebrew are expected to maintain a B average in all departmental courses. The prerequisites for a major include successful completion of the first two levels of language study (MHBR 105D Beginning Modern Hebrew I, MHBR 106D Beginning Modern Hebrew II, MHBR 151D Advanced Beginning Modern Hebrew I, MHBR 213D Intermediate Modern Hebrew I, MHBR 214D Intermediate Modern Hebrew II) or its equivalent and either JINE 208F History, Text and Identity: Introduction to Jewish Civilization or JINE 350 Israeli Culture and Society.

Language Placement: Placement tests are required for all students entering our language programs. Students who test into Intermediate Hebrew and satisfactorily complete (with a grade of B– or better) at least one semester of language study may petition for 3 units of retroactive credit; students who test into third year or above and satisfactorily complete (with a grade of B– or better) at least one semester of language study may petition for 6 units of retroactive credit. Credit is limited to 3 units for testing into intermediate and 6 units for testing into third year or above. Please note that students with native language proficiency as determined by the individual language section, as well as students who enroll in a course below their placement level, are ineligible for retroactive credit units. Students who misrepresent the extent of their background to gain entrance to a course at the elementary or intermediate level will be dropped from that course.

Phone: 314/935-5110 or 314/935-8567
E-mail: jinelc@wustl.edu
Departmental website: http://jinelc.wustl.edu

For a list of affiliated faculty, please see the Department of Jewish, Islamic and Near Eastern Languages and Cultures faculty (p. 504) page.

The Major in Hebrew (Biblical and Modern)

Total units required: 47. First and second level language study, 20 units, plus 27 upper-level units, no more than 12 of which may be language courses.

Required courses:

The prerequisites for a major in Hebrew include successful completion of the first two levels of language study (MHBR 105D Beginning Modern Hebrew I, MHBR 106D Beginning Modern Hebrew II, MHBR 151D Advanced Beginning Modern Hebrew I, MHBR 213D Intermediate Modern Hebrew I, MHBR 214D Intermediate Modern Hebrew II) or its equivalent and either JINE 208F History, Text and Identity: Introduction to Jewish Civilization or JINE 350 Israeli Culture and Society.
Required upper-level courses for the major include language courses at the third-year or higher levels. Hebrew majors must take at least two semesters of fourth-level Modern Hebrew (MHBR 401W Seminar in Hebrew Literature, MHBR 4010 Fourth-Level Modern Hebrew I, MHBR 402 Fourth-Level Modern Hebrew II, MHBR 420 Topics in Modern Hebrew Literature or MHBR 421 Study of Selected Texts in Modern Hebrew Literature), as well as a minimum of one semester of classical Hebrew (BHBR 384 Introduction to Biblical Hebrew, BHBR 385D Topics in Biblical Hebrew Texts, or BHBR 440 Topics in Rabbinic Texts). All students are expected to maintain a minimum grade of B– in language classes.

In addition, Hebrew majors must complete 15 units of relevant upper-level literature, culture and civilization courses, chosen in consultation with their adviser. (Please note that many courses in Near Eastern literatures and cultures can be found under Religious Studies, Comparative Literature or Jewish, Islamic and Near Eastern Studies.) Unless a student is writing an honors thesis or fulfilling a capstone requirement for a second major, he or she also is required to take the departmental capstone course during the senior year.

Additional Information

Study Abroad: Students are strongly encouraged to participate in Washington University-approved study abroad programs in Israel, Egypt and other countries of the Middle East. Study abroad is usually during the junior year and after a minimum of one year of language study at Washington University. Students who participate in Washington University-sponsored and/or -approved overseas programs normally are able to apply most or all of these units to their undergraduate degree, although no more than 9 upper-level units may be applied to the major. However, all transfer of credit is subject to review and approval by the department and the Study Abroad office.

Transfer Credit: Normally no more than 6 units of credit earned at an institution other than Washington University (this does not include Washington University-approved study-abroad programs) may be applied to the major, and no more than 3 units toward the minor.

Senior Honors: Qualified majors are encouraged to apply for Senior Honors before the end of the junior year. Students wishing to pursue this option need to meet the minimum honors requirements stated in this Bulletin: have outstanding performance in language work; and satisfactorily complete, during the senior year, MHBR 488 Independent Work for Senior Honors (fall) and, if possible, MHBR 489 Independent Work for Senior Honors (spring), to be taken in addition to all other departmental requirements. Honors work will be supervised by a three-member departmental Honors Committee composed of a primary adviser and two additional faculty, which plans with each student special language work as needed and an independent honors research paper in the student’s area of academic interest.

The Minor in Hebrew

Units required: 15–29

Required courses: Students pursuing a minor in Hebrew are required to complete a minimum of two years of language (MHBR 105D Beginning Modern Hebrew I, MHBR 106D Beginning Modern Hebrew II, MHBR 151D Advanced Beginning Modern Hebrew I, MHBR 213D Intermediate Modern Hebrew I, MHBR 214D Intermediate Modern Hebrew II) taken in residence and at least 9 units of literature or culture courses chosen in consultation with their minor adviser. Upon placement out of language courses, students are required to take a total of 15 units in literature or culture courses, of which at least one course should be in literature. No more than 3 units can be earned through transfer credit or Study Abroad. Note that at least 12 units of the minor may not be counted toward any other major or minor.
L35 BHBR 3082 From the Temple to the Talmud: The Emergence of Rabbinic Judaism
Same as Re St 3082
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : SSP

L35 BHBR 348 Medieval Jewish Travelogues, Chronicles and Biographies
Medieval Hebrew literature includes a wide range of narratives, many of which are commonly classified as chronicles, travelogues, biographies or diaries. In this course, we explore a variety of authors and narratives from the 9th to the 17th centuries, originating from Muslim and Christian lands, the Middle East and Europe. We ask to what extent these texts mirror the personal experiences of their authors and to what extent they must be regarded as literary fictions. In addition, we discuss the question of how premodern Jewish writers reflected on history. All texts are read in English translation. Prerequisite: JINE 208F or instructor’s permission.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, LS

L35 BHBR 384 Introduction to Biblical Hebrew
This course enables students to read the Bible in the original Hebrew. Review of Hebrew grammar. Intended for students with a foundation in modern Hebrew. Prerequisite: MHBR 214D or instructor’s permission.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : HUM

L35 BHBR 385D Topics in Biblical Hebrew Texts
Prerequisite: BHBR 384 or instructor’s permission.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, LS BU : HUM

L35 BHBR 400 Guided Readings in Northwest Semitic Inscriptions
Prerequisite: permission of the instructor and the department chair.
Credit -6 unit. A&S : LA

L35 BHBR 4001 Asian & Near Eastern Languages & Literatures Senior Seminar
Same as ANELL 400
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L35 BHBR 4020 Jerusalem, the Holy City
Same as JNE 4020
Credit 5 units. A&S : TH, CD, SD

L35 BHBR 440 Topics in Rabbinic Texts
The course aims to introduce students to independent reading of selected rabbinic texts in the original language. We focus on a number of topics representing the range of rabbinic discussion, including legal, narrative and ethical issues. At the same time, we study the necessary linguistic tools for understanding rabbinic texts. Prerequisite: BHBR 385 or MHBR 401 or instructor’s permission.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

L35 BHBR 444 The Mystical Tradition in Judaism
Same as Re St 444
Credit 3 units. A&S : TH, CD A&S : IQ, HUM BU : ETH, IS

L35 BHBR 488 Independent Work for Senior Honors
Prerequisite: senior standing, eligibility for honors and permission of the department.
Credit 3 units. A&S : LA

L35 BHBR 489 Independent Work for Senior Honors
This course is taken in the spring semester. Prerequisite: senior standing, eligibility for honors and permission of the department.
Credit 3 units.

L35 BHBR 4983 Guided Readings in Akkadian
Prerequisite: permission of the instructor and the department chair.
Credit -6 unit. A&S : LA

L35 BHBR 4984 Guided Readings in Aramaic
Prerequisite: permission of the instructor and the department chair.
Credit -6 unit. A&S : TH

L35 BHBR 4985 Guided Readings in Biblical Hebrew
Prerequisite: permission of the instructor and the department chair.
Credit -6 unit. A&S : LA

Hindi
The Department of Jewish, Islamic and Near Eastern Languages and Cultures offers a minor in Hindi (South Asian Language and Culture).

Language Placement: Placement tests are required for all students entering our language programs. Students who test into Intermediate Hindi and satisfactorily complete (with a grade of B– or better) at least one semester of language study may petition for 3 units of retroactive credit; students who test into third year or above and satisfactorily complete (with a grade of B– or better) at least one semester of language study may petition for 6 units of retroactive credit. Credit is limited to 3 units
for testing into intermediate and 6 units for testing into third year or above. Please note that students with native language proficiency as determined by the individual language section, as well as students who enroll in a course below their placement level, are ineligible for retroactive credit units. Students who misrepresent the extent of their background to gain entrance to a course at the elementary or intermediate level will be dropped from that course.

Phone: 314/935-5110 or 314/935-8567
E-mail: jinelc@artsci.wustl.edu
Departmental website: http://jinelc.wustl.edu

For a list of affiliated faculty, please see the Department of Jewish, Islamic and Near Eastern Languages and Cultures faculty (p. 504) page.

The Department of Jewish, Islamic and Near Eastern Languages and Cultures does not offer a major in this area. Please visit the JINELC (p. 505) page for a list of available majors.

The Minor in South Asian Languages and Culture

Units required: 18

Required courses: Choose from the following suggested courses or consult with your minor adviser:

- Hindi 111D Beginning Hindi I
- Hindi 112D Beginning Hindi II
- Hindi 151D Advanced Beginning Hindi I
- Hindi 201 Intermediate Hindi I
- Hindi 202 Intermediate Hindi II
- Hindi 301 Advanced Hindi I
- Hindi 302 Advanced Hindi II
- ReSt 250F Hindu Traditions
- Re St 3392 Topics in South Asian Religions
- Re St 340C Hindu Reformations
- History 3191 History of South Asia to the Eve of Modernization
- History 3192 Modern South Asia
- History 3920 South Asian Traditions in Practice: Ritual, Spectacle, Self
- History 4153 Society and Politics in British India
- History 4154 Postcolonial South Asia: Nations, Cultures and Identities in Transnational Perspective
- Music 1271 Introduction to Indian Music

Additional Information

The minor in South Asian Languages and Culture requires the completion of 18 credits, a minimum of 9 of which must be at the 300 level or above, and no more than 12 of which may be in language. Minimum requirements for the minor include two years of Hindi language and the successful completion of at least 9 units in literature/culture courses chosen in consultation with the minor adviser. Please note that students must earn a minimum of B– in language courses in order to proceed to the next level. Students who place out of language courses because of previous language training, or because they are native speakers of the language, must complete 15 units with literature and culture courses as approved by their minor adviser. No more than 3 units of credit earned at an institution other than Washington University may be applied to the minor. The pass/fail grade option is not allowed for any minor courses. Please note that no more than 3 units of the required 18 units for the minor may be courses that also are used to satisfy the requirements of a major.

Study Abroad: Students are strongly encouraged to participate in Washington University-approved study abroad programs. Study abroad is usually during the junior year and after a minimum of one year of language study at Washington University. Students who participate in Washington University-sponsored and/or -approved overseas programs are normally able to apply most or all of these units to their undergraduate degree although no more than 9 upper-level units may be applied to the major. However, all transfer of credit is subject to review and approval by the department and the Study Abroad Office.

Transfer Credit: Normally no more than 3 units of credit earned at an institution other than Washington University (this does not include Washington University-approved study-abroad programs) may be applied toward the minor.

Hindi

L73 Hindi 111D Beginning Hindi I

An introduction to the most widely spoken language of South Asia. Along with an understanding of grammar, the course offers practice in all four skills: listening, speaking, reading and writing. The Hindi (Devanagari) script is used for reading and writing. Note: students with some previous Hindi language background must take a placement examination.

Credit 5 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L73 Hindi 112D Beginning Hindi II

Continuation of 101D, devoted to the further development of basic skills — listening, speaking, reading and writing — with a particular emphasis on the acquisition of speaking proficiency. Prerequisite: Hindi 111D or placement by examination.

Credit 5 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L73 Hindi 151D Advanced Beginning Hindi I

Designed for the student with some background in Hindi. Emphasis on review of grammar, increased fluency and
vocabulary enrichment. Prerequisite: placement by examination or instructor’s permission.
Credit 3 units. A&S : LA A&S : IQ, LCD BU : IS

L73 Hindi 201 Intermediate Hindi I
Continuing practice in listening, speaking and grammatical understanding. The Hindi (Devanagari) script is used for reading and writing. Prerequisite: grade of B– or better in Hindi 112D or placement by examination.
Credit 5 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L73 Hindi 202 Intermediate Hindi II
Continuation of Hindi 201. Prerequisite: grade of B– or better in Hindi 201 or placement by examination.
Credit 5 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L73 Hindi 299 Undergraduate Independent Study
Prerequisites: Hindi 202 and permission of the instructor and the department chair.
Credit -6 unit.

L73 Hindi 301 Advanced Hindi I
This course is designed to help students gain advanced proficiency in the oral and written use of Hindi through reading and discussion of short stories, newspaper articles and other selected materials. Prerequisite: grade of B– or better in Hindi 202 or placement by examination.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L73 Hindi 302 Advanced Hindi II
This course is a continuation of Hindi 301. It is designed to continue students’ advanced proficiency in the oral and written use of Hindi through reading and discussion of short stories, newspaper articles and other selected materials. Prerequisite: grade of B– or better in Hindi 301 or placement by examination.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS

L73 Hindi 330 Topics in South Asian Literature and Culture
An introduction to major texts of South Asian literature, both traditional and modern, in their cultural context. Specific topics, texts and themes may vary from year to year. The course assumes no previous acquaintance with the material. All readings are in English or English translation.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

L73 Hindi 350 Introduction to South Asian Literature in Translation
Credit 3 units. A&S : TH CD BU : HUM

L73 Hindi 399 Independent Study
Prerequisite: permission of instructor and the department.
Credit -6 unit.

L73 Hindi 400 Asian & Near Eastern Languages & Literatures Senior Seminar
Same as ANELL 400
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L73 Hindi 499 Independent Study
Prerequisite: permission of instructor and the department.
Credit -6 unit.

History
The History Department engages its students through a study of the past. We are committed to the idea that the most compelling stories are often the most revealing ones. In addition to teaching students the particular skills of historical inquiry, we provide them with tools that serve them beyond their majors and beyond the university.

The discipline of history poses challenging questions about the ways that human beings have made the worlds they live in. There are many approaches to history. Some historians study politics, whether that means political parties or the ways that people who never held public office nonetheless act to shape public life. Others study the lived experience of everyday Americans or the popular culture that reflects how people understand the world around them. Still others are especially interested in the kinds of stories about the past that we tell ourselves, for those stories reveal a great deal about our own society as well as that of a different time. While it is not true that history repeats itself, it is true that without knowledge of the past we are unable to understand the present.

The History Department encourages all undergraduates to incorporate the discipline of historical thinking into their liberal arts education. You will learn to organize and interpret data, to write with precision and clarity, to develop logical and convincing arguments, and to combine careful research with creativity. In all of our courses, we emphasize the kinds of skills that will help you to succeed both in your classes at Washington University and in your postgraduate career.

For our majors and minors, we offer the opportunity to work closely with a faculty mentor to develop a coherent yet challenging program of study. The history major is structured to be flexible, and we encourage students both to pursue established interests and to explore topics, time periods and locales that may be less familiar. We offer a broad range of courses from the ancient world to the present, and across Africa, Asia, the Mideast, Europe and the Americas. We have many opportunities for small-group learning and discussion, including freshman seminars, our Historical Methods seminar, writing-
intensive seminars and advanced seminars. Prior to graduation, every major is expected to demonstrate mastery of the field through an advanced seminar, an independent research project, formal fieldwork in the historical and archival professions, or writing a senior honors thesis.

Some history majors go on to pursue graduate work in the field and become professional historians. But most find that the knowledge and skills they build through history courses fit them for a wide range of careers. Our graduates have attended law or medical school, and have pursued careers in government, education, research, business, communications, international agencies, publishing, museums and archives, public advocacy and many other fields.

Contact Person: Margaret Williams
Phone: 314-935-5450
E-mail: history@artsci.wustl.edu
Departmental website: http://history.artsci.wustl.edu

Chair
Jean Allman
Jack Hexter Professor in the Humanities
PhD, Northwestern University

Endowed Professors
Daniel Bornstein
Stella Koetter Darrow Professor of Catholic Studies
PhD, University of Chicago

Derek M. Hirst
William Eliot Smith Professor of History
PhD, Cambridge University

Hillel J. Kieval
Gloria M. Goldstein Professor of Jewish History and Thought
PhD, Harvard University

Kenneth Ludmerer
Mabel Dorn Reeder Distinguished Professor in the History of Medicine
PhD, MD, Johns Hopkins University

Linda J. Nicholson
Stiritz Professor of Women’s Studies
PhD, Brandeis University

Professors
Iver Bernstein
PhD, Yale University

Ahmet T. Karamustafa
PhD, McGill University

David T. Konig
PhD, Harvard University

Tim Parsons
PhD, Johns Hopkins University

Mark Pegg
PhD, Princeton University

Associate Professors
Elizabeth Borgwardt
PhD, Stanford University

Andrea S. Friedman
PhD, University of Wisconsin

Margaret Garb
PhD, Columbia University

Christine Johnson
PhD, Johns Hopkins University

Peter Kastor
PhD, University of Virginia

Steven Miles
PhD, University of Washington

Max J. Okenfuss
PhD, Harvard University

Corinna Treitel
PhD, Harvard University

Lori Watt
PhD, Columbia University

Assistant Professors
Catherine Adcock
PhD, University of Chicago

Venus Bivar
PhD, University of Chicago

Shefali Chandra
PhD, University of Pennsylvania

Charly Coleman
PhD, Stanford University

Sonia Song-Ha Lee
PhD, Harvard University

Yuko Miki
PhD, New York University

Sowandé Mustakeem
PhD, Michigan State University

Paul Ramirez
PhD, University of California–Berkeley

Nancy Reynolds
PhD, Stanford University
The Major in History

Total units required: 28

Major requirements:

Introductory courses

One introductory course, chosen from:

- History 101C Western Civilization
- History 102C Western Civilization
- History 163 Freedom, Citizenship and the Making of American Culture from the Colonial Era to the Present
- History 164 Introduction to World History: Theory and Practice

One additional introductory course, chosen from any 100 or 200 course home-based or cross-listed in history AND taught by history department faculty.

NOTE: A score of 5 on the AP European, U.S., or World History examination will constitute completion of History 102, 163 and/or 164 respectively, and 3 units of credit equivalent to History 102, 163 and/or 164 will be awarded, for a maximum of 6 credits toward the major and/or minor. A score of 4 on any of these exams may earn 3 units of elective credit but will not be counted toward the major or minor.

300/400 Level Courses

At least 18 300- or 400-level units, plus a capstone experience (for a minimum of 22 advanced units).

Requirements at this level include:

- at least one course designated “premodern” and one course designated “modern”
- at least one course from three of the following geographical areas: Africa, East Asia, South Asia, Europe, Latin America, Middle East, the United States, or transregional history
- History 301 Historical Methods, a required methods course for all majors

Capstone Experience

History majors must, prior to graduation, complete a capstone experience consisting of EITHER:

- Successful completion of the Senior Honors Thesis; OR
- An advanced seminar; OR
- An independent research project with a significant writing component (History 500); OR
- Directed fieldwork in the historical or archival profession, with a significant writing component (History 4001/4002)

Additional Information

Fieldwork: As a history major, you are eligible for fieldwork at the Missouri Historical Society or at other museums. Opportunities also are sometimes available in the special collections at Olin Library, with local businesses and at historical sites.

Study Abroad: You are encouraged to participate in various overseas studies programs, which normally may fulfill up to 6 units of credit for the major or minor.
**Senior Honors**: If you have a strong academic record, you may work toward Latin Honors. It is recommended that students complete two advanced seminars in the junior year. Students graduating with Latin Honors must meet GPA requirements and satisfactorily complete History 399 Senior Honors Thesis and Colloquium: Writing-Intensive Seminar, while writing a thesis during your senior year.

**The Minor in History**

**Units required**: 18

**Required courses**:
The minor in history consists of two Introductory courses plus 12 additional units, 9 of which must be at the 300 and 400 level. The College of Arts & Sciences further specifies that all 18 units must be separate courses not double-counted toward the major or another minor, that no more than two courses originate outside the department, and that courses in the minor may not be taken credit/no credit.

At least one introductory course, chosen from:
- History 101C Western Civilization
- History 102C Western Civilization
- History 163 Freedom, Citizenship and the Making of American Culture from the Colonial Era to the Present
- History 164 Introduction to World History: Theory and Practice

One additional introductory course chosen from any 100 or 200 course home-based or cross-listed in history AND taught by faculty in the Department of History.

**NOTE**: A score of 5 on the AP European, U.S. or World History examination will constitute completion of History 102, 163 and/or 164 respectively, and 3 units of credit equivalent to History 102, 163 and/or 164 will be awarded, for a maximum of 6 credits toward the major and/or minor. A score of 4 on any of these exams may earn 3 units of elective credit but will not be counted toward the major or minor.

**Additional Information**
Courses in the minor are excluded from the credit/no credit option. No more than two courses may originate outside the department.

**History**

**L22 History 101C Western Civilization**
This course surveys the period from ca. 3500 BCE to 1650 CE in the West. As we examine the civilizations of Mesopotamia, the ancient Mediterranean and medieval and early modern Europe, we focus on themes of cultural contact, conflict and change in order to understand the complex roots of conventional “Western” history. Introductory course to the major and minor.

**L22 History 102C Western Civilization**
This course provides an introduction to the history of modern Europe. It begins by following Europeans from the upheavals of the Enlightenment to the French Revolution, and from the industrial revolution to the era of nation-state building; continues by exploring how Europeans became embroiled in the scramble for empire, the era of “totalitarianism,” and two disastrous world wars; and ends by examining how Europeans coped with the divisions of the Cold War, the collapse of communism, and the challenges of unification and resurgent nationalism. Introductory course to the major and minor.

**L22 History 1116 Freshman Seminar: Race, Ethnicity and Nation in Latin America and the Caribbean**
This course examines the historical formation of racial and ethnic discourses, identities, and communities in Latin America and the Caribbean from the colonial period to the present. The course focuses on how race relations have shaped Latin American and Caribbean society over time, as well as how race and racial identities have been central to the construction of Latin-American national identities in the 19th and 20th centuries. Topics covered include: slavery and blackness; creole and creolization; new categories of people such as Indians, mestizos and mulattos; nation building and racial discourse, including racial democracy, cosmic race, racelessness, gender and honor, and mestizaje; immigration to Latin America; and U.S. and Latin-American race relations in comparative perspective.

**L22 History 131C Early Political Thought: Text and Tradition**
Same as Hum 203C

**L22 History 132C Topics in European History: Text and Tradition**
Same as Hum 207C

**L22 History 154 Freshman Seminar: Saints and Society**
The topic of this course is saints and society in medieval and early modern Europe. It explores the complex relationships between exceptional holy men and women, the historical settings in which they lived, and the religious and cultural traditions on which they drew. It considers saints as both embodiments of
the highest ideals of their societies and radical challenges to ordinary patterns of social existence.
Credit 3 units.   A&S : TH    A&S : IQ, HUM    BU : ETH

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
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<td>L22 History 156 Freshman Seminar: England in the Age of Shakespeare</td>
<td>This course examines certain themes central to our understanding of Shakespeare’s England, such as monarchy, order, power and the limits on action; national identity; gender; and family. Students read and discuss modern historical scholarship, a range of contemporary sources, and Shakespeare’s plays, and the relationship between them. Credit 3 units.</td>
<td>A&amp;S : TH    A&amp;S : IQ, HUM    BU : HUM</td>
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<tr>
<td>L22 History 163 Freedom, Citizenship and the Making of American Culture from the Colonial Era to the Present</td>
<td>This course offers a broad survey of American history from the era before European settlement of North America to the late 20th century. The course explores the emergence and geographic expansion of the United States and addresses changes in what it meant to be an American during the nation’s history. Tracing major changes in the nation’s economic structures, politics, social order and culture, the course chronicles, among other issues, changes in the meanings of freedom, citizenship and American identity. Introductory course to the major and minor. Credit 3 units.</td>
<td>A&amp;S : TH    A&amp;S : IQ, HUM    BU : HUM</td>
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<tr>
<td>L22 History 164 Introduction to World History: Theory and Practice</td>
<td>As an introduction to world and comparative history, this course tours the globe in an era when the world was engulfed by war. World War II was a period of intense violence, upheaval and profound change that touched every continent in one way or another by destroying, remaking and inventing international, domestic and local institutions. Where conventional studies of the conflict focus on military and diplomatic matters, this course surveys the causes, scope and consequences of World War II for a representative sample of the common people of Europe, the Americas, Africa, the Middle East and Asia. It uses the war’s influence on race, gender, disease, propaganda, technology, literature, film, music and material culture to introduce students to the basic concepts and methodologies of world and comparative history. Introductory course to the major and minor. Credit 3 units.</td>
<td>A&amp;S : TH    A&amp;S : IQ, HUM    BU : LCD    FA : SSP</td>
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<tr>
<td>L22 History 176 Freshman Seminar: A Nation Apart? Jewish Identity in an Age of Nationalism</td>
<td>Same as JNE 176</td>
<td>Credit 3 units.</td>
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<td>L22 History 180 Freshman Seminar in Religious Studies: Miracles</td>
<td>Same as Re St 180</td>
<td>Credit 3 units.</td>
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<tr>
<td>L22 History 201A Text and Tradition: Puzzles and Revolutions</td>
<td>Same as Hum 201A</td>
<td>Credit 3 units.</td>
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<tr>
<td>L22 History 2030 Freshman Seminar: The Enigma of Thomas Jefferson</td>
<td>Who was Thomas Jefferson and why has his reputation undergone so many changes? This course is an exercise in understanding how professional historians and the general public discover and use the past. It therefore sets four primary goals: to recover the past on its own terms; to understand the many different methods and standards applied in interpreting the past; to understand how and why each generation changes the way it views the past as it seeks to make it “useable”; and to develop the skills of exposition and argumentation necessary to describe and analyze complex historical issues and to express critical ideas effectively. Credit 3 units.</td>
<td>A&amp;S : TH    A&amp;S : IQ, HUM</td>
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<tr>
<td>L22 History 2060 East Asia Since 1500</td>
<td>This course seeks to explain the emergence of three of the most dynamic societies in early modern (1500–1800) and modern (1800–present) times: China, Korea and Japan. In addition to offering an introductory overview of East Asian history, this course provides an alternative view to American and European interpretations of early modern and modern world history. Rather than imagining East Asia as a passive actor in history, this course explores the ways in which East Asia has shaped global modernity. Credit 3 units.</td>
<td>A&amp;S : TH    CD    A&amp;S : IQ, HUM, LCD</td>
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<tr>
<td>L22 History 2081 History, Text and Identity: Introduction to Jewish Civilization</td>
<td>Same as JNE 208F</td>
<td>Credit 3 units.</td>
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<tr>
<td>L22 History 2090 Freshman Seminar: Chinese Diasporas</td>
<td>China has had one of the most mobile populations in world history. This freshman seminar explores migration patterns and networks in the creation of Chinese diasporas in the early modern and modern eras (1500–present). Rather than focus exclusively on the history of China or the Chinese overseas,</td>
<td>Credit 3 units.</td>
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this course more broadly considers practices and networks that sustained and linked internal and external migrations.
Credit 3 units.  A&S : TH  BU : IS

L22 History 2091 Freshman Seminar: The City in Early Modern Europe
Cities were important political, economic and population centers in early modern Europe. For its diverse inhabitants, a city functioned as a source of identity and support and as a site for economic and social conflict. Using a wide variety of primary and secondary sources, this class examines how men and women, rich and poor, established citizens and marginal groups, tried to understand and manage the urban experience.
Credit 3 units.  A&S : TH , SD  A&S : IQ, HUM, SD  BU : BA, HUM  FA : SSP

L22 History 2093 Freshman Seminar: Mobilizing Shame: Violence, the Media and International Intervention
Deciding when and when not to intervene in the affairs of a foreign and autonomous state has become a hot-button issue in light of the occupation of Iraq and Afghanistan, and of the more recent lending of support to Libyan rebels. In this course, students examine the emergence of the “international community,” the development of human rights, the rise of the war correspondent as a mythical figure, the creation of supranational political and military institutions, the influence of the media on public sympathies, and the changing nature of global politics, just to name a few of the case studies examined.
Credit 3 units.  A&S : CD  A&S : IQ , HUM  EN : H

L22 History 214C Introduction to Islamic Civilization
Same as JNE 210C
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD  BU : ETH, IS  FA : SSP

L22 History 2152 The Theory and Practice of Justice: The American Historical Experience
This introductory course uses historical case studies combined with readings in law, literature and philosophy to illuminate key episodes in which definitions of justice were contested in 19th- and 20th-century America. Some of the conflicts explored include: Civil War era debates over southern secession; whether reparation should be offered to freed people to redress the injustices of racial slavery; the denial of voting rights to women as a case of “taxation without representation”; 20th-century controversies over legal bans on racial intermarriage; free speech vs. hate speech in the 1960s and ‘70s; and recent debates over affirmative action and gay marriage.
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD  BU : BA, ETH, HUM  FA : SSP

L22 History 217C The Atlantic World, 1000–1800
Survey of the peoples, cultures and civilizations that bordered and traveled the Atlantic Ocean from Norse voyages up to the Napoleonic Wars. Examines the importance of the Atlantic as a frontier, an economic resource, a highway and an impetus to technological innovation. Considers also the political, cultural, economic and demographic effects of increasing contact among Europeans, Americans and Africans.
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD

L22 History 218 Culinary Citizenship: Food, Identity and Belonging in the 20th Century
Same as IAS 218
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L22 History 2188 African Urban History
This introductory course explores the origins and growth of African cities through the historical process of urbanization in sub-Saharan Africa. By focusing on the form and function of cities and examining their changing relations with the surrounding countryside, we explore the fundamental urban issues and tensions that have helped to shape the history of Africa. Some of the topics to be covered include environmental issues, the creation of states, religion, cross-cultural contact, colonization, public health, gender relations and decolonization.
Credit 3 units.  A&S : TH  A&S : IQ, HUM  EN : H

Black women, much like their male counterparts, have shaped the contours of African-American history and culture. This course explores the lived experiences of Black women in North America through a focus on the critical themes of violence and sexuality. We examine African-American women as the perpetrators and the victims of violence, as the objects of sexual surveillance and exploration of the range of contemporary debates concerning the intersections of race, class and gender, particularly within the evolving hip-hop movement.
Same as AFAS 2250
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD  BU : BA

L22 History 244 War, Rebellion and the Formation of American Identity, 1754–1865
Same as AMCS 244
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L22 History 2503 Freshman Seminar: Nation and Religion in Russia
Through the prism of Russian Orthodoxy, Islam and Judaism, students explore the role of nation and religion in shaping political, cultural and social developments in Russia in the
second half of the 19th century and in the 20th century. We investigate how historical actors have articulated national and religious affiliation to maintain — or undermine — the viability of a vast, ethnically diverse, multiconfessional state.
Credit 3 units. A&S : TH, CD

L22 History 2560 Freshman Seminar: Conquest Cultures: Colonialism, Violence and Memory in Latin America
What was the Spanish Conquest? How have projects of colonization, acculturation and religious conversion been pursued in Latin America since? Beginning with the military campaigns of Spanish conquistadores in the 16th century and ending with literary reinterpretations of the Spanish Conquest by Latin American writers, we explore the perpetuation of violence in the service of empire, Christianity and nation-state formation through primary documents, films, art, literature and scholarly work. The goal is to go beyond Columbus, Cortés, Pizarro and other famous explorers to understand the range of actors who have played a role as interpreters, military allies and chroniclers, with special emphasis on women and people of native American and African descent. This seminar is intended as a critical introduction to some of the major problems in Latin American history for students with limited prior knowledge of the region.
Credit 3 units. A&S : TH, CD  A&S : IQ, HUM, LCD

L22 History 2590 Freshman Seminar: From the “City on a Hill” to 9/11: Religion and Social Justice in America
Recent debates surrounding post-9/11 Americans’ fear of Islam may be dismissed as erratic manifestations of a beleaguered minority of fundamentalists. At the root of their ideology, however, lies a much more widespread and common American belief. From the Puritans’ search to build the “city on a hill,” to the growing conflation of Islam with terrorism, Americans have long nurtured a self-identity as “God’s chosen people,” an idea that has helped them justify and normalize a theology of both conquest and suffering. This belief worked in conjunction with the development of capitalism and notions of racial hierarchy to support structures of power created to dominate and colonize groups of people, but it also prompted religious prophets to resist those very structures and create a theology of the oppressed.
This course analyzes how religion served to both buttress and contest notions of social domination, punishment, reform and revolution in the U.S. from the colonial era to the present. Attention is paid to the voices of established religious leaders for whom the Church was their home, as well as religious dissidents who often were outcast as lunatics. Topics include the American Jeremiad, abolitionism, slave rebellions, Native American Catholicism, Fundamentalism, the Catholic Worker Movement, Pacifism, the Black Freedom Struggle, the Moral Majority and Post-9/11 military and gender interventions with the Islamic world.
Credit 3 units. A&S : TH, SD  A&S : IQ, HUM, SD

L22 History 260 Migrations in Past and Present: An Introduction to Migration Studies
Same as IAS 260
Credit 3 units. A&S : TH, CD  A&S : IQ, HUM, LCD

L22 History 2674 Sophomore Seminar: Slavery and Memory in American Popular Culture
Sophomores receive priority registration. The history of slavery has long created a sense of unease within the consciousness of many Americans. Recognizing this continued reality, this seminar examines how slavery is both remembered and silenced within contemporary popular culture. Although slavery scholarship continues to expand, how does the country as a whole embrace or perhaps deny what some deem a “stain” in American history? Taking an interdisciplinary approach to these intriguing queries, we examine a range of sources: literature, public history, art/poetry, visual culture, movies and documentaries, as well as contemporary music including reggae and hip-hop. The centerpiece of this course covers North American society, however, in order to offer a critical point of contrast students are challenged to explore the varied ways slavery is commemorated in other parts of the African Diaspora.
Credit 3 units. A&S : TH, CD  A&S : IQ, HUM, LCD

L22 History 2801 Ben Franklin’s America
In this course, we explore Ben Franklin’s America, from the earliest stirrings of political and religious dissent in the first decades of the 18th century to the post-Revolutionary debates over the meaning of republican virtue, American character and representative government. We read primary sources from a variety of figures who contributed to the century-long debate over these subjects, and then we hear from Franklin himself, as he offers his own insight into these issues, observing the changes taking place around him.
Credit 3 units. A&S : TH  A&S : IQ, HUM

L22 History 2845 Freshman Seminar: States of Nature: The Natural Order of Society in Western Thought
This small-group discussion course gives full attention to the major moments and movements of modern European history, 1650 to the present. We also examine some fundamental texts in the Western traditions, from the Enlightenment to Romanticism; from Marxism to Darwinism and feminism; to the diverse thought of the 20th century. Its organizing idea is that an evolving notion of “nature” and “the natural order” has impacted Europe’s definition of the state, and shaped its image of a just society.
This course fulfills one of the introductory course requirements for the major in History, however, students cannot get credit for both this course and History 102C.
Credit 3 units. A&S : TH  A&S : IQ, HUM  BU : IS
L22 History 299 Undergraduate Internship in History
Students receive credit for a faculty-directed and approved internship. Registration requires completion of the Learning Agreement, which the student obtains from the Career Center and which must be filled out and signed by the Career Center and the faculty sponsor prior to beginning internship work. Credit should correspond to actual time spent in work activities, e.g., eight to 10 hours a week for 13 or 14 weeks to receive 3 units of credit; 1 or 2 credits for fewer hours. Students may not receive credit for work done for pay but are encouraged to obtain written evaluations about such work for the student's academic adviser and career placement file.
Credit -3 unit. FA : SSP

L22 History 3002 Independent Work
Permission of the instructor is required.
Credit 3 units.

L22 History 3011 Biblical Law and the Origins of Western Justice
Same as JNE 3012
Credit 3 units. A&S : TH, CD, SD A&S : IQ, HUM, LCD

L22 History 3012 Modern British History: 1688–2000
This course examines the social and political history of Great Britain from the Glorious Revolution to the present day. Major themes include the forging of a "British" identity, the acquisition of Empire, economics, transition and religious conflict.
Credit 3 units. A&S : TH BU : IS

L22 History 301E Historical Methods in East Asian History
This is a small-group reading course in which students are introduced to the skills essential to the historian's craft. Emphasis is placed on acquiring research skills, learning to read historical works critically, and learning to use primary and secondary sources to make a persuasive and original argument. See Course Listings for current topics. Required for history majors who declared the major after July 2007.
Credit 3 units. A&S : TH

L22 History 301F Historical Methods — African History
This is a small-group reading course in which students are introduced to the skills essential to the historian's craft. Emphasis is on acquiring research skills, learning to read historical works critically, and learning to use primary and secondary sources to make a persuasive and original argument. See Course Listings for current topics. Required for history majors who declared the major after July 2007.
Credit 3 units. A&S : TH

L22 History 301G Historical Methods — Latin American History
This is a small-group reading course in which students are introduced to the skills essential to the historian's craft. Emphasis is on acquiring research skills, learning to read historical works critically and learning to use primary and secondary sources to make a persuasive and original argument. See Course Listings for current topics. Required for history majors who declared the major after July 2007.
Credit 3 units. A&S : TH A&S : IQ, HUM

L22 History 301H Historical Methods — Middle Eastern History
This is a small-group reading course in which students are introduced to the skills essential to the historian's craft. Emphasis is on acquiring research skills, learning to read historical works critically and learning to use primary and secondary sources to make a persuasive and original argument. See Course Listings for current topics. Required for history majors who declared the major after July 2007.
Credit 3 units. A&S : TH

L22 History 301I Historical Methods — European History
This is a small-group reading course in which students are introduced to the skills essential to the historian's craft. Emphasis is on acquiring research skills, learning to read historical works critically and learning to use primary and secondary sources to make a persuasive and original argument. See Course Listings for current topics. Required for history majors who declared the major after July 2007.
Credit 3 units. A&S : TH A&S : IQ, HUM

L22 History 301J Historical Methods — South Asian History
This is a small-group reading course in which students are introduced to the skills essential to the historian's craft. Emphasis is on acquiring research skills, learning to read historical works critically and learning to use primary and secondary sources to make a persuasive and original argument. See Course Listings for current topics. Required for history majors who declared the major after July 2007.
Credit 3 units. A&S : TH

L22 History 301K Historical Methods — Transregional History
This is a small-group reading course in which students are introduced to the skills essential to the historian's craft. Emphasis is on acquiring research skills, learning to read historical works critically and learning to use primary and secondary sources to make a persuasive and original argument. See Course Listings for current topics. Required for history majors who declared the major after July 2007.
Credit 3 units. A&S : TH
This course seeks to explain the emergence of three of the most dynamic societies in early modern (1500–1800) and modern (1800–present) times: China, Korea and Japan. In addition to offering an introductory overview of East Asian history, this course provides an alternative view to American and European interpretations of early modern and modern world history. Rather than imagining East Asia as a passive actor in history, this course explores the ways in which East Asia has shaped global modernity.

Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : IS

L22 History 3066 The American City in the 19th and 20th Centuries

This course explores the cultural, political and economic history of U.S. cities in the 19th and 20th centuries. The course focuses on New York, Chicago, St. Louis, Los Angeles and Atlanta, although other cities may be included. Students conduct significant primary research on sections of St. Louis, developing a detailed history of one of the city’s neighborhoods. Much of the course readings address broad themes such as immigration, industrialization, deindustrialization and race and gender relations in American cities.

Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : HUM FA : SSP

L22 History 3072 Cracks in the Republic: Discontent, Dissent and Protest in America, 1950–1975

This course examines the rise and impact of several major political, social and cultural protest movements in the United States during the middle part of the 20th century. It focuses on the Beats, Civil Rights, New Left, Anti-Vietnam War, Counter-Culture, Black Nationalism, Ethnic Consciousness, Women’s Liberation and Gay/Lesbian Liberation, and contextualizes these movements within major national and international developments including Jim Crow and de facto segregation, middle-class ennui and the Cold War. We pay special attention to the role of youth activism and the methods of dissent and protest used to challenge the status quo. Throughout the course we ask and seek answers to the following questions: What was the nature of these movements? What were their differences and similarities? How was the United States changed significantly during this period and what remained relatively the same? Were those engaged in activism unrealistic in their assumptions, discontent, dissent and protest, or was it a time when many Americans, even those who were passive or who opposed the protesters, reflected upon issues of privilege and political, economic and social power?.
L22 History 3073 The Global War on Terrorism
This course presents an historical assessment of the Global War on Terrorism (GWOT) from the perspective of its major participants: militant Sunni Islamist jihadists, especially the Al-Qaeda network, and the nation-states that oppose them, particularly the United States and its allies. The course concludes by analyzing the current state and future of Islamist jihad and the GWOT.
Credit 3 units. A&S : TH A&S : IQ, HUM

L22 History 307C English and Colonial Foundations of American Law to 1776
The role of law and legal institutions in the establishment of societies by the various peoples of the New World. Although some attention is paid to Native American, African, French and Spanish traditions and practices, the basis of the course is the creation of a new Anglo-American legal culture on the fundamental structures and principles of English law.
Credit 3 units. A&S : TH BU : HUM FA : SSP

L22 History 3091 Poverty and Social Reform in American History
This course explores the history of dominant ideas about the causes of and solutions to poverty in American society from the early republic to the end of the 20th century. We investigate changing economic, cultural and political conditions that gave rise to new populations of impoverished Americans, and to the expansion or contraction of poverty rates at various times in American history.
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : BA

L22 History 3100 Contemporary Jewish Thought
Same as JNE 310
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH FA : Lit, SSP

L22 History 3105 American Holidays, Rituals and Celebrations
Same as AMCS 3105
Credit 3 units. A&S : IQ, HUM EN : H

L22 History 310C The Jews in the Ancient World
Same as JNE 301C
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : BA, HUM FA : SSP

L22 History 3120 South Asian Traditions
Same as Re St 312
Credit 3 units. A&S : TH, CD

L22 History 3122 Race, Caste, Conversion: Social Movements in South Asia
It is a truism that caste-based injustice is one of the abiding forms of inequality in South Asia. But what precisely is a caste, and how is injustice to be removed? In this course, students explore different theories of caste, beginning with the race-inflected theories of the 19th century; and different approaches to the remediation of inequalities, including social reform, religious conversion, political organization and legal remedies. Students also compare caste reform with gender reform and consider how the experience of caste is inflected by gender.
Credit 3 units. A&S : TH, CD, SD

L22 History 3124 9/11 in World History
A century from now, historians will identify 9/11 as a milestone in 20th- and 21st-century world history. This course questions why a single terrorist episode redefined the landscape of global geopolitics. It proceeds from the assumption that the tragedy's global consequences stem no less from the historical context of the Muslim world than from America's contemporary superpower status. Put more simply, a rigorous world history lens upon 20th century Islam is a prerequisite for understanding 9/11's profound transnational significance in our time and for future generations.
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L22 History 313C Islamic History: 600–1200
The cultural, intellectual and political history of the Islamic world, beginning with the prophetic mission of Muhammad and concluding with the Mongol invasions. Topics covered include: the life of Muhammad; the early Muslim conquests; the institution of the caliphate; the translation movement from Greek into Arabic and the emergence of Arabic as a language of learning and artistic expression; the development of new educational, legal and pietistic institutions; changes in agriculture, crafts, commerce and the growth of urban culture; multiculturalism and inter-confessional interaction among Jews, Christians, Muslims, Zoroastrians and others; large-scale movements of nomadic peoples; synoptic glances at Islamic polities in Sicily, Spain, North Africa, the Near East as well as Central and South Asia.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : IS FA : SSP
were affected by the increased monetarization of social and economic relations; changes in patterns of land tenure and agriculture; the rise of colonialism; state efforts at modernization and reform; shifts in gender relations; and debates over the relationship of religion to community and political identity. Credit 3 units. A&S : TH, CD, SD A&S : IQ, HUM, LCD BU : IS

L22 History 314C Islamic History: 1200–1800
An introduction to Islamic polities and societies from the Mongol conquests to the 13th century to the collapse and weakening of the colossal “gunpowder” empires of the Ottomans, Safavids and Mughals in the early 18th century. Broadly speaking, this course covers the Middle Period (1000–1800) of Islamic history, sandwiched between the Early and High Caliphal periods (600–100) on the one hand and the Modern Period (1800–present) on the other hand. Familiarity with the Early and High Caliphal periods is not assumed. Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD FA : SSP

L22 History 3150 The Middle East in the 20th Century
This course surveys the history of the Middle East since World War I. Major analytical themes include: colonialism; Orientalism; the formation of the regional nation-state system; the formation and political mobilization of new social classes; changing gender relations; the development of new forms of appropriation of economic surplus (oil, urban industry) in the new global economy; the role of religion; the Middle East as an arena of the Cold War; conflict in Israel/Palestine; and new conceptions of identity associated with these developments (Arabism, local patriotism, Islamism). Credit 3 units. A&S : TH, CD, SD A&S : IQ, HUM, LCD BU : IS

L22 History 3151 The Palestinian-Israeli Conflict, 1881–Present
This class traces the roots of the Palestinian-Israeli conflict back to Europe, Istanbul and late Ottoman Palestine. During this period, we observe how the Palestinian-Israeli conflict developed as a regional conflict; move on to the British mandate period, and then cover events in Israel and the Palestinian territories once the land was united following the 1967 war, including the rise of the PLO and its impact on Israel. Credit 3 units. A&S : TH BU : IS

L22 History 3161 Chinese Social History: Urban Transformations
The course examines major themes and debates in Chinese urban history since the mid-19th century. Topics include: the Western impact; the construction of modernity; elite activism and authoritarianism; consumerism and nationalism; shifting gender roles; political mobilization and social networking; and the Communist revolution. Understanding and analyzing the nuance and difference in views and interpretations in historical writings (historiography) are essential. Credit 3 units. A&S : TH A&S : IQ, HUM FA : SSP

L22 History 3162 Early Modern China: 1350–1800
This course examines political, socioeconomic and intellectual — cultural developments in Chinese society from the middle of the 14th century to 1800. This chronological focus largely corresponds to the last two imperial dynasties, the Ming (1368–1644) and Qing (1644–1911). Thematically, the course emphasizes such early-modern indigenous developments as increasing commercialization, social mobility and questioning of received cultural values. Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : IS

L22 History 3165 The Chinese Diaspora to 1949
China has had one of the most mobile populations in world history. This course explores migration patterns and networks in the creation of Chinese diasporas in the early modern and modern eras (1500–present). Rather than focus exclusively on the history of China or the Chinese overseas, this course more broadly considers practices and networks that sustained and linked internal and external migrations. Specific topics include: the internal migration that has helped to consolidate the borders of the modern Chinese state, such as Chinese migration to the southwest in the 18th century, to Taiwan in the 19th and 19th centuries, and into western China in recent decades as well as overseas Chinese migration to Southeast Asia, Australia, Europe and the Americas, including St. Louis. In addition to examining how Chinese immigrants have adapted to local conditions both within and outside China, this course explores the practices that have created and sustained diasporic networks in nearly every part of the world today. Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L22 History 316C Modern China: 1890s to the Present
A survey of China’s history from the clash with Western powers in the 1800s to the present-day economic revolution. This course examines the background to the 1911 revolution that destroyed the old political order. Then it follows the great cultural and political movements that lead to the Communist victory in 1949. The development of the People’s Republic is examined in detail, from Mao to the global economy. Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD FA : SSP
L22 History 3172 Queer Histories
Same as WGSS 3172
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD

L22 History 3192 Modern South Asia
This course covers the history of the Indian subcontinent in the 19th and 20th centuries. We shall look closely at a number of issues including colonialism in India; anti-colonial movements; the experiences of women; the interplay between religion and national identity; and popular culture in modern India. Political and social history is emphasized equally.
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : HUM, IS FA : SSP

L22 History 3202 Japan From Earliest Times to 1868
A survey of the history of the Japanese archipelago from prehistory to the Meiji Restoration of 1868, this course is designed to acquaint students with pre-industrial Japanese society and the discipline of history. In addition to tracing political, social and cultural narratives across time, we focus on three themes: the emergence of a centralized state and the subsequent transition from aristocratic to warrior to commoner rule; interactions with the world beyond Japan’s borders; and issues of gender and sexuality.
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : IS

L22 History 320C Japan Since 1868
For some, “Japan” evokes “Hello Kitty,” animated films, cartoons and sushi. For others, the Nanjing Atrocity, “Comfort Women,” the Bataan Death March and problematic textbooks. For still others, woodblock prints, tea ceremony and cherry blossoms, or Sony Walkmans and Toyotas. Still others may hold no image at all. Tracing the story of Japan’s transformations, from a pre-industrial peasant society managed by samurai-bureaucrats into an expansionist nation-state and then to its current paradoxical guise of a peaceful nation of culture led by conservative nationalists, provides the means for deepening our understanding of historical change in one region and grappling with the methods and aims of the discipline of history.
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : IS

L22 History 321C Introduction to Colonial Latin America
This course surveys the history of Latin America from the era of Spanish exploration and conquest up to the Wars of Independence (roughly 1492 to 1831). Stressing the experiences and cultural contributions of Americans, Europeans and Africans, we consider the following topics through primary written documents, but also music, painting and architecture: Aztec, Maya, Inca and Iberian civilizations; models of conquest in comparative perspective (Spanish, Portuguese and Amerindian); consolidation in labor, tributary and judicial systems; religion and the Catholic Church; sugar and mining industries, trade and global economies; urban and rural life; and ethnic, caste, class and gender relations. Brazil provides a continuous counterpoint to Mexico and the Andes, while the experiences of “fringe” areas of empire, such as Haiti, Cuba, Argentina and northern Mexico, become central in the second half of the course.
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : HUM, IS FA : SSP

L22 History 322C Modern Latin America
Latin-American history from Independence to the present. Topics covered include the Wars of Independence; slavery and indigenous people in new Latin-American nations; postcolonial Latin-American state and society; ideas of race and ethnicity in Latin America and the Caribbean; U.S.–Latin American relations; Peron, Vargas and Populism; the Mexican and Cuban Revolutions; the Cold War in Latin America; Latin American arts and popular culture; terror and violence under military dictatorships and popular resistance movements; and the left-turn in recent Latin-American politics.
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : IS

L22 History 3230 Black Power Across Africa and the Diaspora: International Dimensions of the Black Power Movement
Same as AFAS 3231
Credit 3 units. A&S : TH A&S : IQ, HUM

L22 History 3261 American Economic History
Same as Econ 326
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L22 History 3262 The Early Medieval World: 300–1000
A principal theme of this course is the Christianization of Europe. From the emergence of the Christian church in the Roman Empire and the conversion of the emperor Constantine in 312 through the turbulent adoptions of Christianity by different cultures in the Early Middle Ages; the rise of Islam in the 7th century; the Arab conquests of north Africa and southern Europe; and the Byzantine empire, especially in Constantinople.
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : IS
FA : SSP

L22 History 3263 The High Middle Ages: 1000–1500
This course begins with the first millennium in the West and ends with the arrival of Europeans in the Americas. We explore issues such as the relationship of popes to kings, of cities to villages, of Jews to Christians, of vernacular literature to Latin, of knights to peasants, of the sacred to the profane.

Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : IS FA : SSP

L22 History 3266 Scholarship and the Screen: Medieval History and Modern Film
Historical films are surprisingly accurate reflections of modern historiographical trends in the study of the Middle Ages. This course uses films on the Middle Ages, medieval documentary evidence, scholarship from the time the film was released, and current scholarship. It explores the shifts in historical interpretation of the Middle Ages over the past century and engages in debates over what evoking the past means for the scholar and the filmmaker.

Credit 3 units. A&S : TH A&S : IQ, HUM BU : IS

L22 History 326B Latin-American Politics
Same as Pol Sci 326B
Credit 3 units. A&S : SS A&S : IQ, SSC BU : IS FA : SSP

L22 History 3302 Religion and Science
Same as Re St 3301
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH

L22 History 3303 History of American Cinema
Same as Film 330
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : AH

L22 History 331 19th-Century China: Violence and Transformation
This course traces the history of China over the course of the 19th century, with an emphasis on social and cultural history. This was one of the most tumultuous centuries in Chinese history, during which China faced threats from abroad in the form of Western and Japanese imperialism, and from within, in the form of environmental degradation and rebellions resulting in an unprecedented loss of human life. The 19th century has thus often been portrayed as a period of sharp decline for China. At the same time, we explore the ways in which the origins of the dynamic society and economy found in China today, as well as the worldwide influence of overseas Chinese, can be traced to this century of turmoil.

Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L22 History 3311 Topics in American Culture Studies: Exploring America, 1957

Same as AMCS 330
Credit 3 units. A&S : TH A&S : IQ, HUM BU : BA FA : SSP

L22 History 333 The Holocaust: History and Memory
Origins, causes and significance of the Nazi attempt to destroy European Jewry within the context of European and Jewish history. Related themes: the Holocaust in literature; the psychology of murderers and victims, bystanders and survivors; and contemporary implications of the Holocaust for theology and politics.

Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : ETH, HUM, IS FA : SSP

L22 History 3340 Gender, Health and Resistance: Comparative Slavery in the African Diaspora
Slavery is a field of historical study that continues to undergo considerable transformation within scholarly investigation. As such, scholars have sought to initiate much broader understandings of the evolution of slavery across both time and geographical space. This course utilizes a comparative approach to examine the experiences of enslavement common throughout the African Diaspora, particularly within the United States, the Caribbean and parts of Latin America. Some themes briefly covered within this course include gender, sexuality, community, resistance, medicine, labor and culture. As a comparative course, students are challenged to go beyond the traditional narrative of the African-American experience in order to fundamentally understand the linkages of oppression, survival and even liberation, which arguably shaped the lives of enslaved and free populations within and across the Diaspora.

Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L22 History 334C Crusade, Disputation and Coexistence: Jews in Christian Europe
This course investigates some of the major themes in the history of the Jews in Europe, from the High Middle Ages to the eve of the French Revolution. Jews constituted a classic, nearly continuous minority in the premodern Christian world — a world that was not known for tolerating dissent. Or was it? One of the main purposes of the course is to investigate the phenomenon of majority/minority relations, to examine the ways in which the Jewish community interacted with and experienced European societies, cultures and politics. We look at the dynamics of boundary formation and cultural distinctiveness; the limits of religious and social tolerance; the nature and contexts of persecution; and the prospects for Jewish integration to Europe during the course of the Enlightenment era. Our course also highlights the particular historical experiences, cultural and religious developments, and communal patterns of the Jews during this time.

Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : ETH, HUM, IS FA : SSP
L22 History 3350 Out of the Shtetl: Jews in Central and Eastern Europe Between Empire, State and Nation
Is there an East/West divide in Jewish history (perhaps more than one)? What did it mean to emerge from the small market towns and villages of Central and Eastern Europe to confront modern states, empires and nations? This course examines the Jewish historical experience in the countries that make up Central and Eastern Europe (the Bohemian lands, Hungary, Poland, Russia and Romania) from the 16th century to the collapse of the Soviet empire. It looks at patterns in Jewish culture, society and politics as well as the changing dynamic of Jewish interactions with state, society and community.
Credit 3 units.   A&S : TH   A&S : IQ, HUM   BU : HUM   FA : SSP

L22 History 3352 China’s Urban Experience: Shanghai and Beyond
Same as East Asia 3352
Credit 3 units.   A&S : TH   A&S : IQ, HUM

L22 History 335C Becoming “Modern”: Emancipation, Anti-Semitism and Nationalism in Modern Jewish History
This course offers a survey of the Jewish experience in the modern world by asking, at the outset, what it means to be — or to become — modern. We begin with the Enlightenment and the formation of the modern state and end with American and Israeli settings at the close of the 20th century. The cultural, social and political lives of Jews have undergone tremendous transformations and dislocations over this time — a period marked by innovation, tragedy and success. Among the themes that we explore in depth are: the campaigns for and against Jewish “emancipation”; acculturation and religious reform; traditionalism and modernism in Eastern Europe; the rise of political and racial anti-Semitism; mass migration and the formation of American Jewry; varieties of Jewish national politics; Jewish-Gentile relations between the World Wars; the destruction of European Jewry; the emergence of a Jewish nation-state; and Jewish culture and identity since 1945.
Credit 3 units.   A&S : TH, CD   A&S : IQ, HUM, LCD   BU : ETH, HUM   FA : SSP

L22 History 336C History of the Jews in Islamic Lands
This course is a survey of Jewish communities in the Islamic world, their social, cultural and intellectual life from the rise of Islam to the Imperial Age. Topics include: Muhammad, the Qur’an and the Jews; the legal status of Jews under Islam; the spread of Rabbinic Judaism in the Abbasid empire; the development of new Jewish identities under Islam (Karaites); Jewish traders and scholars in Fatimid Egypt; the flourishing of Jewish civilization in Muslim Spain (al-Andalus); and Sephardi (Spanish) Jews in the Ottoman empire. On this background, we look closely at some of the major Jewish philosophical and poetical works originating in Islamic lands. Another important source we study are documents from the Cairo Genizah, reflecting social history, the status of women and other aspects of daily life. Primary and secondary readings (in translation) are supplemented by audiovisual materials.
Credit 3 units.   A&S : TH   A&S : IQ, HUM   BU : HUM   FA : SSP

L22 History 3371 Modern Eurasia: Afghanistan and Central Asia
This course offers an introduction to the political, religious, cultural and social history of Russian Central Asia, Afghanistan and Xinjiang in modern times, with a focus on the past century. Students consider the complex relationship between historical notions of Islam and modernity as a central analytical lens for understanding this region’s contemporary history, and in particular, highlight the central role of the Muslim faith as a source of inspiration, consternation and anxiety among rulers, reformers, conquerors and modernizers.
Credit 3 units.   A&S : TH   A&S : IQ, HUM

L22 History 3402 Money and Morals in the Age of Merchant Capital
Between the late medieval period and the 18th century, Europe underwent an economic transformation that, while creating an expansive and dynamic European economy, also prompted much debate and discussion about the changing patterns of production, consumption and social relations that went hand-in-hand with new economic practices. As state officials worked to make economic policies fit in with national priorities, other writers proclaimed that stock market bubbles, shady business practices and the materialism and fickleness of consumers signaled the decline of morality and civilization.
Credit 3 units.   A&S : TH   A&S : IQ, HUM   BU : IS   FA : SSP

L22 History 3405 For Freedom’s Sake: The Civil Rights Movement in America
Same as AFAS 3405
Credit 3 units.   A&S : IQ, HUM   EN : H

L22 History 341 The Jewish People In America
Same as JNE 341
Credit 3 units.   A&S : TH   A&S : IQ, HUM   BU : HUM

L22 History 3413 Women in Early Modern Europe
From the Renaissance to the Enlightenment, European women experienced tremendous change as Europe witnessed religious upheaval, economic retrenchment, political consolidation and intellectual revolution. However, many of the core ideas about women’s role and status remained remarkably stable during this period, and women continually struggled to create opportunity for themselves. We examine both the changing and unchanging
nature of women’s lives through sources such as conduct manuals for women; biographies about women from different economic, social and religious backgrounds; and the works of female authors. Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : BA FA : SSP

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L22 History 3415 Introduction to European Studies
Same as IAS 344
Credit 3 units. A&S : TH BU : ETH FA : SSP

L22 History 3450 Modern Germany
What does it mean to be German? How should Germany fit into Europe? What problem does the German past pose for today? These questions structure our survey of the forces that have shaped German history since 1800. After examining the multiplicity of German states that existed in 1800, we explore the forces that resulted in unification in 1871. We then turn to a study of modern Germany in its various forms, from the Empire through the Weimar Republic and Third Reich, to post-war division and reunification.
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : IS

L22 History 3456 Greek History: Archaic and Classical
Same as Classics 345C
Credit 3 units. A&S : TH BU : HUM FA : SSP

L22 History 346C Greek History: The Age of Alexander
Same as Classics 346C
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : HUM FA : SSP

L22 History 3470 Gender and Citizenship
Same as WGSS 347
Credit 3 units. A&S : TH, WI BU : BA

L22 History 3480 Hindu Traditions
Same as Re St 348
Credit 3 units. A&S : TH, CD, SD A&S : IQ, HUM, LCD BU : ETH

L22 History 3490 Europe in the 20th Century
In 1914, several European nations dominated much of the world through vast overseas empires in which they exercised military, political and economic power. This course explores the decline, fall and slow return of the “new Europe” by examining the history of Europe from World War 1 to the present. It considers the decline of Europe brought about by two devastating wars, and the crucial impact of war and genocide in shaping European
politics, society and culture; the place of Europe in the Cold War; and the European retreat from empire in the post-war era.  
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L22 History 3510 Cultures of the Middle Ages: Death and Dying in Medieval Europe
Same as Med-Ren 351
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD

L22 History 3520 Conquest and Colony: Cultural Encounters in the New World
This course studies the contrasting patterns of colonization in the New World, as this hemisphere was once termed by Europeans. Traditionally, such comparative studies have focused on the cultural differences among the European colonizers — the English, the French, the Spanish and so on. As the different groups confronted and dealt with each other in the 16th and 17th centuries, they established widely varying patterns of living that would have an impact on the histories of their descendents for generations to come.  
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD

L22 History 3530 Re-forming Ireland, 1500–1700
Ireland in the 16th and 17th centuries was radically transformed. Not only were the political structures and the political culture of resurgent Gaeldom destroyed. Religious loyalties consolidated new Irish identities as protestantism — in the form of new waves of settlers and new flurries of English governmental interventions — obliterated inherited distinctions and divisions and defined all Roman Catholics as the enemy.  
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD  BU : IS

L22 History 3531 Early-Modern England
Around 1500, England was an overwhelmingly agrarian society dominated by crown and aristocracy; by 1700, political power had been redistributed by revolution while commercialization, “science” and empire-building were well under way. Through lecture and discussion and through readings in a variety of autobiographical and other writings, including some of the great works of literature, we examine how contemporaries sought to shape, or to come to terms with, their world.  
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM  FA : SSP

L22 History 3532 Faith and Power in Early Modern England
This course examines the often-explosive relations between religious faith and political power in 16th- and 17th-century England: a time of the conquest of Ireland; the burning of martyrs; the hanging of witches and puritan experiments in New and old England. It explores the painful process by which a general commitment to religious unity and coercion eroded to allow space to the individual conscience.  
Credit 3 units.  A&S : TH

L22 History 3550 Composing the Self in Early-Modern Europe
This course explores manners of thinking about the self in early-modern Europe, (ca. 1400–1800). During this period, the human person was not regarded as a static category; rather, men and women formulated multiple ways of being a self in relation to God, the state, the family and other persons in society. Discussion revolves around autobiographical writings as well as a selection of theological, philosophical and literary works.  
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L22 History 3553 French Revolution to Napoleon III
The focus of this course is on the French Revolution of 1789–1799 and France under Napoleon Bonaparte, but the topics discussed begin with the crisis of the French monarchy at the end of the Old Regime and end with the reign of the last French monarch, Emperor Napoleon III.  
Credit 3 units.  A&S : TH  BU : HUM, IS

L22 History 3557 The Politics of Terror: The French Revolution
Students explore the history of political culture in 18th-century France, from the final decades of the Bourbon monarchy to the rise of Napoleon Bonaparte. Topics include: the erosion of the king's authority in the years leading up to 1789; the fall of the Bastille; the Constitutions of 1791 and 1793; civil war in the Vendee; the militarization of the Revolution; the de-Christianization movement; attempts to establish a new Revolutionary calendar and civil religion; and the conspiracy theories that gripped Robespierre and his colleagues during the Terror.  
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L22 History 3560 Russia and the West
Same as Hum 3560  
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L22 History 3561 Andean History: Culture and Politics
Same as IAS 356  
Credit 3 units.  A&S : SS, CD  A&S : IQ, SSC, LCD

L22 History 356C 20th-Century Russian History
A survey of Russian history from 1900 to the present. The course emphasizes the Russian Revolutions at the beginning and end of the century; Stalinism, de-Stalinization and postcommunist society. Much attention is given to the assumptions and conclusions of schools of historical analysis: Marxist, totalitarianism, Kremlinologist and revisionist.
L22 History 3585 Music in the Holocaust: Sonic Portrayals from Past and Present
Same as JNE 3584
Credit 3 units.  A&S : TH  A&S : IQ , HUM  BU : IS  FA : SSP

L22 History 359 Topics in European History: Modern European Women
This course examines the radical transformation in the position and perspective of European women since the 18th century. The primary geographical focus is on Britain, France and Germany. Topics include: changing relations between the sexes; the emergence of mass feminist movements; the rise of the “new woman”; women and war; and the cultural construction and social organization of gender. We look at the lives of women as nurses, prostitutes, artists, mothers, hysterics, political activists, consumers and factory hands.
Credit 3 units.  A&S : TH  A&S : IQ , HUM

L22 History 3590 Topics in American Culture Studies
American Enlightenment — 18th-century thought and culture. Same as AMCS 359
Credit 3 units.  A&S : TH  A&S : IQ , HUM

L22 History 3593 The Wheels of Commerce: From the Industrial Revolution to Global Capitalism
One of the primary aims of this course is to determine how the terms capitalist economy, industrial economy, global economy and modern economy have emerged historically, both as intellectual constructs and as descriptors for real world developments. Students build working definitions for each term and discuss the degree to which any of these terms is useful for thinking about how economies have been organized at different times and in different places since the mid-18th century. The course ends with a section on the post-war economic miracle and its ultimate collapse in the 1970s.
Credit 3 units.  A&S : IQ , HUM  EN : H

L22 History 3598 The First World War and the Making of Modern Europe
World War I ushered our age into existence. Its memories still haunt us and its aftershocks shaped the course of the 20th century. The Russian Revolution, the emergence of new national states, fascism, Nazism, World War II and the Cold War are all its products. Today, many of the ethnic and national conflicts that triggered war in 1914 have resurfaced. Understanding World War I, in short, is crucial to understanding our own era.
Credit 3 units.  A&S : TH  A&S : IQ , HUM  BU : IS

L22 History 3603 Renaissance Italy
This course examines the social, cultural, intellectual and political history of late medieval and Renaissance Italy: civic life and urban culture; the crisis of the 14th century; the city-states of Renaissance Italy; the revival of classical antiquity; art and humanism of the Renaissance; culture, politics and society; Machiavelli and Renaissance political thought; the wars of Italy; religious crisis and religious reaction in the 16th century.
Credit 3 units.  A&S : TH  A&S : IQ , HUM

L22 History 3608 Science and Society Since 1800
This course surveys selected topics and themes in the history of modern science from 1800 to the present. Emphasis is on the life sciences, with some attention to the physical sciences.
Credit 3 units.  A&S : TH  A&S : IQ , HUM  FA : SSP

L22 History 3610 City of Peace: Baghdad in Medieval Times
Same as JNE 361
Credit 3 units.  A&S : TH  A&S : IQ , HUM  EN : H

L22 History 3630 Mapping the World of Black Criminality
Same as AFAS 363
Credit 3 units.  A&S : TH , SD  A&S : IQ , HUM , SD  EN : H

L22 History 3632 The American Frontier: 1776–1848
This course examines the nation’s shifting frontier from independence through the Mexican-American War. It considers people and places in flux as their nationality, demography and social order underwent dramatic changes. Students make use of an extensive electronic archive of primary sources including period documents, historic maps and contemporary art work, in order to consider how these sources confirm, reject or expand on the ideas they encounter in published scholarship.
Credit 3 units.  A&S : TH , CD , SD  A&S : IQ , HUM , LCD  BU : HUM  FA : SSP

L22 History 3641 Anarchism: History, Theory and Praxis
Same as IAS 364
Credit 3 units.  A&S : SS  A&S : IQ , SSC

L22 History 365 The New Republic: The United States, 1776–1850
A survey of American history from the eve of the Revolution to the eve of the Civil War. Topics covered include: the Revolution and its ambiguous legacies; the rise of democracy; the starkly paradoxical “marriage” of slavery and freedom; the creation of much of the America that we know; mass political parties; sustained capitalist growth; individualistic creeds; formalized and folkloric racism; technological innovation; literary experimentation; distinctively American legal, scientific and
L22 History 360 The Civil War and Reconstruction: 1848–1877
This course is a survey of American history from 1848 to 1877, focusing on the Civil War and Reconstruction. The bloody conflict and its causes and consequences are explored from multiple perspectives: those of individuals such as Lincoln, McClellan, Davis, Douglass and Lee, who made momentous choices of the era; of groups such as the Radical Republicans and the black freed people who helped shape the actions of individuals; and of the historians, novelists, filmmakers and social movements that have struggled to define the war’s legacy for modern America. Credit 3 units. A&S : TH, A&S : IQ, HUM, SD BU : HUM, FA : SSP

L22 History 3660 Narratives of Discovery
This course examines Europe’s encounter with the newly discovered lands and peoples of Africa, Asia and America through the writings of the travelers themselves. We read stories of exploration and conquest, cultural and commercial exchanges, religious visions and cannibal practices. Credit 3 units. A&S : TH A&S : IQ, HUM

L22 History 366 Modern America: 1877–1929
The rise of industrial America: the social conflicts, cultural shifts, political responses and world status occasioned by industrial development in the United States, from Reconstruction to World War I. Key concerns include labor, race and women’s suffrage; popular culture; the bohemian avant-garde; consumerism; progressive reform; imperialism and the impact of World War I. Credit 3 units. A&S : TH A&S : IQ, HUM BU : BA, HUM FA : SSP

L22 History 3670 The Long Civil Rights Movement
The Civil Rights Movement is known as a southern movement, led by church leaders and college students, fought through sit-ins and marches, dealing primarily with non-economic objectives, framed by a black and white paradigm, and limited to a single tumultuous decade. This course seeks to broaden our understanding of the movement geographically, chronologically and thematically. It pays special attention to struggles fought in the North, West and Southwest; it seeks to question binaries constructed around “confrontational” and “accommodationist” leaders; it reveals how Latinos, Native Americans and Asian Americans impacted and were impacted by the movement; and it seeks to link the public memory of this movement with contemporary racial politics.

L22 History 3672 Medicine, Healing and Experimentation in the Contours of Black History
Conversations regarding the history of medicine continue to undergo considerable transformation within academia and the general public. The infamous Tuskegee syphilis experiment serves as a marker in the historical consciousness regarding African Americans and the medical profession. This course taps into this particular evolution, prompting students to broaden their gaze to explore the often delicate relationship of people of African descent within the realm of medicine and healing. Tracing the social nature of these medical interactions from the period of enslavement through the 20th century, this course examines the changing patterns of disease and illness, social responses to physical and psychological ailments, and the experimental and exploitative use of black bodies in the field of medicine. As a history course, the focus is extended toward the underpinnings of race and gender in the medical treatment allocated across time and space — the United States, Caribbean and Latin America — to give further insight into the roots of contemporary practice of medicine. Credit 3 units. A&S : TH, CD, SD A&S : IQ, HUM, LCD

L22 History 3673 Gurus, Saints and Scientists: Religion in Modern South Asia
Same as Re St 3670
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : ETH

L22 History 368 Modern America Since 1929
This course offers an intensive survey of U.S. history since World War I, concentrating on key turns in the development of American life: social and political strains of the 1920s as part of the “new era” commenced by the Great War; responses to the Great Depression and the construction of a limited welfare state in the 1930s and 1940s; the rise of Cold War anticommunism in foreign and domestic affairs in the wake of World War II; the advent of a new period of social reform and disruptive protest in the 1950s and 1960s; the turn toward the political right since the 1970s; and the aftermath of the Cold War. Credit 3 units. A&S : TH BU : HUM FA : SSP

L22 History 3680 The Cold War, 1945–1991
This course presents an assessment of the Cold War from the perspective of its major participants. Topics include: the origins of the Cold War in Europe and Asia; the Korean War; the Stalin regime; McCarthyism and the Red Scare; the nuclear arms race; the conflict over Berlin; Cold War film and literature; superpower rivalry in Guatemala, Cuba, Vietnam, Africa and the Middle East; the rise and fall of detente; the Reagan years and the impact of Gorbechev; the East European Revolutions; and the end of the Cold War.
Credit 3 units.  A&S : TH  A&S : IQ, HUM  FA : SSP

L22 History 3711 The History of Popular Culture in the United States
This course surveys major developments in the history of popular culture in America, stretching from the mid-19th century to the present. It explores topics such as literature, drama/theater, dance halls, movies, radio, advertising, television, music, and the internet; it covers different types of popular culture such as printing, performance, image and audio; it looks at how popular culture has been depicted in terms of icons, myths, stereotypes, heroes, celebrities and rituals; it addresses the rise of mass production and consumption; it examines the ways in which race, class, gender, ethnicity and sexuality have been perceived and are portrayed in popular culture; and it illustrates how the content of popular culture shapes and reflects our personal, social, political and intellectual beliefs and values. Modern, U.S. Prerequisite: see History overview.
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : BA

L22 History 3712 Art and Culture in America’s Gilded Age
Same as Art-Arch 3712
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : BA  FA : AH

L22 History 372C Law in American Life: 1776 to the Present
Among the many contradictions of American history, none has been more recurrent than the tension of justice and law — of aspiration and reality — as Americans have sought to make good on the promises of the Revolution. Although we pride ourselves as a nation devoted to the principle of “equal justice under the law,” the terms “equal” and “justice” have prompted bitter debate, and the way we place them “under law” has divided Americans as often as it has united them. It is the purpose of this course to examine the many and conflicting ways in which Americans have sought to use “law” to achieve the goals of the republic established in 1776. Viewing “law” as the contested terrain of justice, cultural construction, social necessity and self-interest, this course pays close attention to the way Americans have used, abused or evaded “law” throughout their national history.
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD  BU : BA  ETH, IS  FA : AH

L22 History 373 History of United States Foreign Relations: To 1917
This course explores the major diplomatic, political, legal and economic issues shaping U.S. foreign relations in the 18th, 19th and early 20th centuries, up until the U.S. entry into World War I. Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM, IS  FA : SSP

This course explores the major diplomatic, political, legal and economic issues shaping U.S. foreign relations with the wider world from the 1920s to the “fall of Communism” in 1989. Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM, IS  FA : SSP

L22 History 3750 African-American Women in the 19th and 20th Centuries
Same as WGSS 3754
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD  BU : BA

L22 History 3751 U.S. Women Since 1945
Through a combination of lectures and discussion, we identify and analyze important themes in the history of American women since 1945. Topics include: domesticity and the culture of the 1950s; gendering the cold war; women and racial politics; the social movements of the 1960s; the “sexual revolution”; second-wave feminism; the new right’s gender politics; and women, work and poverty at the century’s end. A central presumption of the class is that one cannot understand the recent history of the U.S. without understanding the histories of women and gender during this period.
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD  BU : BA  FA : SSP

L22 History 3776 Sexuality, Courtship and Marriage in U.S. History
This course surveys the history of practices, identities, legal constructs and social norms relating to sexuality, courtship and marriage. Students particularly focus on locating the history of sexuality in its larger social, economic and cultural contexts. Students also discuss the experience of individuals or social groups who deviated from the socially and legally constructed norms of the day in order to gain insight into how the sexual order has developed as a whole in this country.
Same as WGSS 3776
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD
L22 History 3783 Medicine Among European Jews
Same as JNE 3782
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L22 History 3789 Building St. Louis History
This course aims to provide a national and local understanding of how Americans and St. Louisans dealt with the problems of racism, poverty and sexism from 1945 to the present. While history courses traditionally require that students analyze the credibility and subjectivity of each historical source, this course further challenges students to use the methods of oral history to compare evidence from oral historical memory with written texts. By comparing St. Louis history with that of the rest of the nation, students analyze regional differences and understand the unique historical conditions that shaped this city. CBTL course.
Credit 4 units.  A&S : TH, SD  A&S : IQ, HUM, SD

L22 History 3802 The Supreme Court in American Life, 1789–2006
From Marbury vs. Madison in the early 19th century to Dred Scott vs. Sanford on the eve of the Civil War and, more recently, Roe vs. Wade or Bush vs. Gore, the Supreme Court — its composition, its rulings and their legitimacy — has provoked intense, widespread legal, political, even ethical debate. This course is an historical survey of the Supreme Court’s history and of the Court’s broader resonance in American life and society, from the court’s first session in 1789 to the present.
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L22 History 3812 Sufism: Mystics in Islam
This course is designed as a social and intellectual history of Sufism in all its major aspects. The course begins with a survey of Sufism’s formative period from the 9th to the 12th centuries CE, examining the emergence of key Sufi doctrines and practices as well as the formation of the first Sufi communities around accomplished masters. Then, the course traces the rise to social prominence of the Sufi mode of piety during and after the 12th century in the form of Sufi orders as well as the reaction of nonconformist Sufis to such increasing social success.
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD

L22 History 382C The American School
Same as Educ 301C
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD  BU : BA, ETH, HUM  FA : SSP

L22 History 3840 Migration and Modernity: Human Mobility, Identity and State Formation — Russian/Soviet/post-Soviet Context
Same as IAS 384

L22 History 385 Topics in American History
See Course Listings for current topics.
Credit 3 units.  A&S : TH  BU : ETH  FA : SSP

L22 History 3853 History of Electronic Media
Same as Film 350
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM

L22 History 3860 Empire in East Asia: Theory and History (WI)
Same as IAS 386
Credit 3 units.  A&S : TH, CD, WI  A&S : IQ, HUM, LCD, WI  EN : H

L22 History 3878 Britain and Its Empire from 1688 to 1870
This course is an introduction to the history and culture of modern Britain and Ireland. We see how this damp archipelago off the northwestern coast of Europe extended its reach across the seas and throughout the world. The expansion of English power throughout the British Isles — and of British power throughout the world — was made possible by a combination of political stability, unifying nationalism and economic might, and we trace these developments from the assertion of Parliamentary supremacy in 1688 to the apex of Victorian civilization in 1870.
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : IS

L22 History 3879 Britain and Its Empire Since 1870
The United Kingdom of Great Britain and Ireland entered the 20th century as an economic and political superpower; after enduring civil war, two world wars, de-industrialization and the loss of its empire, however, it ended the century on very different terms. This course examines, explains and attempts to characterize this process, focusing upon two seemingly contradictory themes: (1) the tendency of historians, politicians and other analysts to read this period as an age of national decline, and (2) the improvements to the lives of the vast majority of Britons.
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : IS

L22 History 3879 Britain and Its Empire Since 1870
The United Kingdom of Great Britain and Ireland entered the 20th century as an economic and political superpower; after enduring civil war, two world wars, de-industrialization and the loss of its empire, however, it ended the century on very different terms. This course examines, explains and attempts to characterize this process, focusing upon two seemingly contradictory themes: (1) the tendency of historians, politicians and other analysts to read this period as an age of national decline, and (2) the improvements to the lives of the vast majority of Britons.
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : IS

L22 History 3880 Terror and Violence in the Black Atlantic
From the period of bondage through the 21st century, terror and racialized violence have consistently been used as a form of social control. This course is constructed to explore the historical foundations of extreme threats of violence inflicted among populations of African descent. The fabric of American culture has given birth to its own unique brand of terrorism waged against black people, which this class spends considerable
time interrogating. Yet, in recognizing that these practices are commonly found in other parts of the Black Atlantic, students are encouraged to take a comparative view to better tease out the wider strands of violence operative in places such as England as well as islands within the Caribbean. Within this course we explore the varied ways in which music, films, newspapers and historical narratives shed light on these often life-altering stories of the past.

Same as AFAS 3880

Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD

L22 History 3891 East Asia Since 1945: From Empire to Cold War
This course examines the historical forces behind the transformation of East Asia from war-torn territory under Japanese military and colonial control into distinct nations ordered by Cold War politics. We begin with the 1945 dismantling of the Japanese empire and continue with the emergence of the People’s Republic of China, the Republic of China (Taiwan), the two Koreas and Vietnam, all of which resulted from major conflicts in post-war Asia. We conclude with a look at East Asia in the post-Cold War era.

Credit 3 units.  A&S : TH, CD

L22 History 38A8 Women, Men and Gender in Africa: Writing-Intensive Seminar
This seminar explores the ways in which gender relations have been produced, reproduced and transformed through the everyday actions of women and men in Africa. The focus is both on agency and on structures of power, as we move from a consideration of gender relations during the 19th-century jihads in West Africa to problems of love, sexuality and marriage in contemporary South Africa.

Credit 3 units.  A&S : TH, CD, WI  A&S : IQ, HUM, LCD  BU : BA

L22 History 38B9 Understanding Lincoln: Writing-Intensive Seminar
This course explores the life, art (political and literary) and historical significance of Abraham Lincoln. It focuses first on how he understood himself and foregrounds his inspired conception of his own world-historical role in the Civil War. The course also traces how the larger world furnished the contexts of Lincoln’s career, how his consciousness, speeches and writings, and presidential decisions can be understood against the backdrop of the revolutionary national democratic upheavals of the 19th century. Finally the course investigates how the 16th president, so controversial in his day, has remained a subject of cultural contestation, with historians, novelists, poets, cartoonists, filmmakers, advertisers and politicians struggling over his memory and meaning, to the present.

Credit 3 units.  A&S : TH, WI  A&S : IQ, HUM, WI

L22 History 38C8 Religion and Politics in South Asia: Writing-Intensive Seminar
The relationship between religion, community and nation is a topic of central concern and contestation in the study of South Asian history. This course explores alternative positions and debates on such topics as: changing religious identities; understandings of the proper relationship between religion, community and nation in India and Pakistan; and the violence of Partition (the division of India and Pakistan in 1947). The course treats India, Pakistan and other South Asian regions in the colonial and postcolonial periods.

Credit 3 units.  A&S : TH, CD, WI  A&S : IQ, HUM, LCD

L22 History 38M8 The Making of the Modern American Landscape — Writing-Intensive Seminar
This writing-intensive seminar explores environmental change in relation to human actions in the United States. It provides a vision of American history from the perspective of the land itself. It traces transformations in the organization and uses of landed property from the 18th-century surveys of western lands through the expansion of slavery and the cotton kingdom; the construction of irrigation systems in the west; the emergence of new technologies of production and communication in 19th century cities to the mass production of suburban housing; and finally to the rise of Disneyland and Las Vegas.

Credit 3 units.  A&S : TH, WI  A&S : IQ, HUM, WI

L22 History 38R8 The Russian Revolution: Writing-Intensive Seminar
The “10 Days that Shook the World” divided Russian, European and American society from 1917 until the dissolution of the U.S.S.R. in 1991. This seminar examines major interpretations of the Russian Revolution through readings and a series of written exercises including a formal book review, a comparative essay and an analytical research paper.

Credit 3 units.  A&S : TH, WI  A&S : IQ, HUM, WI  BU : IS

L22 History 38YM Imagining the African Diaspora: Slavery, Black Radicalism and Globalization: Writing-Intensive Seminar
This course introduces students to the African diaspora as both a practice and a subject of study. From Latin America to the United States, the Atlantic world and Asia, students critically consider the construction of the African diaspora across time and space, and the foundational role of people of African descent in the making of the modern world. While the overarching framework of the course is historical, we assume an interdisciplinary approach, examining memoirs and historical works as well as film, music and the performing arts. We think about how the African diaspora complicates our understandings of home, identity, race, geography, gender and politics. This course does not aim to establish a single understanding of the African
Arts & Sciences

diaspora but to appreciate its “flexibility” as both a practice and concept.
Credit 3 units.  A&S : TH, CD, SD, WI  A&S : IQ, HUM, LCD

L22 History 3920 South Asian Traditions in Practice: Ritual, Spectacle, Self
Same as Re St 392
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD  BU : ETH

L22 History 393 Medieval Christianity
Same as Re St 393
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : BA

L22 History 394C African Civilization to 1800
Same as AFAS 321C
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD  BU : HUM, IS  FA : SSP

L22 History 395C African Civilization: 1800 to the Present
Same as AFAS 322C
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD  BU : IS  FA : SSP

L22 History 3960 Women and Social Class
Same as WGSS 396
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD  BU : BA

L22 History 3962 Religion and American Society: 1890 to the Present
Same as Re St 3962
Credit 3 units.  A&S : TH  A&S : IQ, HUM  EN : H

L22 History 399 Senior Honors Thesis and Colloquium: Writing-Intensive Seminar
Prerequisites: satisfactory standing as a candidate for Senior Honors and permission of thesis director.
Credit -4 unit.  A&S : TH, WI  A&S : IQ, HUM, WI  FA : SSP

L22 History 39F8 Gender and Sexuality in 1950s America: Writing-Intensive Seminar
Historians have recently begun to reconsider the dominant view of the 1950s as an era characterized by complacency and conformity. In this writing intensive seminar we use the prism of gender history to gain a more complex understanding of the intricate relationship between conformity and crisis, domesticity and dissent that characterized the 1950s for both women and men.
Credit 3 units.  A&S : TH, SD, WI  A&S : IQ, HUM, SD, WI  BU : BA

L22 History 39H8 Internal Empire: The Unification of Britain: Writing-Intensive Seminar
The establishment and the costs of English hegemony over the British Isles. Political and cultural aggression, religious conflict, and social and economic development all contributed to identity formation, whether in the triumphant metropolitan core or in the embittered Celtic periphery. Students cannot receive credit for both History 3511 and 39H8.
Credit 3 units.  A&S : TH, WI

L22 History 39J8 Mapping the Early Modern World: Writing-Intensive Seminar
Societies use maps not just to see the world, but also to assign meaning and order to space: both nearby spaces and spaces on the other side of the world. In this writing-intensive seminar, we study how maps were created, circulated and interpreted between the 16th and 18th century, when Europeans came into contact with new regions throughout the world and reshaped their own backyards through the rise of the modern state and the development of national identity.
Credit 3 units.  A&S : TH, WI

L22 History 39K8 The Many Enigmas of Thomas Jefferson: Writing-Intensive Seminar
Who was Thomas Jefferson, and why has his reputation undergone so many changes? Why has this hero of abolitionists and a man hated by slaveholders become a figure condemned today for being a slaveholder with an African-American mistress? How did an apostle of small government and states’ rights become the patron saint of the New Deal and the Democratic Party, and then an inspiration for anarchists? Why have examinations of his public “greatness” and study of his ideas shifted to scrutiny and criticism of his private lapses?.
Credit 3 units.  A&S : TH, WI

L22 History 39S8 Rivers: A Comparative Approach to Chinese and World History: Writing-Intensive Seminar
This course uses rivers as geographical frames of reference to address a variety of issues, including physical and social mobility, agriculture and commerce, the state, environmental history and construction of cultural meanings. Each week begins with a focus on the West River, which flows through two provinces in southern China. Readings on the West River are matched with readings that address similar topics but focus on other important rivers in the world. The temporal focus is approximately 1500–1900, a period that witnessed the zenith of rivers as modes of transportation and commerce.
Credit 3 units.  A&S : TH, WI
L22 History 39SC Imperialism and Sexuality: India, South Asia and the World: Writing-Intensive Seminar
What is the connection between the appropriation of other people’s resources and the obsession with sex? Why is “race” essential to the sexual imperatives of imperialism? How has the nexus between “race,” sexuality and imperial entitlement reproduced itself despite the end of formal colonialism? By studying a variety of colonial documents, memoirs produced by colonized subjects, novels, films and scholarship on imperialism, we seek to understand the history of imperialism’s sexual desires and its continuation in our world today.
Credit 3 units. A&S : TH, CD, SD, WI A&S : IQ, HUM, LCD

L22 History 39SL Blacks, Latinos and Afro-Latinos: Constructing Difference and Identity: Writing-Intensive Seminar
The growth of the Latino population in the United States is changing conversations about race. While some worry about job competition between black and Latino workers, others celebrate the future of a “majority minority.” Students taking this course examine the history of the racialization of African Americans and Latinos under British, Spanish and American empires, paying attention to both the construction of the racial “Other” by European elites, as well as the reclaiming of identities by the racially marginalized through various social movements, culminating in the Black and Brown liberation movements of the 1960s and the mobilization of Afro-Latinos since the 1970s.
Credit 3 units. A&S : TH, CD, SD, WI A&S : IQ, HUM, LCD

L22 History 39T8 Sufism: Mystics in Islamic History: Writing-Intensive Seminar
This course is designed as a social and intellectual history of Sufism in all its major aspects. The course begins with a survey of Sufism’s formative period from the 9th to the 12th centuries CE, examining the emergence of key doctrines and practices as well as the formation of the first Sufi communities around accomplished masters. Then, the course traces the rise to social prominence of the Sufi mode of piety during and after the 12th century.
Credit 3 units. A&S : TH, CD, WI A&S : IQ, HUM, LCD BU : HUM

L22 History 39X9 To Russia and Return: Travel, Literature and History: Writing-Intensive Seminar
For 300 years, scholars have relied upon the accounts of eyewitness travelers to make Russia less mysterious. One famous traveler was responsible for the idea of despotic tsars, others deemed the Muscovy “rude and barbarous,” while still another shaped the end of Russian serfdom. This course introduces students to the full sweep of modern Russian history through readings in selected travelers and scholarship based on them. Prior course work on Russia is not required.
Credit 3 units. A&S : TH, WI

L22 History 4000 IPH Thesis Prospectus Workshop
Same as Hum 401
Credit -3 unit. A&S : TH A&S : IQ, HUM

L22 History 4001 Directed Fieldwork in Historical and Archival Professions
A fieldwork project under the direction of a member of the Department of History. Normally planned and undertaken in conjunction with an established museum or archival program.
Credit 4 units. A&S : TH FA : SSP

L22 History 4002 Directed Fieldwork in Historical and Archival Professions
A fieldwork project under the direction of a member of the Department of History. Normally planned and undertaken in conjunction with an established museum or archival program.
Credit 4 units. A&S : TH FA : SSP

L22 History 4008 Senior Seminar on the Presidency: The Obama Administration
Same as AMCS 4008
Credit 3 units. A&S : TH A&S : IQ, HUM

L22 History 4020 Jerusalem, The Holy City
Same as JNE 4020
Credit 5 units. A&S : TH, CD, SD

L22 History 4030 Topics in East Asian Religion and Thought: The Zhuangzi
Same as Re St 403
Credit 3 units. A&S : TH, CD A&S : IQ, HUM

L22 History 4033 Race, Sex and Sexuality: Concepts of Identity
Same as WGSS 403
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD BU FA : SSP

L22 History 4040 Convivencia or Reconquista? Muslims, Jews and Christians in Medieval Iberia
Same as JNE 4060
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L22 History 4042 Competing Ideologies and Nationalisms in the Arab-Israeli Arena
Same as JNE 4042
L22 History 4044 The Politics of Secularism
Same as Anthro 4044
Credit 3 units.  A&S : SS  A&S : IQ, SSC  BU : IS

L22 History 4051 Diaspora in Jewish and Islamic Experience
Same as JNE 405
Credit 4 units.  A&S : TH  A&S : IQ, HUM

L22 History 4080 Nuns
Same as Re St 408
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD

L22 History 4112 Topics in Christianity: Women and Religion in Medieval Europe
Same as Re St 411
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L22 History 4120 Rainbow Radicalisms: Ethnic Nationalism, the Black Panther Party and the Politics of the New Left
Same as AFAS 4121
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L22 History 4121 American Religion, Politics, Culture: Historical Foundations
Same as Re St 4121
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L22 History 4122 American Religion, Politics and Culture: Commentary from Alexis de Tocqueville to Contemporary Pundits
Same as Re St 4122
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L22 History 4154 Postcolonial South Asia: Nations, Cultures and Identities in Transnational Perspective
Focusing on the years after independence from British colonialism, this course explores the transnational and diasporic histories of South Asia. We investigate an array of literary, visual and historical sources on the politics and society of Bangladesh, Pakistan, Sri Lanka and India. The course is reading-intensive; advanced undergraduates and graduate students are welcome. Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD

L22 History 417 Topics in African History: Middle Passages — African Americans and South Africa

Same as AFAS 417
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD  BU : BA

L22 History 4210 Christians and Muslims in the Mediterranean World, 1100–1650
The medieval and early modern Mediterranean was the crossroads of empire, trade, learning and faith. This course examines how the diverse countries in this region handled questions of religious difference, cultural encounter and political and economic rivalry from the Crusades to the flourishing of the Ottoman Empire and the 17th century revolutions in politics and knowledge. Topics covered include: religious disputes and dialogue; the treatment of religious minorities; diplomacy and war; trade; slavery; and cultural influences. Credit 3 units.  A&S : TH

L22 History 4214 A Tale of Two Cities: The Growth and Structure of Chicago and St. Louis
Same as AMCS 4210
Credit 3 units.  A&S : TH  BU : HUM

L22 History 4222 Special Topics in History: Keble College, Oxford
Credit -10 unit.  FA : SSP

L22 History 4274 Palestine, Israel and the Arab-Israeli Conflict
This course examines the history of the Arab-Israeli conflict from the mid-19th century to the present. Topics include: Palestine in the late Ottoman period; the development of modern Zionism; British colonialism and the establishment of the Palestine Mandate; Arab-Jewish relations during the Mandate; the growth of Palestinian nationalism and resistance; the establishment of the state of Israel and the dispersion of the Palestinians in 1948; the Arab-Israeli wars; both Palestinian uprisings; and the peace process. Credit 3 units.  A&S : TH  A&S : IQ, HUM

L22 History 4280 History of Urban Schooling in the United States
Same as Educ 4280
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L22 History 4288 Higher Education in American Culture
Same as Educ 4288
Credit 3 units.  A&S : TH  BU : HUM  FA : SSP

L22 History 4322 The Later Roman Empire: From Constantine to Justinian
Same as Classics 442
Credit 3 units. A&S : TH  A&S : IQ  HUM

L22 History 442 European Intellectual History, 1789–1890
The development of modern rationalist individualism out of the French and Industrial Revolutions, its extension in Romanticism and Hegelian thought, and the reactions of modern ideologies (liberalism, conservatism, nationalism and socialism); Romantic individuality; the conflicted responses to industrialization and modernity; liberal culture; Marxism; the aesthetic reaction; Nietzsche.
Credit -4 unit. A&S : TH  A&S : IQ  HUM  BU : IS  FA : SSP

L22 History 4420 Empire and Memory: Approaches to Islamic Historiography
Same as JNE 442
Credit 3 units. A&S : TH  A&S : IQ  HUM  EN : H

L22 History 443 European Intellectual History: 1890–1930
This course explores the crises in individualist and nationalist thought and culture in the years before and after World War I. Topics include: the emergence of irrationality in political and social thought; the rise of psychoanalysis; the birth of modernism in painting, music and literature; relativism in philosophy and the social sciences; the crisis of World War I; the beginnings of Fascist and Nazi ideology; and the emergence of existentialism.
Credit -4 unit. A&S : TH  A&S : IQ  HUM  BU : IS  FA : SSP

L22 History 444 European Intellectual History: 1930–2000
This course is an exploration of European thought and culture from the intellectual and artistic response to Nazism in the 1930s to the postmodernism of the present. Topics include: art and political commitment before and after World War II; existentialism in France; the intellectual responses to the Cold War, such as the theory of totalitarianism; the “Critical Theory” of the Frankfurt School and the rise of Marxist humanism; the student movements of 1968; the critique of technological society; structuralism and post-structuralism; contemporary feminist theory; and postmodernism.
Credit -4 unit. A&S : TH  A&S : IQ  HUM  FA : SSP

L22 History 4442 The Jewish Experience in Eastern Europe
A study of Jewish culture, society and politics in Poland-Lithuania, Hungary, the Czech lands, Russia, Romania and the Ukraine, from the 16th century through the 20th century. Among the topics covered are: economic, social and political relations in Poland-Lithuania; varieties of Jewish religious culture; Russian and Habsburg imperial policies toward the Jews; nationality struggles and anti-Semitism; Jewish national and revolutionary responses; Jewish experience in war and revolution; the mass destruction of East European Jewish life; and the transition from Cold War to democratic revolution.
Credit 3 units. A&S : TH  CD  FA : SSP

L22 History 4444 The Mystical Tradition in Judaism: Magic and Mysticism in the 15th to 19th Century
Same as Re St 444
Credit 3 units. A&S : TH  CD  A&S : IQ  HUM  BU : ETH  IS

L22 History 4446 European Social History: 1750–1930
This course examines both the old social history (which focused on social classes and “the social question”) and the newer social history of the Annales School (which stresses the social conditions of everyday life). Most of the semester is spent surveying selected topics of the new social history, such as demography, marriage and the family, sexuality and reproduction, diet and cuisine, drink and drugs, disease and public health, and topics in material culture such as housing.
Credit 3 units. A&S : TH

L22 History 444A Europe Under the Old Regime, 1660–1789
Despite the static obsolescence implied by the term, the Old Regime was a dynamic period during which European men and women gradually but fundamentally altered how they related to power, to knowledge, and to each other. This course explores the major sociopolitical and intellectual developments of the period through primary sources and historical literature. Our main geographical focus is France, with occasional forays into the Dutch, British and German cases. Our main cultural focus is on the Enlightenment, with an eye to the diversity of ideas and beliefs that were advocated both for and against it.
Credit 3 units. A&S : TH  A&S : IQ  HUM

L22 History 4480 Russian Intellectual History
This seminar-style discussion and research course examines major currents in Russian intellectual life from the age of Peter the Great to the revolutions of 1905. Its primary focus is on Russians’ perception of themselves as a part of Western Civilization. Authors include: the Ukrainian humanists; the so-called Russian Enlightenment; romantic nationalists; Slavophiles and Westernizers; the literature of the Golden Age; nihilists; and the early Marxists. Students enrolling in the course should attempt to acquire a copy of (out of print) Marc Raeff, ed., Russian Intellectual History: an Anthology.
Credit 3 units. A&S : TH  A&S : IQ  HUM

L22 History 4481 Race Politics in 19th- and 20th-Century America
Same as AFAS 448
Credit 3 units. A&S : SS  A&S : IQ  SSC  BU : BA  FA : SSP
L22 History 448C Russian History to the 18th Century
Medieval Russian history is in turmoil: Ukrainians charge the
Russians with stealing their history; new perspectives from
world history have fundamentally altered our understanding
of the Viking age, and of Russia's infamous Tatar Yoke; Ivan
the Terrible has lost his demonic appearance, and the hapless
Romanovs before Peter the Great are now praised as the
most successful of all early-modern monarchs. Topics include:
Kievan politics, society and religion; the Mongol world; the rise
of Moscow; consolidation and empire; religious crisis; and the
dramatic first contacts with the West.
Credit 3 units. A&S: TH A&S: IQ, HUM BU: HUM FA: SSP

L22 History 4491 American Unbelief from the Enlightenment
to the New Atheism
Same as Re St 4491
Credit 3 units. A&S: TH A&S: IQ, HUM

L22 History 449C Imperial Russia
The Russian tsars, from Peter the Great to Nicholas II, built the
empire that became the Soviet Union. Now that the U.S.S.R.
is gone, historians focus not only on the governance of the
Russians, but also on the fate of scores of nationalities ruled
by them. This course also explores the changing reputation of
Russia's rulers, especially the women rulers of the 18th century;
the rise of an intelligentsia committed to radical reform; the fate
of millions of serfs, and the government's efforts to steer a path
between Muscovite traditions and a dynamic West.
Credit 3 units. A&S: TH A&S: IQ, HUM FA: SSP

L22 History 4503 Captives, Slaves and Renegades in the
Early Modern Mediterranean
This reading-intensive course introduces students to the social,
political and cultural history of the Early Modern Mediterranean,
and surveys the recent historiography on captives and converts
as significant social actors and cultural brokers. The case studies
in this course are broad, ranging from the Persian empire and
the Ottoman lands to Spain, France and England.
Credit 3 units. A&S: IQ, HUM EN: H

L22 History 450B Topics in the History of Eugenics
Same as Biol 450W
Credit 3 units. A&S: NS, WI A&S: IQ, NSM, WI

L22 History 4510 French Art and Politics in the Belle
Epoque, 1870–1914
Same as Art-Arch 4856
Credit 3 units. A&S: TH A&S: IQ, HUM

L22 History 4555 Advanced Topics in Modern Chinese
History
Same as East Asia 555
Credit 3 units.

L22 History 4650 Topics in Arabic
Same as Arab 465
Credit 3 units. A&S: TH A&S: IQ, HUM, LCD

L22 History 4675 Beyond the Harem: Women, Gender and
Revolution
This course examines the history and current situations of
women in Middle Eastern societies. The first half of the course
is devoted to studying historical changes in factors structuring
women's status and their sociopolitical roles. The second half
of the course focuses on several case studies of women's
participation in broad anti-colonial social revolutions and how
these revolutions affected the position of women in those
societies. Evaluation of students encourages their participation,
analytical engagement and improvement throughout the term.
Credit 3 units. A&S: TH, CD, SD A&S: IQ, HUM, LCD BU: BA

L22 History 4689 American Intellectual History to 1865
This course presents an overview of American intellectual
history from the early 17th century and the founding of the first
English settlements in North America to the mid-19th century
and the American Civil War. We investigate how different
thinkers responded to and helped shape key events and
processes in colonial and early American history, concentrating
in particular on developments in religious, political, social,
scientific and educational thought. We cover major topics such
as: Puritanism, the Enlightenment, Evangelicalism, Romanticism
and the inner Civil War. We address concepts central to the
formation of the nation's identity including those of the covenant,
republicanism, citizenship, equality, freedom, liberty, natural law,
transcendentalism, order, reason, progress and democracy.
Credit 3 units. A&S: TH A&S: IQ, HUM

L22 History 469 American Intellectual History Since 1865
This course concentrates on social, cultural, philosophical
and political thought since the end of the Civil War, and
investigates how American thinkers have responded to the
challenge of modernity. After an examination of the end of
the old religious order and the revolt against Victorianism, it
analyzes the subsequent rise of pragmatism, progressivism,
literary modernism, radical liberalism, political realism, protest
movements and the New Left, neo-conservatism and the New
Right, and the current state of intellectuals in post-9/11 America.
The format combines mini-lectures with in-depth discussions
of primary texts by Harold Frederic, Charlotte Perkins Gilman,
Jane Addams, Henry Adams, George Santayana, Charles

Credit 3 units. A&S : TH A&S : IQ, HUM

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L22 History 4710 Topics in Japanese Culture
Course subtitle should be used only on Semester course record.
Same as East Asia 471
Credit 3 units. A&S : TH A&S : IQ, HUM FA : SSP

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L22 History 4735 Modeling the Second World War
Models and simulations of trends, events, institutions and processes are useful tools for historians and social scientists. They can illustrate complex interactions between individuals and groups, map broad political and social trends, and possibly predict the outcome of specific events. Students in this research seminar choose an aspect of the geographic, political, diplomatic, military, economic or social history of World War II to research and model through computer simulation, multimedia presentations, or a role-play exercise. These models and simulations are based on primary sources from the period.
Credit 3 units. A&S : TH A&S : IQ, HUM

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L22 History 4742 Americans and Their Presidents
Same as AMCS 474
Credit 3 units. A&S : TH A&S : IQ, HUM

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L22 History 4743 Imagining the West
Same as Art-Arch 4743
Credit 3 units. A&S : TH FA : AH

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L22 History 4750 The City in American Arts and Popular Culture, 1910–1940
Same as Art-Arch 475
Credit 3 units. A&S : TH A&S : IQ, HUM FA : AH

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L22 History 4751 Intellectual History of Feminism
Same as WGSS 475
Credit 3 units. A&S : TH A&S : IQ, HUM FA : Lit

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L22 History 4760 The Intellectual History of Psychoanalysis
Same as Hum 476
Credit 3 units. A&S : TH A&S : IQ, HUM

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L22 History 4770 Cultures of Memory in Postwar Germany and Japan
Same as IAS 477
Credit 3 units. A&S : TH A&S : IQ, HUM

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L22 History 481 History of Education in the United States
Same as Educ 481
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : SSP

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L22 History 4820 Reading America: Henry Adams and the Study of American Culture
Same as AMCS 482
Credit 3 units. A&S : TH A&S : IQ, HUM

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L22 History 4833 Topics in African History
See Course Listings for current topics.
Credit 3 units. A&S : TH

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L22 History 4840 Anti-Slavery in the Courtroom
Same as AMCS 484
Credit 4 units. A&S : TH A&S : IQ, HUM

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L22 History 4841 Core Seminar in East Asian Studies: East Asia in Scholarly Literature
Same as East Asia 484
Credit 3 units. A&S : TH, CD A&S : IQ, HUM LCD FA : SSP

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L22 History 4842 The Japanese Empire in Asia, 1874–1945
This course examines the expansion of the Japanese Empire in Asia from 1874 to 1945, focusing on Japan’s acquisition of neighboring territory and the subsequent building of colonies in Taiwan, Korea and Manchuria. The course explores the concepts of imperialism and colonialism, how they functioned in East Asia, and how they intersect with other major developments in Asia, including ideas of civilization and race, the formation of the nation, and the growth of capitalism.
Credit 3 units. A&S : TH, CD

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L22 History 4844 Women and Confucian Culture
This course explores the lives of women in East Asia during a period when both local elites and central states sought to Confucianize society. The course focuses on Ming (1368–1644) and Qing (1644–1911) China, but also examines these issues in two other early-modern East Asian societies: Yi/Choson (1392–1910) Korea and Tokugawa (1600–1868) Japan. Course readings are designed to expose students both to a variety of theoretical approaches and to a wide range of topics, including: women’s property rights; the medical construction of gender; technology, power and gender; and state regulations on sexuality.
Credit 3 units. A&S : TH, CD

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L22 History 4872 Colonial Cities and the Making of Modernity
Massive urban growth has been a central result of the incorporation of many areas — both central and peripheral — into the global economy in the 19th and 20th centuries. Scholars have long theorized urbanization as a key component of modernity, but they have usually done so by looking at urbanization and modernization from the perspective of the West. This course investigates the character of cities in the colony and then uses these empirical and analytical entry points to examine critically some theories of modernity. The geographical focus of the course is primarily on cities in the Middle East, North Africa and South Asia.
Credit 4 units.  A&S : TH

L22 History 4941 Advanced Seminar: The Inquisition in Europe, Asia and Latin America, 1200–1700
This seminar studies the history of the Inquisition from its beginnings in southern France in the first half of the 13th century up to the investigations undertaken by Dominicans and Franciscans in 17th-century Mexico and Peru. Along the way the seminar focuses upon other inquisitions in Europe (especially those made in Italy, Spain and Germany), and the hunt for heresy in Goa and the Philippines. This seminar reads inquisitional manuals (books on how to conduct an inquisition) and original inquisitional documents (the records of the trials and interrogations). Consequently, the history of heresy and witchcraft, as understood by people in the past and historians in the present, is discussed.
Credit 4 units.  A&S : TH

L22 History 4894 Advanced Seminar: The U.S. in Vietnam: Origins, Developments and Consequences
This course focuses on America’s involvement in Vietnam from the era of French colonialism through the collapse of U.S. intervention. Special attention to political, military, economic and cultural aspects, as well as to international relationships, and the significance of the experience and subsequent developments upon both American and Vietnamese societies.
Credit 4 units.  A&S : TH

L22 History 4920 Advanced Seminar: American Education
The so-called “Jewish Question” was a product of European modernity. It emerged in conjunction with the formation of modern states, Enlightenment projects for political reform, the decline of religious influence in society, and struggles over Jewish emancipation. This seminar examines important themes in the history of sexuality: the relationship between sexual ideologies and practices; racial hierarchy and sexuality; the policing of sexuality; construction of sexual identities and communities; and sexual politics at the end of the century. Students also spend time discussing theoretical approaches to the history of sexuality, as well as methodological issues, including problems of source and interpretation.
Credit 4 units.  A&S : TH

L22 History 4907 Advanced Seminar: Issues in the History of American Medicine
This seminar examines major issues and themes in the history of American medicine. Specific topics include: the changing image of the physician; professional authority; and the rise in the status of the medical profession during the past 100 years.
Credit 4 units.  A&S : TH

L22 History 4918 Advanced Seminar: Sexuality in America
Does sex have a history, and if so, how can we study it? This seminar examines important themes in the history of sexuality: the relationship between sexual ideologies and practices; racial hierarchy and sexuality; the policing of sexuality; construction of sexual identities and communities; and sexual politics at the end of the century. Students also spend time discussing theoretical approaches to the history of sexuality, as well as methodological issues, including problems of source and interpretation.
Credit 4 units.  A&S : TH  A&S : IQ, HUM  FA : SSP

L22 History 4942 Advanced Seminar: Europe’s “Jewish Question”: Emancipation, Anti-Semitism and Jewish-Christian Confrontation
The so-called “Jewish Question” was a product of European modernity. It emerged in conjunction with the formation of modern states, Enlightenment projects for political reform, the decline of religious influence in society, and struggles over Jewish emancipation. In this seminar, students examine the unusual career of this obsession from the 16th through the 20th century by focusing selectively on a number of illustrative episodes: Christian Hebraism and the Reformation;
the Enlightenment assault on religious power; European debates on Jewish emancipation; the emergence of the “Jewish Question” in the 19th century; anti-Semitism as a modern political phenomenon; the renewed discourse of Jewish “ritual murder” at the turn of the 20th century; Zionism and other forms of Jewish nationalism; and the question of anti-Zionism in the reformulation of the “Jewish Question” during the past half-century.

Credit 4 units. A&S : TH A&S : IQ, HUM FA : SSP

L22 History 4952 Advanced Seminar: Modern British History
The seminar is devoted to the consideration of new interpretations of such questions as political reform, the industrial revolution, the status of women and imperialism in 19th-century Britain.
Credit 4 units. A&S : TH

L22 History 4963 Advanced Seminar: Encounter and Empire: European Colonialism, 1500–1800
This seminar examines the first age of European world empires, from the Spanish and Portuguese explorations and conquests in the Americas, Africa and Asia, to the rise of the Dutch and English merchant empires, to the 18th-century exploration of the Pacific and revolutions in the Atlantic World. We use primary sources to examine ideas about cultural diversity, colonial society and the natural world, while, through secondary sources, we examine themes of cultural transfer, economic development, political contestation and control, and scientific discovery.
Credit 4 units. A&S : TH A&S : IQ, HUM

L22 History 4965 Advanced Seminar: Magic, Heresy and Witchcraft in the Middle Ages, 350–1550
This course concerns itself with addressing and familiarizing students with some of the major issues, debates, problems, themes and methods, adopted and adapted by historians of the Middle Ages.
Credit 4 units. A&S : TH A&S : IQ, HUM

L22 History 4967 Advanced Seminar: Migration and Travel in China, 1500–1900
Despite the growing importance of native-place identities during the late Imperial era, China had an increasingly mobile population. This course examines the movement of people in China approximately from 1500 to 1900, including voluntary and forced migration, travel associated with trade, travel for civil service examinations and official postings, exile, urban sojourning, religious pilgrimages, and touring. In addition, this course focuses on relations between locals and sojourners or migrants, as well as the perceived dangers that geographical mobility posed for the state and the social order.
Credit 4 units. A&S : TH

L22 History 4970 Advanced Seminar: Early Medieval History, Italy and France in the Early Middle Ages
The topic of this seminar is the kingdoms formed as successor states to the Western Roman empire by the Gothic, Frankish and Lombard peoples in the territories of modern France and Italy. The course compares the varied models used in these kingdoms for the accommodation of Roman and Germanic cultures.
Credit 4 units. A&S : TH FA : SSP

L22 History 4971 Advanced Seminar: Selected Topics in Anglo-American Legal History
A research and writing seminar on a specific topic chosen by the student. The course introduces students to the scholarship on the history of law and examines certain key cases or questions as examples of the field and its potential.
Credit 4 units. A&S : TH FA : SSP

L22 History 4974 Advanced Seminar: Gender, Property and Law in American Society
This course aims to explore the intersections of gender relations, work and property in law, custom and culture from the colonial period to the late 20th century. We read a wide range of articles and books, all of which in some way address the relationships among gender ideologies, social practices and property relations in American society.
Credit 4 units. A&S : TH FA : SSP

L22 History 4976 Advanced Seminar: The American Trauma: Representing the Civil War in Art, Literature and Politics
This seminar is an interdisciplinary examination of how Americans represented the Civil War during and after the titanic conflict, with special attention given to the period between 1865 and 1915. The course explores how painters, novelists, photographers, sculptors, essayists, journalists, philosophers, historians and filmmakers engaged the problems of constructing narrative and reconstructing national and individual identity out of the physical and psychological wreckage of a war which demanded horrific sacrifice and the destruction of an enemy that could not be readily dissociated from the self.
Credit 4 units. A&S : TH A&S : IQ, HUM

L22 History 4977 Advanced Seminar: A Long Road to Uhuru and Nation: The Social History of Modern Kenya
This seminar challenges the popular Western view that the African continent is a single place and that Africans are homogenous or inherently tribal. Focusing on the lived experiences of imperial rule, the struggle for independence, and the process of nation building, it explores the development of an African country. The seminar focuses on how common men, women and adolescents wrestled with the problem of turning a colony into the modern Kenyan nation. Admission to the seminar requires permission of the instructor and at least one previous upper-level course in African history.
of freedom in the New World has unfolded in unlikely fits and starts. The course explores two related conjectures: first, that maroon politics (the often short-lived alliances between slaves, quasi-free blacks and white allies), slave rebellion, provincial secession and civil war were the widespread and normative conditions of post-colonial regimes throughout the New World; and second, that the problem of freedom was especially challenging in a New World environment in which freedom was fleeting and tended to decompose. Special attention is given to antislavery insurgencies, interracial politics and alliances in the United States and the perspectives on freedom they produced, but the readings also include materials on debates over freedom in the Caribbean and South America over the course of the long age of democratic revolution, 1760–1888.

Credit 4 units. A&S: TH, SD A&S: IQ, HUM, SD

L22 History 4987 Advanced Seminar: Antislavery — The Legal Assault on Slavery in St. Louis
This seminar begins with a survey of the legal and constitutional arguments made against slavery in English and American courts since the 1600s, and examines the culture and tactics of antislavery as it emerged in Antebellum America, as well as the meaning of the Dred Scott decision. Students research a particular freedom suit from the online manuscript court records of the St. Louis Circuit Court.
Credit 4 units. A&S: TH, SD A&S: IQ, HUM, SD

L22 History 4988 Advanced Seminar: The French Revolution
This course functions as both an advanced readings seminar and as a research paper colloquium. As a readings seminar, the course covers major scholarly debates on different aspects of the French Revolution. Other topics for the seminar include such issues as: the revolution and women; the reign of terror; and the French Revolution. As a research colloquium, each student undertakes research on an important aspect of the revolution and presents a paper to the seminar.
Credit 4 units. A&S: TH A&S: IQ, HUM

L22 History 4990 Advanced Seminar: History of the Body
Do bodies have a history? Recent research suggests that they do. Historians have tapped a wide variety of sources — including vital statistics, paintings and photographs, hospital records, and sex manuals — to reconstruct changes in how humans have conceptualized and experienced their own bodies. We pay particular attention to the intersection of European cultural history and history of medicine since 1500.
Credit 4 units. A&S: TH, SD A&S: IQ, HUM, SD

L22 History 4993 Advanced Seminar: Women and Religion in Medieval Europe
This course explores the religious experience of women in medieval Europe and attempts a gendered analysis of the Christian Middle Ages. In it, we examine the religious experience
of women in a variety of settings — from household to convent. In particular, we try to understand how and why women came to assume public roles of unprecedented prominence in European religious culture between the 12th century and the 16th, even though the institutional church barred them from the priesthood and religious precepts remained a principal source of the ideology of female inferiority.
Credit 4 units.   A&S : TH  A&S : IQ, HUM

L22 History 4994 Advanced Seminar: Religion and Society in Modern Europe, 1750–1930
This course explores the changing relationships of religion, society, and the state after the age of the Enlightenment and before the age of totalitarianism in Europe — a very long 19th century. This seminar focuses chiefly on changes in Christian society in Western Europe, but students may choose to write their seminar papers on religious minorities or other parts of Europe.
Credit 4 units.   A&S : TH  A&S : IQ, HUM

L22 History 4995 Advanced Seminar in History: The Dred Scott Case and Its Legacy After 150 Years
March 2007 marked the 150th anniversary of what has been called “the worst ever rendered by the Supreme Court.” Chief Justice Roger B. Taney’s opinion, which denied American citizenship to African Americans, also threatened to force the spread of slavery into every corner of the nation and to undermine the most basic principles of American justice. A bloody Civil War followed within four years, but even with a Union victory and the passage of three amendments to the Constitution, one of the central issues of the case continued unsolved: full citizenship and equal justice before the law. Chattel slavery was abolished, but legal, social and political equality remained unachieved.
Credit 4 units.   A&S : TH  A&S : IQ, HUM

L22 History 4998 Advanced Seminar: Holy War
This seminar studies the history of holy war in Christianity and Islam (and related notions in Judaism) in the Middle Ages. Readings and discussion compare and contrast the theory and practice of holy war among Christians and Muslims from the 7th century until the 15th. What did it mean to perform Jihad in the 12th century or to be a cruzignatus in the 13th? How revolutionary was the First Crusade? Why did Latin Christianity and Sunni Islam elaborate theories of holy war against Christian and Muslim heretics? These and other questions direct the reading and enliven the discussions of the seminar.
Credit 4 units.   A&S : TH  A&S : IQ, HUM

L22 History 49DH Advanced Seminar in History: An Imperial Project?
This course studies the processes by which England’s hegemony over its neighbors to the north and west was established in the early-modern period — a period that saw the incorporation of Wales with England, the conquest of Ireland and union with Scotland. The class reads Spenser, Milton, Defoe, as well as into the proliferating scholarship of the past 30 years on what has been called “the British problem” to understand the political destruction of Gaeldom; the development of a Protestant ascendency in Ireland; English and Scottish understandings of Union. Keeping in view the changing English senses of nationhood, it considers the meanings of “empire” in this period.
Credit 4 units.   A&S : TH  A&S : IQ, HUM

L22 History 49DK Advanced Seminar in History: Thomas Jefferson
Who was Thomas Jefferson, and why has his reputation undergone so many changes? Why has this hero of abolitionists and a man hated by slaveholders in his own lifetime become a figure detested today for being a slaveholder with an African-American mistress? How has the hero of the New Deal and patron saint of the Democratic Party become an inspiration for anarchists? Why have examinations of his public “greatness” and study of his ideas shifted to scrutiny and criticism of his private lapses? This course is an exercise in understanding how professional historians and the general public discover and use the past.
Credit 4 units.   A&S : TH

L22 History 49EM Advanced Seminar: The Collapse of Communism
This course examines the political, social, economic and cultural factors that led to the demise of the U.S.S.R. in 1991. Focusing on the lands from the Socialist Bloc in Eastern Europe to the Soviet east, it broadly engages post-World War II Soviet history and in particular, focuses on the politically stable and largely socially tranquil decades spanning the 1960s to the 1980s.
Credit 4 units.   A&S : CD   A&S : IQ, HUM, LCD   EN : H

L22 History 49HG Advanced Seminar: The Making of the American Dream: A History of Work and Housing in America
This course traces the intersecting histories of labor and housing markets in 19th- and 20th-century America. Students look at rural and urban real estate, free and unfree labor, factory towns, sweating labor and the crop lien system, and service and office workers. Students investigate the ways changes in labor markets transformed the structure and meaning of the American family home. We also look at how racial and gender hierarchies were made and remade through labor systems, explore the role of the state in defining work, trace political struggles over government regulation of housing and labor markets, and investigate changing representations of work and housing in popular culture.
Credit 4 units.   A&S :
L22 History 49JK Advanced Seminar: Blood and Sacred Bodies: Ritual Murder and Host Desecration Accusations

This seminar follows the history of the ritual murder and host desecration accusations from the origins in 12th- and 13th-century Europe to the 20th century. It pays close attention to the social and political functions of the narratives; their symbolic importance in Christianity’s salvific drama; attacks on such beliefs from both within and outside the community of the faithful; the suppression and decline of the ritual murder accusation; the integration of Jews into European societies in the 19th century; and the reappearance of the blood libel in the afterlife of emancipation.

Credit 4 units. A&S : TH, CD  A&S : IQ, HUM, LCD

L22 History 49PR Advanced Seminar: The Enlightenment in Latin America: Science and Reason on the Colonial Frontier

What is Enlightenment? Neither the harbinger of a utopian society “philosophers” and bureaucrats in the Age of Revolutions anticipated nor as totalitarian or destructive as social critics judged from the 20th century, the projects of self-styled rationalists and empiricists have had repercussions in seemingly every aspect of life. This course invites students to consider the contributions of non-Western actors to the emergence of our modern world. Specifically, we examine the variety of ways scientists, administrators and laypeople in Latin America and the Caribbean thought about medicine and disease, race, religion, social and political organization, and problems of truth and empiricism in the 18th and 19th centuries. The goal is to engage critically with the view that the modern world emerged from predominantly textual, literate, English or French traditions and to think about how we can recover the cultural contributions of non-literate groups of indigenous American, African and Spanish descent.

Credit 4 units. A&S : TH, CD  A&S : IQ, HUM, LCD

L22 History 49SA Advanced Seminar: Slavery in America: The Politics of Knowledge Production

This course focuses on the long history of black chattel slavery in America, from origins to emancipation. The course foregrounds the struggles over power, life and death that were at the heart of slavery’s traumatic and grotesquely violent 250-year career in North America, with attention to hemispheric context. At the same time, it highlights the fiercely contested historical battleground where scholars have argued about how to define American slavery — as a system or site of labor; reproduction; law; property and dispossession; racial and gender domination; sexual abuse and usurpation; psychological terror and interdependency; containment and marooning; settlement and nationality; agency; revolutionary liberation; and millennial redemption.

Credit 4 units. A&S : TH, SD  A&S : IQ, HUM, SD

L22 History 49SC Advanced Seminar: Incredible India?

Today, India’s Department of Tourism works to attract visitors from far and wide with the slogan, “Incredible India!” — a publicity campaign that extols the country’s exceptionalism. Yet, images of India as unique and exotic, exceptional yet unchanging, are anything but new. They have been absolutely foundational to everything from British explorer Richard Burton’s translation of the Kama Sutra, to the hit TV series Jewel in the Crown, the global explosion of Bollywood, the scholarly study of the “subaltern,” and the proliferation of yoga studios in North America and Europe. How, and why, did India become “incredible”? Reaching to intellectual and social history and to cultural studies methods, this course explores the mechanisms for the production of popular perceptions about India. Where do these perceptions originate and how are they produced? What are the intellectual traditions, the institutional sites and the visual/narrative forms that support what some might describe as a transnational public relations campaign? In answering these questions, students use a diverse range of primary and secondary sources.

Credit 4 units. A&S : TH, CD  A&S : IQ, HUM, LCD

L22 History 49YM Advanced Seminar: Blacks and Indians in Latin America

The goal of this course is to introduce students to the study of indigenous and African-based resistance and rebellion in the Americas and the Caribbean from the colonial period to the 19th century. Throughout the course, we discuss how concepts such as “agency,” “popular or subaltern politics” and “resistance” have been variously interpreted by scholars of both indigenous and African diasporic societies. By beginning in the early colonial period when “Indians” and “Blacks” became new social and racial categories, we think about the relevance and changing meanings of such categories over time, and look beyond national and/or linguistic borders.

Credit 4 units. A&S : TH, CD, SD  A&S : IQ, HUM, LCD

Institutional Social Analysis

The Institutional Social Analysis minor is an interdisciplinary program that allows students to learn about fundamental institutions such as property rights, markets, social norms and constitutional democracy. Students learn about the key role that these institutions play in economic development and political governance in particular. Those participating in this program gain a detailed understanding of the field of new institutional social sciences, taking courses that share a conceptual orientation and commitment to interdisciplinary social sciences.

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(Economics)

Michael Wysession
Associate Professor
PhD, Northwestern University
(Earth and Planetary Sciences)

The Center for New Institutional Social Sciences does not offer a major in this area. Interested students are encouraged to investigate the Center’s minor in Institutional Social Analysis.

The Minor in Institutional Social Analysis
Units required: 15

Sample elective courses:
Anthro 160B Introduction to Cultural Anthropology
Econ 458 The Theory of Property Rights
Pol Sci 4792 Globalization and National Politics

Additional Information
Students enrolled in the Institutional Social Analysis minor take courses in a variety of disciplines, structuring their own curriculum with the advice of a mentoring faculty member. The
courses share a conceptual orientation and commitment to interdisciplinary social sciences.

The courses listed here are only a sampling of the types of courses you can use for this minor and are in no way limited to those courses or disciplines.

Students are required to take a total of 15 credit hours that are closely related to their course work and individualized research agenda. Three of these credit hours are for participating in an independent research experience course (see ISA 400 information under “Courses”) and another 3 credit hours (or 6 credit hours if class is taken in fall and spring semesters) are for participating in a Research Seminar Course (ISA 5825, ISA 5826). The Research Seminar course meets weekly and includes both undergraduate and graduate students who present their work and research and are then critiqued by the class. Students must participate for a minimum of one semester on both of the above and generally extend their commitment beyond this time frame.

The other 9 required credit hours (or 6 depending on above) include classes that fit within the grand scheme of the student’s research agenda and are generally electives related to the student’s course work. These are normally taken from classes students are already taking to meet departmental and other degree requirements. On the Courses page, we list examples of some of the types of courses that students have used toward this minor in the past. These courses are by no means the only ones you can use toward the minor, but merely examples.

Research Experience: Students enrolled in this minor will apply to participate in a research project with a faculty adviser. Students are chosen on the basis of their academic records and appropriateness of the research project as well as availability and interest of faculty members in the proposed project. Up to 10 students are selected each year. Students are expected to devote at least 10 hours per week for research. There also is a possibility of continuing the participation past the first semester as a paid research collaborator. Prerequisite: approval of faculty adviser and coordinator of the ISA program. Credit 3 units.

Institutional Social Analysis

L65 ISA 326 American Economic History
Basic theoretical concepts applied to analyze the changing structure and performance of the American economy from colonial times to the present. Prerequisites: Econ 1011 (103B) and Econ 1021 (104B).
Same as Econ 326
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L65 ISA 373 International Political Economy
Analysis of the interplay of economics and politics in the world arena, focused primarily on the political basis of economic policies in both advanced and less developed societies. Treating differing perspectives on the international economy, production, trade and finance, and international economic relations. Prerequisite: junior standing or permission of instructor.
Same as Pol Sci 373
Credit 3 units. A&S : SS BU : IS FA : SSP

L65 ISA 400 Research Experience in Institutional Analysis
After completing two courses in the minor in Institutional Social Analysis, students may apply to participate in a research program with the participation of a faculty supervisor. Students are chosen on the basis of their academic record and the appropriateness of the research project as well as availability and interest of faculty members in the proposed project. Up to 10 students are selected each year. Students are expected to devote at least 10 hours per week for research. There also is a possibility of continuing the participation past the first semester as a paid research collaborator. Prerequisite: approval of faculty adviser and coordinator of the ISA program. Credit 3 units.

L65 ISA 452 Industrial Organization
Theoretical and empirical analysis of the presence and value of competitive forces in the U.S. economy. Theories of industrial organization and development of criteria for performance of noncompetitive industries. Prerequisite: Econ 401.
Same as Econ 452
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L65 ISA 4621 Politics and the Theory of Games
A course on the relationships between the individual and various forms of community, in the U.S. and in other societies. We examine interactions in family, school and neighborhood, and the social bonds or divisions created therein. We also consider the place of group differences (gender, ethnic, religious) in law and in political life. Materials come from political theory, law and the social sciences.
Same as Pol Sci 4621
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L65 ISA 471 Development Economics
Investigation of issues related to the development of the economics of third-world countries. Topics include economic growth, poverty and the distribution of income with an emphasis on labor markets and education. Consideration of the effectiveness of various institutional policies designed to encourage development including decentralization and privatization. Empirical examples drawn from international experience, especially Latin America.
Same as Econ 471
Credit 3 units. A&S : SS A&S : IQ, SSC
L65 ISA 4761 Politics of International Finance
Global finance underwent stunning transformations over the past 30 years. The changes contribute to interdependence, challenge national sovereignty, alter state-society relations, affect economic development, and influence the distribution of wealth and power in the global political economy. The seminar examines the political economy of monetary relations and the globalization of capital markets.
Same as Pol Sci 4761
Credit 3 units. A&S : SS FA : SSP

L65 ISA 4792 Globalization and National Politics
This seminar examines globalization and its interaction with national politics. The movement of ideas, capital, goods, services, production and people across national borders and provide a skeletal framework for the global political economy. Politicians, policy makers and societies discover new opportunities, but also dilemmas as expanding interdependence challenge traditional notions of sovereignty and national policy autonomy.
Same as Pol Sci 4792
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

Interdisciplinary Project in the Humanities (IPH)
The Interdisciplinary Project in the Humanities (IPH) is a rigorous program for highly motivated students whose interests lead them beyond traditional academic categories. The major, which usually leads to a degree with honors, combines an introductory core — a concentrated study of texts central to the European and American philosophical, religious and literary traditions — with an area of concentration: an advanced sequence of courses and research tailored to the special interests of each student in the program. For students pursuing concentrations in (for example) American intellectual history, in the European avant-garde in the 20th century, or in Renaissance political thought (to take three among many possible concentrations), the introductory core provides a crucial foundation for advanced interdisciplinary work. The core also provides a useful background for students undertaking comparative concentrations — for example, in Buddhist, Christian and Muslim mystical literature, or in the influence of Russian fiction in East Asia. All students in the major learn to write and speak clearly and flexibly; they are given broad exposure to a range of canonical texts; they are trained in the historical and formal analysis of those and other texts; they become skilled in at least one foreign language; and they are given considerable experience in independent research. Their work in the humanities bridges disciplines and fosters in them the two fundamental interpretive skills of contextualization and criticism. Students in the program will be well prepared for a range of graduate programs in the humanities, for professional careers in law and public service, and for the vital work of critical citizenship and adult intellectual discovery.

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PhD, Yale University  
(Germanic Languages and Literatures)  

The Major in the Interdisciplinary Project in the Humanities  

Total units required: 41-44  

Prerequisites for the major include Text and Tradition core courses, shown below, or a humanities-based FOCUS (p. 371) course plus three of the IPH courses in the core.  

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<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>Hum 201C</td>
<td>Classical to Renaissance Literature: Text</td>
<td>3</td>
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<td>and Tradition</td>
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<tr>
<td>Hum 203C</td>
<td>Early Political Thought: Text and Tradition</td>
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<td>Scriptures and Cultural Traditions</td>
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<tr>
<td>Hum 310</td>
<td>An Intellectual History of Sex and Gender</td>
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Core Program  
Students typically enter the core program in the freshman year, but generally not later than the spring of the sophomore year. The core consists of either five courses drawn from the program in Text and Tradition or three courses in the Text and Tradition program in combination with a FOCUS program in the humanities. (Some of the current FOCUS offerings in the humanities include Cuba: From Colonialism to Communism, Writers as Readers/Readers as Writers, and Literary Culture of Modern Ireland. See FOCUS (p. 371) information.) Students in the core program apply for admission to the major during the sophomore year by submitting a portfolio of three previously written essays and a letter of recommendation from a T&T professor.  

Once admitted to the program, each student designs, in consultation with the IPH faculty, a program of advanced course work. In the second semester of the sophomore year, students enroll in an upper-level course in social or political history, or in the history of a literary or other aesthetic form, or of some institution or cultural practice (e.g., history of science or history...
of philosophy); in this semester they also undertake their first sustained research projects under the mentorship of a member of the IPH faculty.

In the junior year, students take a cluster of two courses addressing a single historical period from the perspective of different disciplines. In the spring semester, they complete a writing-intensive Junior Colloquium and participate in a group thesis tutorial and a thesis-related course in anticipation of their capstone project. In April, students seeking honors take the written and oral comprehensive exam.

In the senior year, students take the Theory and Methods seminar (fall) as well as the capstone colloquium (spring); in addition, they complete and present their capstone project under the mentorship of a member of the IPH faculty. By the middle of their senior year, students take at least one 400-level Textual and Historical (TH) course in a foreign language in order to secure their foreign-language competency.

Areas of Concentration

Many students develop their own special areas of concentration. Recent concentrations have included modernism and politics, Muslim ethics and jurisprudence, philosophy of education, opera, and the history of the novel. Some students will pursue concentrations that reflect the longstanding research interests of a number of faculty in the humanities. Among these latter, fully developed concentrations are the tracks in Renaissance Studies and Literature and History.

Students in the Renaissance Studies track enroll either in Text and Tradition or in the Renaissance FOCUS program during their first year. They have a wide range of courses from which to construct their period-specific cluster; as they develop their senior project, they are able to work closely with faculty from several different departments who make up Washington University's active group of Renaissance scholars. Students in the Renaissance concentration are strongly encouraged to begin work on a second foreign language so that they have some experience both with Greek or Latin and with one of Western Europe's modern vernaculars.

Students in the Literature and History track are expected to complete 9 units of course work in history and 9 units in literature; most satisfy the bulk of this requirement in the course of completing their sophomore history course, junior period cluster, advanced foreign language course, and thesis and thesis-related courses.

Required courses, in addition to the above listed for the major are:

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<tr>
<td>Hum 401</td>
<td>IPH Thesis Prospectus Workshop</td>
<td>3</td>
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<td>Hum 403</td>
<td>Senior Thesis Tutorial</td>
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<tr>
<td>Hum 405</td>
<td>Theory and Methods in the Humanities</td>
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The remaining 9–12 credits required for the major will be made up from the area of concentration courses, to be determined through discussions with the director of IPH.

The Minor in Text and Tradition

Text and Tradition is a minor open to first-year and sophomore students in the College of Arts & Sciences by special registration. It provides a compact, integrated sequence of five courses. In this program you read, reflect on and analyze, both orally and in writing, the basic texts of Western literary, philosophical, scientific and political culture.

If you are majoring in a science, the Text and Tradition minor gives you a firm grounding in the humanities. All courses in the program fulfill distribution requirements, and one of the teachers offering a course in the program also serves as your adviser. You fulfill the requirements of the program by completing five Text and Tradition courses, usually by the end of your sophomore year. This satisfies the requirements for an interdisciplinary minor in Text and Tradition.

Units required: 15

Required courses:

Five of the following 10 courses:

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<tr>
<th>Course</th>
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<tr>
<td>Hum 201A</td>
<td>Puzzles and Revolutions: Text and Tradition</td>
<td>3</td>
</tr>
<tr>
<td>Hum 201B</td>
<td>The Great Economists: Text and Tradition</td>
<td>3</td>
</tr>
<tr>
<td>Hum 201C</td>
<td>Classical to Renaissance Literature: Text and Tradition</td>
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<tr>
<td>Hum 203C</td>
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<tr>
<td>Hum 318</td>
<td>Lincoln: Then and Now</td>
<td>3</td>
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<tr>
<td>Hum 360</td>
<td>The Traffic in Women and Contemporary European Cinema</td>
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Elective courses:

Students may elect to substitute for one of the above Text and Tradition courses for any course that is text-centered and emphasizes primary sources. Prior consultation and approval is required.
Additional Information
Enrollment by application only. Students must earn a grade of C or better for the course to count toward the minor.

Interdisciplinary Project in the Humanities (IPH)

L93 Hum 201A Puzzles and Revolutions: Text and Tradition
This course introduces students to the history and philosophy of science. It counts toward the minor in Text and Tradition (T&T) and serves as a gateway to the minor in the History and Philosophy of Science (HPS). The course examines major episodes in the history of science from two of four periods: ancient, medieval, early modern, and modern. Possible topics include the Copernican, Newtonian, Darwinian, and Mendelian revolutions, and in each case the questions under consideration include: What was the state of natural knowledge before this episode? What historical developments caused or enabled a transformation of that knowledge? What were the features and fortunes of the paradigm that emerged? By applying these questions to a few specific case studies, students will learn about the content and context of scientific knowledge, while also becoming familiar with various explanations as to how and why that knowledge changes over time.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : SCI FA : NSM

L93 Hum 201B The Great Economists: Text and Tradition
Examination of the great economic thinkers, the problems they sought to solve, the historically-conditioned assumptions that they bring to their work, and the moral issues they raise. The class will read from the works of Adam Smith, Ricardo, Malthus, Marx, Veblen, Keynes, Schumpeter, Galbraith, and others as well as commentary from Heilbronner. These readings will be paired with selected texts on the social and moral issues of their times. Open only to participants in Text and Tradition.
Credit 3 units. A&S : TH A&S : IQ, HUM

L93 Hum 201C Classical to Renaissance Literature: Text and Tradition
As we study some of the most influential of ancient works we will address the basic questions of liberal education. Why ought the classics be read in the first place? How is it that Western culture has come to value certain fundamental questions, even to the point of encouraging opposition? Texts include selections from the Old Testament, Homer, Aeschylus, Sophocles, Virgil, Ovid, Petrarch, Montaigne, and Shakespeare. Preference given to Text and Tradition and IPH students.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L93 Hum 203C Early Political Thought: Text and Tradition
A selected survey of the political and moral thought of Europe from the rise of Athenian democracy to the Renaissance, with emphasis on analysis and discussion of writers such as Thucydides, Plato, Aristotle, St. Augustine, Castiglione, and Machiavelli. The course aims to introduce students to basic texts in the intellectual history of Western Europe, understood both as products of a particular time and place and as self-contained arguments that strive to instruct and persuade. The texts are simultaneously used to chart the careers of such fundamental notions as liberty, virtue, and justice. Preference given to Text and Tradition and IPH students.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : SSP

L93 Hum 204 Darwin and the Modern Ache
D.H. Lawrence reminds us how exciting and instructive it can be to watch the way our fictions take in a new cultural idea as important as Darwinism; as the theory shocks our defenseless bodies, our literature reacts with fresh forms and consciousness that enable us to feel the wound of moral, metaphysical, psychological, biological insecurity and humiliation without becoming merely helpless readers and carriers of our pain. We still feel longings for a creation by design in a post-Darwinian world shaped by thinkers most responsive to evolutionary theory, Nietzsche, Freud, Marx. This semester we will study some modern texts most sensitive and susceptible to what Hardy calls the "modern ache" of Darwin's thought, of Ibsen, hardy, Conrad, Strindberg, Kafka, D.H. Lawrence, and Robert Frost. Preference given to Text and Tradition and IPH students.
Credit 3 units. A&S : TH

L93 Hum 205C Literary Modernities: Text and Tradition
Through a wide sampling of Western literary works, the course explores themes and tones characteristic of the rise of modern consciousness from the Renaissance forward: we trace debates on aesthetics, the transformation of autobiography, writers' persistent distrust of books, and their relentless assaults on perversions of cultural idealism. Books by such authors as Cervantes, Diderot, Rousseau, Goethe, Balzac, Dostoevsky, Twain, Freud, Kafka, and Beckett. Preference given to Text and Tradition and IPH students.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : SSP

L93 Hum 206 The Idea of America
The Idea of America.
Credit 3 units. A&S : TH

L93 Hum 207C Modern Political Thought: Text and Tradition
A course in European history and thought since 1600 which addresses two themes: the search for a moral code, and the legitimate role of the state. Both are ancient inquiries, but they acquired important and novel interpretations in the West after the Reformation and the gunpowder revolution, and the rise of the modern statecraft grounded in both. One uniquely Western
approach to these questions was the search for the primitive or “natural” situation of mankind, and readings in this genre provide some of the texts for the course. Parallel to presentation of the political history of modern Europe, such writers may be discussed as Locke from the seventeenth century, Montesquieu and Rousseau from the eighteenth, Marx and Darwin from the nineteenth, and the writings of anthropologists and philosophers from the twentieth. Preference given to Text and Tradition and IPH students.
Credit 3 units. A&S : TH  A&S : IQ, HUM  BU : HUM  FA : SSP

L93 Hum 209 Scriptures and Cultural Traditions
Certain books, “sacred scriptures,” have shaped human culture in powerful and complex ways. Religious communities believe that Scriptures are ancient texts that are ever-flowing sources of timeless truths. We will do close readings of crucial Scriptural texts and explore how they are interpreted and why they have had such a profound impact on human communities, in social organization and the behavior of individuals, in literature, art, and politics. This year the course will focus on the canonical texts of Judaism, Christianity, and Islam. Preference given to Text and Tradition and IPH students.
Credit 3 units. A&S : TH  A&S : IQ, HUM, LCD  BU : ETH

L93 Hum 211A Digital Humanities: Information Representation, Analysis, and Modeling
It is a truism that computers have changed our lives, the way we think, but in fact systematic efforts to apply current technologies to the thinking about history and culture have been rare. This course will enable students to consider how these technologies might transform the humanities. Students will explore the various ways that ideas and data in the humanities can be represented, analyzed, and communicated. Topics include forms of information, modeling and simulation, geospatial (GIS) and temporal representations of data, and ways of creating and using audio and visual information. Readings and classwork will be supplemented by small assigned digital projects culminating in a project chosen by the students themselves. Students should be comfortable with using the Internet and a word processor. No other special computing skills are required.
Credit 3 units. A&S : TH, CD  A&S : IQ, HUM, LCD  BU : ETH

L93 Hum 220 Introduction to Research in the Humanities
This course will give students interested in the humanities the opportunity to learn about areas of current faculty research in literature, history, philosophy, art history, music, and other areas of the humanities. What are the archives for research in the humanities? How do humanities scholars develop a research agenda and what analytic tools do they bring to bear on their work? What are the biographies of new ideas in literature, history, and the arts?
Credit 1 unit. A&S : TH  A&S : IQ, HUM  BU : HUM

L93 Hum 228 Introduction to Aural Cultures: Silence, Noise, Music
This interdisciplinary course will explore a range of issues related to contemporary hearing and the aural worlds of the past. Our basic aim will be to consider the many ways in which sound becomes meaningful. We will discuss diverse figures and topics ranging from John Cage (the composer-philosopher of silence and random sounds), Gregorian Chant, and Bach, to Muzak, the development of recording technology, and recent research in music cognition. Other subjects to be discussed include aesthetics, politics, performance practice, taste, popular music, sound and music in film, and music in other cultures. The ability to read music is not required. Pairs well with the Introduction to Visual Culture. Same as Music 228
Credit 3 units. A&S : LA  A&S : IQ, HUM

L93 Hum 230 Visual Culture
In this interdisciplinary course, we explore the long history of vision and visual representation from antiquity to the present so as to shed light on how people at different moments have understood vision, have seen their own seeing and have encoded this seeing in different artifacts and media- from ancient cave painting to modernist paintings and motion pictures.
Credit 3 units. A&S : TH  A&S : IQ, HUM

L93 Hum 255 Freshman Seminar: Luxury: The Culture and Ethics of Expensive Taste
As the current economical downturn began, newspapers reported on shoppers leaving designer stores with merchandise hidden in unmarked, brown bags. But the idea that the consumption of luxury goods carries with it moral implications is far from new. In this seminar, we will trace the history of the concept of luxury as it crossed economic, cultural, and political borders and debates over several centuries. Taking a cue from Aristotle, we will focus on Renaissance and Enlightenment
France and England, a period when the emergence of a ‘middling class’ brought forward the dangers and the benefits of a wide-scale circulation of exotic foods, rich fabrics, porcelain, and other expensive commodities. Credit 3 units. A&S : TH A&S : IQ, HUM

L93 Hum 299 Research Internship in the Humanities
Credit - 3 unit.

L93 Hum 301 Sophomore Research Tutorial
A practical introduction to research in the humanities. Students develop and complete a project in a research area of possible long-term interest. Credit 2 units. A&S : TH A&S : IQ, HUM

L93 Hum 302 Two Renaissance Cities: Approaches to Early Modern Culture
Same as History 3042
Credit 3 units. A&S : TH

L93 Hum 304 The Cultural History of the Robot
This course will survey the history of the desire to perfect or eliminate what is most human through the creation of artificial men and women. Familiar questions - Can robots feel? Can we tell who is a robot? - Will be considered alongside the traditional use of robots to understand or emblematize justice, sin, progress and modernity, self-awareness or simplicity, indifference, virtuosity, authorship, invention, and art itself. Examples will be drawn from both fictional and real robots in literature and in film. Texts will likely include: Homer, Hesiod, Spenser, Descartes, Hobbes, Vaucanson, Villiers de l’Isle-Adam, Shelley, Hoffmann, Capek, Filisberto-Hernandez, Lem, Lang, and Scott. This course is intended primarily for sophomores considering a major in the Interdisciplinary Project in the Humanities. Freshmen will be considered by permission of the instructor. Credit 3 units. A&S : TH BU : ETH

L93 Hum 305 An Intellectual History of Sex and Gender
When did sexuality begin? Is it safe to assume that gender constructions are universal and timeless? In this course, we will engage with a broad range of readings that serve as primary texts in the ‘history of sexuality and gender.’ Our aims are threefold: to analyze the literary evidence we have for sexuality and gender identity in Western culture, to survey modern scholarly approaches to those same texts and to consider the ways in which these modern theoretical frameworks have become the most recent set of ‘primary’ texts on sexuality and gender. Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : BA

L93 Hum 310 The Legend of King Arthur in the Middle Ages
This course will examine the medieval tradition of King Arthur that arose in northern Europe from the "dark ages" to the invention of printing. The objective of this course is to achieve a thematic, historical, and structural insight into some of the best examples of medieval storytelling and understand why they continue to cast a spell over readers today. You may want to try your own hand at Arthurian storytelling after you have learned the building blocks. The course also lays a foundation for the study of pre-modern literature, the medieval and early modern world, and the national cultures of France, Germany, and Britain. Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM

L93 Hum 311 Independent Study in the Interdisciplinary Project in the Humanities
Credit units.

L93 Hum 318 Lincoln: Then and Now
A study of Lincoln’s writings, and of how they emerge from his reading and his experiences. We will read his speeches and other writings to investigate his political and social philosophy. And, we will look at this legacy, politically and culturally. Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM

L93 Hum 319 The European Avant Garde: Interdisciplinary Studies in the Humanities, 20th Century
The first half of the twentieth century witnessed the emergence of Artistic movements characterized by revolt against tradition, emphasis on radical experimentation, and redefinition of the art work. This course will familiarize students with the avant-garde’s main currents: Italian Futurism, English Vorticism, Russian Constructivism, "stateless" Dadaism, and French Surrealism. We will ask ourselves how to define the avant-garde, how it is related to modernity, and whether its aesthetic is necessarily political. Credit units.
service, trade, and scholarship; Italian sculptors and architects
German and British migrants who filled important niches in state
will consider the presence of European communities in Russia:
West - constitutional projects, scientific and economic thought,
study the intellectual products of Russian interactions with the
focus on the transfer of ideas and migrant communities. We will
centuries through the lens of this obsession. The course will
history as the question of the West - Russia's most passionate
There are few problems as enduring and central to Russian
pictures.
early modern church designs to modernist paintings and motion
and virtualization-from ancient cave painting, medieval icons and
function of seeing within different media of art, entertainment,
systems of truth, enlightenment, and scientific progress; and the
encoded this seeing in different artifacts and media. More
understood vision, have seen their own seeing and have
so as to shed light on how people at different moments have
We will begin by exploring ways of reading a small number of
characteristics of courtly literature, and issues of gender, genre
Court women in tenth and eleventh century Japan produced
literary works that have dominated the vernacular canon from
our day to the present, a situation without parallel elsewhere in
Europe: Coline Serreau's Chaos, Lukas Moodisson's Lilja 4-
new media in the formation of new systems of trafficking (internet
brides), and the place of the debate on gay marriage within
larger conversation. We will read texts by Friedrich Engels,
Sigmund Freud, Marcel Mauss, Claude Lévi-Strauss, Gayle
Rubin, Luce Irigaray, Judith Butler, Barbara Ehrenreich and Arlie
Russell Hochschild; and we will watch a number of films that
dramatize the traffic in women in the context of contemporary
Europe: Cristian Mungiu's Occident, Nilita Vachani's When Mother
comes Home for Christmas, Fatih Akin's Head-on, Jean-Pierre
and Luc Dardenne's The Silence of Lorna.
Credit 3 units. A&S : TH , CD , SD A&S : IQ , HUM , LCD

L93 Hum 3301 Laughter from Joubert to Bataille:
Interdisciplinary Studies in the Humanities
In this course we will trace a tradition of writing on laughter.
laughing sound? Where, when and how does laughter happen? What is
laughter's relation to language, to song, to thought? What kind of
communities does laughter form? We will read texts by Joubert,
Erasmus, Hobbes, Descartes, Chesterfield, Kant, Bergson,
Freud, Bataille, Sarrante, and Eliison. We will listen to music like
Louis Armstrong's "Laughin' Louie" and we will watch films like
"Laughing Gas", "The Man Who Laughs" and "A Question of
Silence".
Credit 3 units. A&S : TH A&S : IQ, HUM

L93 Hum 3311 Laughter from Joubert to Bataille:
Interdisciplinary Studies in the Humanities
In this course we will trace a tradition of writing on laughter.
While we will read texts that might explain laughter by way
of comedy or humor, we will be interested in laughter itself.
What does the body in laughter look like? How does laughter
sound? Where, when and how does laughter happen? What is
laughter's relation to language, to song, to thought? What kind of
communities does laughter form? We will read texts by Joubert,
Erasmus, Hobbes, Descartes, Chesterfield, Kant, Bergson,
Freud, Bataille, Sarrante, and Eliison. We will listen to music like
Louis Armstrong's "Laughin' Louie" and we will watch films like
"Laughing Gas", "The Man Who Laughs" and "A Question of
Silence".
Credit 3 units. A&S : TH A&S : IQ, HUM

L93 Hum 332 Visual Culture
In this interdisciplinary course, we explore this long history of
vision and visual representation from antiquity to the present
so as to shed light on how people at different moments have
understood vision, have seen their own seeing and have
encoded this seeing in different artifacts and media. More
specifically, we explore the role of the visual in the historical
production of subjectivity and collectivity; the political, religious,
and ideological uses and abuses of vision; the relation of images
to words and stories; the implication of sight in competing
systems of truth, enlightenment, and scientific progress; and the
function of seeing within different media of art, entertainment,
and virtualization-from ancient cave painting, medieval icons and
early modern church designs to modernist paintings and motion
pictures.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH

L93 Hum 3560 Russia and the West
There are few problems as enduring and central to Russian
history as the question of the West - Russia's most passionate
romance and most bitter letdown. In this seminar we will read
and think about Russian culture from the 17th to the 20th
centuries through the lens of this obsession. The course will
focus on the transfer of ideas and migrant communities. We will
study the intellectual products of Russian interactions with the
West - constitutional projects, scientific and economic thought,
the Westernizer-Slavophile controversy, and revolutions. We
will consider the presence of European communities in Russia:
German and British migrants who filled important niches in state
service, trade, and scholarship; Italian sculptors and architects
who designed some of Russia's most famous and symbolically
potent monuments; Parisian aristocratic expatriates in the wake
of the French Revolution; Communist workers and intellectuals,
refugees from Nazi Germany; and foreign journalists who, in the
late Soviet decades, trafficked illicit ideas, texts, and artworks.
In the end, we will follow Russians into successive waves of
emigration to Europe and the United States.
Credit 3 units. A&S : TH A&S : IQ , HUM

L93 Hum 360 The Traffic in Women and Contemporary
European Cinema
What binds society together? One of the most influential answers
to this question was offered by French anthropologist Claude
Lévi-Strauss. He argued that the fabric of a society is formed by
a network of exchanges among kinship groups, which circulate
three kinds of objects: economic goods, linguistic signs, and
women. In this course, we will inquire into the place of women in
this argument. We will trace rudiments of the traditional marriage
system (a father figure still "gives away" the bride in the marriage
ceremony), its range of displacements in a global economy
(transnational wives, nannies and domestic servants), the role of
new media in the formation of new systems of trafficking (internet
brides), and the place of the debate on gay marriage within
the larger conversation. We will read texts by Friedrich Engels,
Sigmund Freud, Marcel Mauss, Claude Lévi-Strauss, Gayle
Rubin, Luce Irigaray, Judith Butler, Barbara Ehrenreich and Arlie
Russell Hochschild; and we will watch a number of films that
dramatize the traffic in women in the context of contemporary
Europe: Coline Serreau's Chaos, Lukas Moodisson's Lilja 4-
ever, Cristian Mungiu's Occident, Nilita Vachani's When Mother
comes Home for Christmas, Fatih Akin's Head-on, Jean-Pierre
and Luc Dardenne's The Silence of Lorna.
Credit 3 units. A&S : TH, CD, SD A&S : IQ, HUM, LCD

L93 Hum 370 Women Writers at Court: Japanese Examples
in Comparative Context
Court women in tenth and eleventh century Japan produced
literary works that have dominated the vernacular canon from
their day to the present, a situation without parallel elsewhere in
the premodern world. This course combines readings of poetry,
poetic diaries, and prose narrative by Japanese women with an
exploration of the political, cultural, and social conditions that
permitted women to flourish as writers. We will also consider
characteristics of courtly literature, and issues of gender, genre
and canonically more broadly, drawing on the circumstances and
writings of women in the medieval West for comparison.
Credit 3 units. A&S : TH A&S : IQ, HUM

L93 Hum 3751 Shakespeare's Sonnets: Framing the
Sequence
We will begin by exploring ways of reading a small number of
individual sonnets, proceeding thereafter to think about patterns
of meaning in language and image across broader groupings
and the sequence as a whole. We will investigate the influence
of earlier sonnet tradition, especially Petrarch's sonnets, and the relationship of the poems to modes of sexuality and selfhood. Finally, we will ask how some of Shakespeare's most creative readers--including Wilde, Booth, and Vendler--have responded to the challenges of the Sonnets. Students will work on writing their own commentary on a group of poems.

Credit 3 units.  A&S : TH    A&S : IQ , HUM

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L93 Hum 401 IPH Thesis Prospectus Workshop
Credit -3 unit.  A&S : TH    A&S : IQ, HUM

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L93 Hum 403 Senior Thesis Tutorial
Credit -3 unit.

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L93 Hum 405 Theory and Methods in the Humanities
This course familiarizes advanced undergraduate and graduate students with some of the basic issues in humanistic study. It follows the conversations between Marxist, psychoanalytical, anthropological, historicist, and linguistic approaches. Our work will highlight the boundaries between these fields and identify incursions across them. Some of the questions that will animate our discussions are: what does truth mean in the humanities? What is an object of study and how does one go about identifying it? Is it useful to view the past as a strange country? What is interpretation and what are its procedures? Preference given to Text and Tradition and IPH students.

Credit 3 units.  A&S : TH    A&S : IQ , HUM

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L93 Hum 411 Pastoral Literature: Interdisciplinary Studies in the Humanities, Antiquity
This course will open with a survey of the classical tradition in pastoral/bucolic. We will consider questions of genre, intertextuality and ideology, and we will ask how #the lives and loves of herders# became favored ground for literary meditation on issues of surface and depth, reality and illusion, artifice and sincerity. This portion will involve intensive reading in translation of Theocritus, Vergil and Longus. In the second half of the semester, we will consider the survival, adaptation and deformation of ancient pastoral themes, forms and modes of thought in British and American writing from the 19th and 20th centuries. We will read works of Mark Twain, Kenneth Grahame, Thomas Hardy and Tom Stoppard.

Credit 3 units.  A&S : TH    A&S : IQ, HUM

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L93 Hum 4171 Roman Remains: Traces of Classical Rome in Modern British Literature
This course will examine the use of the Roman textual and material inheritance in poets, novelists and critics of the late nineteenth and twentieth centuries working in Britain, and will ask how modernity addresses the claims of the classical tradition. We will place Thomas Hardy's "Poems of 1912-13" next to Vergil's Aeneid, then survey Hardy's relationship to the visible remainders of Rome and the people it conquered -- roads, barrows, forts -- in the landscape of Dorset. After examining the representation of the Celtic hill-fort in fiction, and the legacy of Vergilian representations of the countryside in poetry, we will consider representations of Rome in light of modern imperialism (Joseph Conrad's Heart of Darkness and Ezra Pound's Homage to Sextus Propertius) and examine the place of Vergil in T. S. Eliot's critical and poetic practice.

Credit 3 units.  A&S : TH    A&S : IQ, HUM

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L93 Hum 419A Economic Life in Modern Social and Cultural Theory
Social and cultural theorists have developed many perspectives on economic life, ranging from actor-network theory to new institutionalism. Yet recent ethnographic work, for instance in consumption studies and in the anthropology of financial markets, has raised all sorts of problems for theorists. Our course will ask whether we really can generalize about economic life and, if so, how far such generalizations might extend into fields such as intimate relations or artistic production. Readings will include work by Bourdieu, Callon, Geertz, Hochschild, Mauss and Zelizer.

Credit 3 units.  A&S : SS    A&S : IQ, SSC

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L93 Hum 419A Senior Colloquium: Interdisciplinary Topics in the Humanities
Credit 3 units.  A&S : TH    A&S : IQ, HUM

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L93 Hum 450 IPH Junior Colloquium: Interdisciplinary Topics in the Humanities
Credit 3 units.  A&S : TH , WI    A&S : IQ , HUM, WI

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L93 Hum 4501 THEORY AND METHODS IN THE HUMANITIES
This course familiarizes advanced undergraduate and graduate students with some of the basic issues in humanistic study. It follows the conversations between Marxist, psychoanalytical, anthropological, historicist, and linguistic approaches. Our work will highlight the boundaries between these fields and identify incursions across them. Some of the questions that will animate our discussions are: what does truth mean in the humanities? What is an object of study and how does one go about identifying it? Is it useful to view the past as a strange country? What is interpretation and what are its procedures?. Same as German 453

Credit 3 units.  A&S : TH    A&S : IQ, HUM, LCD    EN : H

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L93 Hum 455 IPH Senior Colloquium: Interdisciplinary Topics in the Humanities
Credit 3 units.  A&S : TH    A&S : IQ, HUM

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L93 Hum 465 The Pre-History of Blogging: Social Media of the Enlightenment
This course will explore the ways in which the Enlightenment-in France, England, Germany and the US-was shaped by the emergence of new literary forms, media, and technologies
Arts & Sciences

of communication. Like our blogs, Facebook, and e-mail, the eighteenth-century had its new social media—newspapers and literary journals, letters that surged through the national postal systems as well as new social institutions—salons and coffeehouses—that served as forums for public debate. We will examine these novelties in order to investigate the often ambivalent heritage of the Enlightenment: the use of media to exchange knowledge and express dissent; the use of media for surveillance and State control.

Credit 3 units. A&S : TH A&S : IQ, HUM

L93 Hum 476 The Intellectual History of Psychoanalysis
This course will explore the development of psychoanalytic ideas from their beginnings in 19th Century psychiatry to their various permutations in twentieth Century Europe. While it is often assumed by mainstream psychologists that psychoanalytic ideas are outdated and have been superseded by developments in experimental psychology, scholars in the humanities, as well as a growing number in philosophy and in neuroscience, have recently returned to Freud as an exemplar of interdisciplinary innovation and creativity, both inside and outside the clinic. And thus while the course will be largely theoretical and philosophical in its emphasis, charting the theoretical disagreements and revisions of psychoanalysis’ first 50 years that culminated in Jacques Lacan’s famed, and highly controversial ‘return to Freud’ in Paris in 1953, it will also comment implicitly on the current state of psychoanalysis as a clinical practice outside the boundaries of mainstream psychology, a practice increasingly influential on practitioners at the cutting edge of therapeutic and neuropsychological research.

Credit 3 units. A&S : TH A&S : IQ, HUM

L93 Hum 4ABR IPH Coursework Completed Abroad
Credit 3 units.

L93 Hum 460. Independent Studies in the Humanities
Credit 3 units.

L93 Hum 499. Directed Studies in Literature and History
Credit 3 units.

International and Area Studies

International and Area Studies (IAS) offers an interdisciplinary major that allows undergraduate students to develop a broad understanding of the world, while exploring the diversity and richness of other cultures. One of the hallmarks of the contemporary era is the complex relationship between globalization and local differences. New information technologies and worldwide markets connect people, ideas and products throughout the globe. Yet even in this context of globalization, strong attachments to local languages, cultures and societies remain. In some ways, differences among people — whether of government, economy, religion or ethnicity — are becoming more pronounced.

How can we understand these tensions between the global and the local? International and Area Studies courses explore this question in a combination of ways that makes it unique among undergraduate majors at Washington University. IAS is committed to an interdisciplinary perspective that spans the humanities and social sciences and encourages both a contemporary and a historical point of view. It introduces IAS majors to comparative local, international and global perspectives on issues of major import in the 21st century. The major challenges students to master a foreign language as well as the cultural contexts in which the language is spoken, but it also requires study of more than one world area. In addition to conventional course work, IAS offers training in practical skills such as online publishing, web design and team research; encourages exploration of contemporary foreign affairs through speakers, conferences and faculty panels; and provides an introduction to international careers.

The program’s support for foreign study and research is robust given that IAS is responsible for the administration of Overseas Programs. Consequently, IAS majors and minors frequently take advantage of one of Washington University’s overseas programs during the junior year or the summer. The major also encourages students to explore internships with an international focus with an eye to preparing them for careers in the public and private sector, including academia, diplomacy, business, education and law.

There are six concentrations available to IAS majors: (1) IAS with a concentration in Development Studies; (2) IAS with a concentration in Eurasian Studies; (3) IAS with a concentration in European Studies; (4) IAS with a concentration in Global Cultural Studies; (5) IAS with a concentration in Latin American Studies; and (6) IAS with a concentration in Sustainable Development.

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Director, International and Area Studies
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PhD, Johns Hopkins University
(History)

Assistant Provost for International Education, Director of Overseas Programs
Priscilla Stone
Adjunct Associate Professor
PhD, University of Arizona
Program Faculty

Shefali Chandra
Assistant Professor
PhD, University of Pennsylvania
(History, IAS)

Lingchei Letty Chen
Associate Professor
PhD, Columbia University
(East Asian Languages and Cultures)

Seth Graebner
Associate Professor
PhD, Harvard University
(Romance Languages and Literatures, IAS)

Steven Hirsch
Professor of the Practice
PhD, George Washington University
(IAS)

Nate Jensen
Associate Professor
PhD, Yale University
(Political Science)

Tabea Linhard
Associate Professor
PhD, Duke University
(Romance Languages and Literatures, IAS)

Stephen B. Miles
Associate Professor
PhD, University of Washington
(History)

Mabel Moraña
William H. Gass Professor in Arts & Sciences; Director, Latin American Studies
PhD, University of Minnesota
(Romance Languages and Literatures, IAS)

Mikhail Palatnik
Senior Lecturer
MA equivalent, University of Chernovtsy
MA, Washington University
(Russian)

Derek Pardue
Assistant Professor
PhD, University of Illinois–Urbana
(Anthropology, IAS)

Ignacio Sanchéz Prado
Associate Professor
PhD, University of Pittsburgh
(Romance Languages and Literatures, IAS)

Andrew Sobel
Professor
PhD, University of Michigan
(IAS)

Nicole Svobodny
Lecturer
PhD, Columbia University
(Assistant Dean of Arts & Sciences)

Lynne Tatlock
Hortense and Tobias Lewin Distinguished University Professor in the Humanities; Co-Director, European Studies
PhD, Indiana University
(Germanic Languages and Literatures)

Anika Walke
Postdoctoral Fellow
PhD, University of California–Santa Cruz
(IAS)

Lori Watt
Associate Professor
PhD, Columbia University
(History, IAS)

James V. Wertsch
Marshall S. Snow Professor of Arts & Sciences
PhD, University of Chicago
(Anthropology, IAS)

Affiliated Faculty

Endowed Professors

John R. Bowen
Dunbar–Van Cleve Professor in Arts & Sciences
PhD, University of Chicago
(Anthropology)

Paul Michael Lützeler
Rosa May Distinguished University Professor in the Humanities
PhD, Indiana University
(German and Comparative Literature)

Charles R. McManis
Thomas and Karole Green Professor of Law
JD, Duke University
(Law)

Elżbieta Sklodowska
Randolph Family Professor in Arts & Sciences
PhD, Washington University
(Romance Languages and Literatures)

Professors

Lois Beck
PhD, University of Chicago
(Anthropology)

Robert L. Canfield
Arts & Sciences

PhD, University of Michigan
(Anthropology)

Rebecca Copeland
PhD, Columbia University
(East Asian Languages and Cultures)

Lutz Koepnick
PhD, Stanford University
(Germanic Languages and Literatures)

Jeffrey G. Kurtzman
PhD, University of Illinois
(Music)

Stamos Metzidakis
PhD, Columbia University
(Romance Languages and Literatures)

John H. Nachbar
PhD, Harvard University
(Economics)

Glenn Stone
PhD, University of Arizona
(Anthropology)

Akiko Tsuchiya
PhD, Cornell University
(Romance Languages and Literatures)

Carol Camp Yeakey
PhD, Northwestern University
(Education)

Associate Professors

Gaetano Antinolfi
PhD, Cornell University
(Economics)

J. Andrew Brown
PhD, University of Virginia
(Romance Languages and Literatures)

Elizabeth Childs
PhD, Columbia University
(Art History and Archaeology)

Brian Crisp
PhD, University of Michigan
(Political Science)

Matt Erlin
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Marvin Marcus
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(Political Science)

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(History)

Assistant Professors

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PhD, Indiana University
(Anthropology)

Charly Coleman
PhD, Stanford University
(History)

Jennifer Kaczynski
PhD, University of California–Berkeley
(Germanic Languages and Literatures)

Pauline Chen Lee
PhD, Stanford University
(East Asian Languages and Cultures)

Nancy Reynolds
PhD, Stanford University
(History)

Professors Emeriti

Milica Banjanin
PhD, Washington University
(Russian)

Henry W. Berger
PhD, University of Wisconsin
(History)

Pedro C. Cavalcanti
PhD, University of Warsaw
(Anthropology)

Elyane Dezon-Jones
Doctorat de 3e Cycle, University of Paris
(Romance Languages and Literatures)

John F. Garganigo
PhD, University of Illinois
(Romance Languages and Literatures)

George C. Hatch Jr.
PhD, University of Washington
(History)

Steven C. Hause
The Major in International and Area Studies

There are six concentrations available to IAS majors: (1) Development Studies; (2) Eurasian Studies; (3) European Studies; (4) Global Cultural Studies; (5) Latin American Studies; and (6) Sustainable Development.

Elective courses:

- Depending on the concentration, three to four lower-level courses (3 credits each, typically at the 100 or 200 level, may be at 300 or 400 level).
- Depending on the concentration, eight or nine upper-level courses (3 credits each, at the 300 or 400 level).

Regulations:

- Completion of all IAS course work with a grade of C+ or higher; all courses for the major must be taken for a letter grade.
- You must show depth in at least one world area by taking at least two courses in one these world areas and one course in another (Africa, East Asia, Europe, Latin America, Middle East and South Asia).
- You must choose your upper-level course work from a minimum of three academic disciplines (for example, Anthropology, Art History, Economics, Film, History, Literature, Music, Philosophy and Political Science).
- No more than 6 credits may be from a semester of study abroad (9 credits from a year of study abroad, or a semester plus a summer of study abroad) 400-level credits must be earned on campus or in Washington University courses taught abroad).
- For those who do not study abroad, an additional 3 credits at the 300 or 400 level are required.
- No more than 3 credits may be from directed readings, research or internships excluding the honors thesis.
- The advanced credits must be unique to the IAS major.
- If your prime major is IAS, you must participate in a capstone experience. The options are Research and Editorial Methods in International Studies, a Senior Honors Thesis, a Senior Research Project, a Joint Senior Research Project, or an International Studies Portfolio. For more details, please see the IAS Capstone section on capstone experiences.

Additional Information

Language Requirement: All IAS majors and minors must satisfy a foreign language requirement which entails the successful completion of four semesters of a language appropriate to their concentration while at Washington University. For some students, this may mean the first four semesters of a language; for others who place into advanced language classes this may include literature, culture, oral communications and linguistic courses in the target language, once they complete the basic language sequence. Advanced courses in literature, social sciences and culture used to satisfy this requirement may be counted as advanced credit for IAS majors and minors as long as they are cross-listed with IAS or approved for IAS study abroad credit and are not applied toward a language major or minor. A maximum of two of these classes may be completed
while abroad on a Washington University approved program in the target language (may be within the same semester abroad). Native speakers of a foreign language must satisfy the four-semester requirement in another language appropriate to their concentration. Heritage speakers must seek appropriate placement by the coordinator of the language program and complete the four-semester requirement.

Study Abroad: You are strongly encouraged to study abroad in one of Washington University’s overseas programs during your junior year or the summer. Some credit for courses taken abroad may be applied to the major. For those who do not study abroad, an additional 3-credit course at the 300 or 400 level is required.

Senior Honors: You must confidently expect to graduate with an overall GPA of 3.5 or higher. You must have maintained a 3.65 grade point average through the sixth semester in order to qualify for Senior Honors. You should enroll in IAS 485 Preparation for IAS Honors Thesis in the fall of your senior year (under the corresponding section number of the faculty member overseeing your thesis), and in IAS 486 IAS Senior Honors Thesis in the spring of your senior year in order to be properly tracked by the IAS capstone coordinator.

The Minor in International and Area Studies

There are three concentrations available to IAS minors:

1. IAS with a concentration in European Studies (p. 366)
2. IAS with a concentration in Latin American Studies (p. 523)
3. IAS with a concentration in Russian Studies (p. 670)

Additional Information

Language Requirement: All IAS majors and minors must satisfy a foreign language requirement, which entails the successful completion of four semesters of a language appropriate to their concentration while at Washington University. For some students, this may mean the first four semesters of a language; for others who place into advanced language classes this may include literature, culture, oral communications and linguistic courses in the target language, once they complete the basic language sequence. Advanced courses in literature, social sciences and culture used to satisfy this requirement may be counted as advanced credit for IAS majors and minors as long as they are cross-listed with IAS or approved for IAS study abroad credit and are not applied toward a language major or minor. A maximum of two of these classes may be completed while abroad on a Washington University approved program in the target language (may be within the same semester abroad). Native speakers of a foreign language must satisfy the four-semester requirement in another language appropriate to their concentration. Heritage speakers must seek appropriate placement by the coordinator of the language program and complete the four-semester requirement.

Study Abroad: You are strongly encouraged to study abroad in one of Washington University’s overseas programs during your junior year or the summer. Some credit for courses taken abroad may be applied to the minor.

International and Area Studies

L97 IAS 107 A World on the Move: Post-Conflict Migrations

Migration is the human face to our modern era of globalization, entailing incredible costs, risks and returns for migrants along with important consequences for host societies, sending societies and the wider world. This course offers a new perspective on how and why people move by examining general theories and practices of migration and then analyzing various geographic locations, policies and individual experiences through the detailed study of two cases of global movement that occurred after the end of World War II and again after September 11, 2001. While close attention is paid to Europe, as both host and home to many migrants during these two key moments, we also spend time visiting North Africa, the Middle East, South Asia, Latin America and the United States to follow the paths of important migrant groups during these eras. We contextualize the historical factors that led to these migrations, the social and economic consequences of these large movements of people, but spend the bulk of our time looking at the multiple perspectives of peoples involved from migrants themselves (both forced and voluntary), refugees and displaced people, soldiers, government officials from both host and home societies, representatives from the host society and more. Credit 3 units. A&S: TH

L97 IAS 120 An Awakening Giant: Brazil and Its Impact on Globalization

The famous composer Tom Jobim supposedly once said to an inquisitive journalist wondering about the “Brazilian sound” of bossa nova as the new wave of jazz: “Well, you know, Brazil is not for beginners.” This pithy phrase has been used countless times as a way of introducing the complexity of this massive country, Brazil. The professor sees it another way. Brazil is, in fact, perfect for beginners, because Brazil encapsulates the two meanings of the word “awesome.” It is both incredibly cool and beautiful as well as overwhelming and complex. The aesthetic draws the “beginner” in and inspires him/her to want to learn and hopefully become culturally competent in the rest. This class has two goals: (1) link forms of everyday life to the macro-level of Brazilian society and (2) to understand how Brazil has connected and impacted globalization. An example that embodies both goals is soccer. We read and discuss soccer as a way of engaging sports at the level of spectacle (the upcoming World Cup and Olympics in Brazil) and the underlying social fabric of Brazilian hierarchy. Soccer is also the most popular sport around
L97 IAS 125 Migration and the Migrant Experience
Regular migrations of people across international borders continue to perplex governments, policy experts, and human rights advocates. This course uses the lived experiences of the millions of people who have moved and currently move between Mexico and the United States each year to think about migration’s meanings in local, multinational, and global contexts. What does the relocation of individuals, families, and communities tell us about boundaries, nation states and globalization? What does it mean to be a transnational citizen? What is the relevance — and responsibility — of nation states in the new “global” world?
Credit 3 units. A&S : SS, CD, SD A&S : IQ, LCD

L97 IAS 127 Migration in the Global World: Stories
The expression “Stories of Migration” has a variety of meanings. A “story” is a narrative that has a beginning, middle, and an end; an account of imaginary or real people and events told for entertainment, a report of an item of news in a newspaper, magazine or broadcast; or an account of past events in someone’s life or in the development of something. This course is restricted to and required of participants in the International Leadership Program. A story also can be a way to make sense of the world, and, as we discuss throughout the semester, a tool to change the world. This course is based on the premise that in order to shape the future of migration in the global context, it is imperative to understand how stories of migration emerge, are told, passed on, shared, translated, disseminated, collected, challenged, and retold. For these purposes we examine a wide range of stories of migration from the past decade. We experiment with both low-tech and high-tech media in order to come up with different ways to showcase stories of migration, and to assess the actual repercussions that these stories of migration have. While we address migration in the global context, we focus on three regions: the U.S. Mexican border, the Mediterranean, and St. Louis. We study immigrant communities in these different locations and analyze a variety of narrative forms and structures in order to discern the impact that stories of migration have both locally and globally. Course materials include novels, memoirs, journalism, essays, short stories, graphic novels, radio programs, film, and performance pieces. This course is restricted to freshmen in the International Leadership Program.
Credit 3 units. A&S : TH, CD, SD A&S : IQ, LCD

L97 IAS 129 Perspectives on Migration: History, Memory and the Making of Modern Europe
Politicians in several European countries recently declared that “multiculturalism has failed,” emphasizing immigration as the cause of contemporary social and political conflict and denying the historical role of migration on the European continent. However, from Teutonic and Slavic settlement migration in the first 10 centuries AD to recent guest worker programs and immigration from former colonies, encounters between different cultures, religions, and forms of social organization have been a staple of European societies’ development and contributed to producing the continent’s geopolitical map as we know it today. In this course we will trace significant mass movements of people in Europe and the historical and political repercussions of these migrations to try to understand why some migrations are remembered and others are not. We will also study how notions of ‘otherness’ and ‘diversity’ have come to be central points of contention within current discourses in Europe. Primary sources, autobiographical narratives, scholarly analyses and a range of visual material including maps are the basis for class lectures and individual and group work assignments in this course. THIS COURSE IS RESTRICTED TO AND REQUIRED OF PARTICIPANTS IN THE INTERNATIONAL LEADERSHIP PROGRAM.
Credit 3 units.

L97 IAS 140 East Asia in the World
The goal of this course is to provide students with an introduction to East Asia as well as a look at the region’s role in a global setting. The course first covers the geopolitical history of 20th-century East Asia, from its colonial constellation into Cold War nation-states. We then use an interdisciplinary approach to investigate contemporary problems accompanying the emergence of regional economies and institutions. We grapple with the question of when people in East Asia — China, Taiwan, the Koreas and Japan — act as a member of a transnational region and when they act in ideological, national or local terms. We evaluate different disciplinary approaches in order to understand the combination of knowledge and skills necessary for drawing meaningful research conclusions. In reading articles produced by a range of scholars and institutions, the course is also an introduction to the politics of the production of knowledge about East Asia. This course is restricted to freshmen in the International Leadership Program.
Credit 3 units. A&S : TH, CD A&S : IQ, LCD

L97 IAS 1501 Seminar for the International Leadership Program
This seminar, which is restricted to and required of participants in the International Leadership Program, is a continuation of the fall IAS 1502 course. Credit 1 unit.
L97 IAS 1502 Seminar for the International Leadership Program
This seminar, which is restricted to and required of participants in the International Leadership Program, is a companion to the core ILP fall course. The ILP seminar fosters critical thinking, provides leadership opportunities and builds community among students in the program. In seminar, students craft an international awareness campaign and are visited by guest lecturers. Credit 1 unit.

L97 IAS 165C Survey of Latin-American Culture
This class is an introduction to Latin American Studies. By the end of the semester, students are able to recognize some of the main issues in Latin-American politics, history and culture, both in the region at large and in the specific regions and sub-regions within it. Students develop research tools to approach the study of Latin America. The class begin a discussion on the concept of Latin America and then proceed to case studies regarding the cultures of different regions. Prerequisite: None. This class is required of majors and minors in Latin-American Studies and fulfills some requirements of IAS majors. Credit 3 units. A&S : TH , CD A&S : IQ , LCD BU : IS FA : SSP

L97 IAS 208 History, Text and Identity: Introduction to Jewish Civilization
Same as JNE 208F
Credit 3 units. A&S : TH A&S : IQ , HUM BU : ETH , IS FA : SSP

L97 IAS 209B African Studies: An Introduction
Same as AFAS 209B
Credit 3 units. A&S : TH A&S : IQ , HUM , LCD BU : IS FA : SSP

L97 IAS 210C Introduction to Islamic Civilization
Same as JNE 210C
Credit 3 units. A&S : TH A&S : IQ , HUM , LCD BU : ETH, IS FA : SSP

L97 IAS 215C Introduction to Russian Civilization
Same as Russ 215C
Credit 3 units. A&S : TH A&S : IQ , HUM , LCD BU : HUM, IS FA : SSP

L97 IAS 216 Introduction to South Asian Civilization
We begin this course by considering the geographical and social frameworks that defined this area as a coherent region for a variety of travelers, scholars, writers, artists and state-builders. The course next traces conflict and consensus over culture and rule, placing particular emphasis on state-building in the Mughal and British empires. We explore how these empires reshaped political, cultural and religious life in the subcontinent. The rise of nationalism and the simultaneous burst of caste, gender and religious critiques of the notion of “India” dominate the third part of the course. Finally, we turn to developments within and between the independent states of India, Pakistan, Bangladesh and Sri Lanka. Throughout the semester, students conduct independent research on a variety of contemporary topics relating to Empire, South Asian Globalization and the Politics of Knowledge. Credit 3 units. A&S : TH , CD A&S : IQ , HUM , LCD BU : IS

L97 IAS 218 Culinary Citizenship: Food, Identity and Belonging in the 20th Century
If we are what we eat, who are we? In this course we examine the ways in which 20th-century histories of colonialism, nation building and immigration have shaped the identity politics of what people eat today. This course is built around the premise that the production and consumption of food is, and has historically been, intimately related to the politics of identity and belonging. What people eat, and don’t eat, establishes boundaries and borders. In this class we explore how some of these borders have been constructed, particularly the imagination of national cuisines, and how some of these lines have been challenged and crossed by empires and migrant communities. We also use food as a lens to examine the interaction between globalization, markets and local/global identities. The temporal and spatial scope of this class runs from the latter 19th century to the end of the 20th century and span societies from the Americas, Asia and Europe. Credit 3 units. A&S : TH A&S : IQ , HUM

L97 IAS 223 Korean Civilization
Same as Korean 223C
Credit 3 units. A&S : TH, CD

L97 IAS 226C Japanese Civilization
Same as Japan 226C
Credit 3 units. A&S : TH, CD, SD A&S : IQ , HUM , LCD

L97 IAS 260 Migrations in Past and Present: Introduction to Migration Studies
The course, grounded in a multidisciplinary approach, provides an introduction to the study of migration, featuring significant mass movements in the past 150 years and crucial concepts of historical and theoretical analyses of the movement of people. Course units explore continuities, trends and shifts in human migration and migration policy and how they affect individual immigrants’ lives. A variety of sources, such as oral history, films, novels, legal documents and scholarly secondary analysis help students to consider different perspectives on internal...
and international migrations, from the individual migrant to civil society, from political regulation to economic consideration. Throughout the course, students deepen their understanding of migration as a result of social transformation, force or individual choice. We study concepts of the nation-state and citizenship, the political economy of migration, gender, sexuality and migration, and notions of identity and social inclusion more generally to build a sound critique of contemporary discourses on immigration.

Credit 3 units. A&S: TH, CD, A&S: IQ, HUM, LCD

L97 IAS 3024 International Institutions
Same as Pol Sci 3024
Credit 3 units. A&S: SS, A&S: IQ, SSC, BU: IS

L97 IAS 302B Peoples and Cultures of the Middle East
Same as Anthro 302B

L97 IAS 3030 The Taoist Tradition
Same as Re St 303
Credit 3 units. A&S: TH, CD, A&S: IQ, HUM, LCD, BU: ETH

L97 IAS 3033 Global Masculinities
Same as WGSS 3033
Credit 3 units. A&S: SS, CD, A&S: IQ, SSC, LCD, BU: BA

L97 IAS 3034 Christianity in the Modern World
Same as Re St 3031
Credit 3 units. A&S: TH, A&S: IQ, HUM, BU: ETH

L97 IAS 305 Music of the African Diaspora
Same as Music 3021

L97 IAS 3050 Greater Central Asia in Crisis
Same as Anthro 305B

L97 IAS 3053 Anthropology of Tibet and the Himalayas
Same as Anthro 3051
Credit 3 units. A&S: SS, A&S: IQ, SSC, BU: IS

L97 IAS 3055 Contemporary Chinese Culture and Society
Same as Anthro 3055
Credit 3 units. A&S: SS, SD, A&S: IQ, SSC, SD, FA: SSP

L97 IAS 3056 Material Culture in Modern China
Same as Anthro 3056
Credit 3 units. A&S: SS, CD, A&S: IQ, SSC, LCD, FA: SSP

L97 IAS 306 Modern Jewish Writers
Same as Comp Lit 306
Credit 3 units. A&S: TH, A&S: IQ, HUM, BU: HUM

L97 IAS 3060 East Asia Since 1500
Same as History 3060
Credit 3 units. A&S: TH, CD, A&S: IQ, HUM, LCD, BU: IS

L97 IAS 3061 Between Submission and Power: Women and Family in Islam
Same as WGSS 306
Credit 3 units. A&S: SS, CD, BU: ETH, FA: SSP

L97 IAS 3063 Islam, Culture and Society in West Africa
Same as AFAS 3062
Credit 3 units. A&S: SS, CD, A&S: IQ, SSC, LCD

L97 IAS 306B Africa: Peoples and Cultures
Same as Anthro 306B

L97 IAS 3077 The Writing of the Indian Subcontinent
Same as E Lit 307
Credit 3 units. A&S: TH, CD, A&S: IQ, HUM, LCD, BU: HUM, FA: Lit

L97 IAS 3073 The Global War on Terrorism
Same as History 3073
Credit 3 units. A&S: TH, A&S: IQ, HUM

L97 IAS 3081 Topics in Asian American Literature: Identity and Self-Image
Same as E Lit 308
Credit 3 units. A&S: TH, SD, A&S: IQ, HUM, SD, BU: HUM, FA: Lit
L97 IAS 3092 Indigenous Peoples and Movements in Latin America
Same as Anthro 3092
Credit 3 units. A&S : SS, CD, SD A&S : IQ, SSC, LCD BU : ETH FA : SSP

L97 IAS 3093 Anthropology of Modern Latin America
Same as Anthro 3093
Credit 3 units. A&S : SS A&S : IQ, SSC BU : IS FA : SSP

L97 IAS 3094 Politics of the European Union
Same as Pol Sci 3093
Credit 3 units. A&S : SS A&S : IQ, SSC

L97 IAS 3096 Chinese Thought
Same as Re St 3090
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L97 IAS 3097 Confucian Thought: the Sage and Society: Writing-Intensive Seminar
Same as Re St 3092
Credit 3 units. A&S : TH, WI A&S : IQ, HUM, WI

L97 IAS 3101 Ancient Civilizations of the New World
Same as Anthro 310C
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : HUM FA : AH

L97 IAS 311 Buddhist Traditions
Same as Re St 311
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH

L97 IAS 3110 Topics in English and American Literature
Same as E Lit 311
Credit 3 units. A&S : TH A&S : IQ, HUM FA : Lit

L97 IAS 3111 Family, Kinship and Marriage
Same as Anthro 3111
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L97 IAS 3112 French Culture and Civilization: the New Face of France
Same as French 311C
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, LS BU : BA, HUM, IS FA : SSP

L97 IAS 312 Globalization and Gender
Same as WGSS 312
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD BU : IS

L97 IAS 3120 South Asian Traditions
Same as Re St 312
Credit 3 units. A&S : TH, CD

L97 IAS 3124 Race, Caste, Conversion: Social Movements in South Asia
Same as History 3122
Credit 3 units. A&S : TH, CD, SD

L97 IAS 3125 9/11 in World History
Same as History 3124
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L97 IAS 3130 Topics in English and American Literature
Same as E Lit 313
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L97 IAS 3132 Introduction to Comparative Arts
Same as Comp Lit 313E
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L97 IAS 3149 The Late Ottoman Middle East
Same as History 3149
Credit 3 units. A&S : TH, CD, SD A&S : IQ, HUM, LCD BU : IS

L97 IAS 315 Indian Barbie, Asian Tigers and IT Dreams: Politics of Globalization and Development in South Asia
This course explores how South Asia is at the heart of current debates about globalization, development, empire, gender, sexuality and ethnic identity. We raise questions such as: What has lead to sex trafficking in Nepal? Can information technology solve India’s social problems and unemployment? What is biopiracy and how are South Asian activists challenging the global corporatization of world food and water supplies? Readings, films and discussions take us to countries such as Bangladesh, Nepal, Pakistan, Sri Lanka and India.
Credit 3 units. A&S : SS, CD, SD A&S : IQ, SSC, LCD BU : IS

L97 IAS 3150 The Middle East in the 20th Century
Same as History 3150
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<td>Environmental and Energy Issues</td>
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<td>L97 IAS 3356</td>
<td>Out of the Shtetl: Jews in Central and Eastern Europe Between Empire, State and Nation</td>
<td>History 3350</td>
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L97 IAS 3357 China’s Urban Experience: Shanghai and Beyond
Same as East Asia 3352
Credit 3 units. A&S : TH A&S : IQ, HUM

L97 IAS 3360 The Floating World in Japanese Literature
Same as Japan 336
Credit 3 units. A&S : TH CD A&S : IQ, HUM, LCD, SD FA : Lit

L97 IAS 3361 Spanish-American Literature II
Same as Span 336C
Credit 3 units. A&S : TH CD A&S : IQ, HUM, LCD, LS BU : IS FA : Lit

L97 IAS 3371 Modern Eurasia: Afghanistan and Central Asia
Same as History 3371
Credit 3 units. A&S : TH A&S : IQ, HUM

L97 IAS 3373 Law and Culture
Same as Anthro 3373
Credit 3 units. A&S : SS A&S : IQ, SSC, LCD

L97 IAS 3400 History of World Cinema
Same as Film 340
Credit 3 units. A&S : TH CD A&S : IQ, HUM, LCD BU : HUM, IS FA : AH

L97 IAS 3402 German Literature and the Modern Era
Same as German 340C
Credit -4 unit. A&S : TH CD A&S : IQ, HUM, LCD BU : ETH, IS FA : Lit

L97 IAS 3403 Topics in Politics
Same as Pol Sci 340
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L97 IAS 3410 Literature of Early and Imperial China
Same as Chinese 341
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD, SD BU : HUM FA : Lit

L97 IAS 3414 Transnational Cinema(s): Film Flows in a Changing World
Same as Film 341
Credit 3 units. A&S : LA A&S : IQ, HUM

L97 IAS 3415 Early Chinese Art: from Human Sacrifice to the Silk Road
Same as Art-Arch 3415
Credit 3 units. A&S : TH CD A&S : IQ, HUM, LCD EN : H

L97 IAS 342 Literature of Modern and Contemporary China
Same as Chinese 342
Credit 3 units. A&S : TH CD A&S : IQ, HUM, LCD, SD BU : ETH FA : Lit

L97 IAS 343 Text, Memory and Identity
This course explores issues of collective memory and identity through the study of texts such as national myths and official histories taught in schools. The focus is on texts themselves and how they are produced (e.g., by the state, popular culture) and consumed. The course has two components, methodological and analytical. In the first, we read a number of theoretical works devoted to definitions of the text from a historical and structural point of view. In the second, we analyze various key works that have played a crucial role in the formation of communities of memory and identity and the borders that separate them. The course is comparative, multidisciplinary and international in its scope.
Credit 3 units. A&S : TH

L97 IAS 3430 Capitalism, Exchange and Inequality in Africa
Same as AFAS 343
Credit 3 units. A&S : SS, CD, SD A&S : IQ, SSC, LCD

L97 IAS 344 Introduction to European Studies
This course provides an introduction to the study of contemporary Europe through a historical examination of the moments of crisis, and their political and cultural aftermath, that shaped modern Europe and continue to define it today. These crises include: the revolutions of 1848, the advent of 19th-century nationalisms, the Great War, the Spanish Civil War, the rise and defeat of state fascism, the Cold War, the formation of the EEC and Union, May 1968, and the return of right-wing politics. After the study of these traditions, the final portion of the semester considers contemporary Europe since 1991, considering such subjects as Green politics, internal migration and immigration, and the culture of the European Union. This
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<td>L97 IAS 3453</td>
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<td>L97 IAS 3460</td>
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<td>Japanese Literature in Translation II</td>
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<td>L97 IAS 3482</td>
<td>Masterpieces of Literature</td>
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<td>Yidishkayt: Yiddish Literature in English Translation</td>
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<td>The 19th-Century Russian Novel</td>
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<td>Literature of Modern and Contemporary Korea</td>
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<td>Introduction to Postcolonial Literature and Theory</td>
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<td>L97 IAS 3554</td>
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<td>The Politics of Terror: the French Revolution</td>
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<td>L97 IAS 3560</td>
<td>Andean History: Culture and Politics</td>
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<td>Since pre-Columbian times, the central Andean mountain system, combining</td>
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<td>highlands, coastal and jungle areas, has been the locus of multiethnic</td>
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<td>polities. Within this highly variegated geographical and cultural-historical</td>
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<td>space, emerged the Inca Empire, the viceroyalty of Peru — Spain’s core South</td>
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<td>American colony — and the central Andean republics of Ecuador, Peru and</td>
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<td>Bolivia. Taking a chronological and thematic approach, this course examines</td>
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<td>pre-Columbian Andean societies, Inca rule, Andean transformations under</td>
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<td>Spanish colonialism, post-independence nation-state formation, state-Indian</td>
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<td>relations, reform and revolutionary movements, and neoliberal policies and</td>
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<td>the rise of new social movements and ethnic politics. This course focuses</td>
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<td>primarily on the development of popular and elite political cultures, and</td>
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<td>the nature and complexity of local, regional and national power relations.</td>
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<td>Course Code</td>
<td>Course Name</td>
<td>Description</td>
<td>Credit Units</td>
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<tr>
<td>L97 IAS 3562</td>
<td>Russia and the West</td>
<td>Same as Hum 3560</td>
<td>3</td>
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<tr>
<td>L97 IAS 356C</td>
<td>20th-Century Russian History</td>
<td>Same as History 356C</td>
<td>3</td>
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<tr>
<td>L97 IAS 357</td>
<td>The Holocaust in the Sephardic World</td>
<td>The course aims to provide students with a comprehensive understanding of the Holocaust, of its impact on the Sephardic world, of present-day debates on the &quot;globalization&quot; of the Holocaust, and of the ways in which these debates influence contemporary conflicts between Jews, Arabs and Christians in Southern Europe and North Africa. We turn to the history of these conflicts and study the Sephardic diaspora by focusing on the consequences that the 1492 expulsion had within the Iberian Peninsula, in Europe and in the Mediterranean world. We study Sephardic communities in Europe and North Africa and their interactions with Christians and Muslims before World War II. Once we have examined the history of the Holocaust and its impact on the Sephardic world in a more general sense, our readings focus on the different effects of the Holocaust’s “long reach” into Southeastern Europe, the Balkans and North Africa, paying close attention to interactions among Jews, local communities and the Nazi invaders. Finally, we address the memory of the Sephardic experience of the Holocaust and the role of Holocaust commemoration in different parts of the world. We approach these topics through historiographies, memoirs, novels, poetry and film.</td>
<td>3</td>
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<tr>
<td>L97 IAS 3580</td>
<td>Modern Near Eastern Literatures</td>
<td>Same as Comp Lit 358C</td>
<td>3</td>
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<tr>
<td>L97 IAS 3584</td>
<td>Music in the Holocaust: Portrayals in Sound from Past and Present</td>
<td>Same as JNE 3584</td>
<td>3</td>
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<tr>
<td>L97 IAS 359</td>
<td>Topics in European History: Modern European Women</td>
<td>Same as History 359</td>
<td>3</td>
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<tr>
<td>L97 IAS 3593</td>
<td>China–U.S. Relations and the Rise of Asia</td>
<td>Same as East Asia 3593</td>
<td>3</td>
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<tr>
<td>L97 IAS 3594</td>
<td>The Wheels of Commerce: from the Industrial Revolution to Global Capitalism</td>
<td>Same as History 3593</td>
<td>3</td>
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<tr>
<td>L97 IAS 3598</td>
<td>The First World War and the Making of Modern Europe</td>
<td>Same as History 3598</td>
<td>3</td>
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<tr>
<td>L97 IAS 360</td>
<td>Directed Readings in International and Area Studies</td>
<td>These courses are designed to offer a greater breadth for IAS majors in disciplines that typically require prerequisites at the advanced level. To be granted credit toward the IAS major, students must complete additional work as determined by the instructor.</td>
<td>3</td>
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<tr>
<td>L97 IAS 3601</td>
<td>The Traffic in Women and Contemporary European Cinema</td>
<td>Same as Hum 360</td>
<td>3</td>
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<tr>
<td>L97 IAS 361</td>
<td>Culture and Environment</td>
<td>Same as Anthro 361</td>
<td>3</td>
</tr>
<tr>
<td>L97 IAS 3612</td>
<td>Population and Society</td>
<td>Same as Anthro 3612</td>
<td>3</td>
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<tr>
<td>L97 IAS 363</td>
<td>Russian Literature and Opera: Transpositions and Transgressions</td>
<td>This interdisciplinary course surveys the intersections between Russian literature and opera from the 19th century to the present. Literary works in a variety of genres (short stories, narrative poems, plays and novels) by Russian authors (with Pushkin as a clear favorite) have inspired generations of leading Russian composers, resulting in significant operatic adaptations, including Tchaikovsky’s <em>Eugene Onegin</em>, based on Pushkin, Prokofiev’s <em>The Gambler</em>, based on Dostoevsky, and Shostakovich’s <em>The Nose</em>, based on Gogol. For each pairing of author and composer, we read and discuss the literary text before considering the ways in which the original was refined, trimmed and generally transformed for the operatic stage.</td>
<td>3</td>
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</tbody>
</table>


We frequently view opera productions and consider issues of staging, embodiment and fidelity to the original. The broader goal of the class is to consider the possibilities and limits of artistic media, specifically the points of agreement or dissonance between literature and music.

Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD

L97 IAS 364 Anarchism: History, Theory and Praxis
This course analyzes the origins, historical trajectories and influence of anarchism from its classical period (1860s–1930s) until the present. It examines the major personalities, complex ideas, vexing controversies and diverse movements associated with anarcho-collectivism, anarcho-communism, individualist anarchism, anarcho-syndicalism, anarchist feminism, green anarchism, lifestyle anarchism and poststructuralist anarchism. In doing so, it explores traditional anarchist concerns with state power, authority, social inequality, capitalism, nationalism, imperialism and militarism. It also analyzes anarchism’s conception of individual and collective liberation, mutual aid, workers’ organization, internationalism, direct democracy, education, women’s emancipation, sexual freedom and social ecology. Special attention is given to past and contemporary globalizing processes and their relation to the dissemination and reception of anarchism in the global South.
Credit 3 units.  A&S : SS  A&S : IQ, SSC

L97 IAS 3640 Literature and Ethics
Same as Comp Lit 364
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : ETH

L97 IAS 365 Theater Culture Studies III: Melodrama to Modernism
Same as Drama 365C
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : ETH  FA : Lit, SSP

L97 IAS 366 Women and Film
Same as Film 366
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD  BU : HUM

L97 IAS 3670 Gurus, Saints and Scientists: Religion in Modern South Asia
Same as Re St 3670
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD  BU : ETH

L97 IAS 3672 Medicine, Healing and Experimentation in the Contours of Black History
Same as History 3672
Credit 3 units.  A&S : TH, CD, SD  A&S : IQ, HUM, LCD

Same as History 3680
Credit 3 units.  A&S : TH  A&S : IQ, HUM  FA : SSP

L97 IAS 3690 Politics of International Trade
Same as Pol Sci 3690
Credit 3 units.  A&S : SS  A&S : IQ, SSC  BU : IS

L97 IAS 3691 Kill Assessment: An Investigation into Death, Genocide and Other Forms of Violence
Same as Anthro 3691
Credit 3 units.  A&S : SS  A&S : IQ, SSC  BU : BA

L97 IAS 3701 Women Writers at Court: Japanese Examples in Comparative Context
Same as Hum 370
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L97 IAS 373 International Political Economy
Same as Pol Sci 373
Credit 3 units.  A&S : SS  BU : IS  FA : SSP

L97 IAS 3731 History of U.S. Foreign Relations to 1914
Same as History 373
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM, IS  FA : SSP

L97 IAS 374 Russian Literature and Empire
In this course we explore Russian literary works (from the 19th century to the present day) that address issues of empire. We consider the building of the Russian empire during tsarist times with the conquest of Siberia, Ukraine, the Crimea, the Caucasus, Central Asia and the Far East; then we look at the remaking of the Russian empire as the Soviet Union under the “anti-imperialist” communist regime; we conclude with a glance at the legacy of empire in contemporary Russia, with a focus on the Chechen Wars. Some of the topics we discuss include the poetics of space, orientalism, authority and rebellion, imperial bureaucracy, religious identities, migration and deportation, and multiculturalism. We do close readings of works by Pushkin, Lermontov, Gogol, Tolstoy, Chekhov, Babel, Platonov, Iskander, Aitmatov, Petrushevskaya and others. Primary readings are supplemented with critical articles and several films. All readings are in English translation. No prerequisites.
Credit 3 units.  A&S : TH, CD, SD  A&S : IQ, HUM, LCD

L97 IAS 3741 History of U.S. Foreign Relations Since 1950
L97 IAS 3750 Topics in Russian Culture: Madmen or Visionaries? (WI)
Where is the borderline between “insanity” and the “visionary” experience? What is the correlation between madness and creativity? How does the Russian conception of madness compare to the Western one? In general, how do our cultural experiences shape our perception of madness? These are some of the questions we address in this course as we explore the role and representation of madness in Russian culture and literature. Class discussions focus on close readings of formative works by Pushkin, Gogol, Dostoevsky, Tolstoy, Chekhov, Gippius and Nijinsky. These primary literary texts are supplemented by critical and theoretical articles as well as film. This is a Writing-Intensive course; workshops are required. All readings are in English translation. No prerequisites.
Credit 3 units. A&S : TH, CD, WI A&S : IQ, HUM, LCD

L97 IAS 3762 Cinema and Society
Same as French 376C
Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : IS FA : AH

L97 IAS 3775 Ancient Eurasia and the New Silk Roads
Same as Anthro 3775
Credit 3 units. A&S : SS, CD, SD A&S : IQ, SSC, LCD, SD EN : S

L97 IAS 3781 Topics in Politics: Israeli Politics
Same as Pol Sci 3781
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD BU : IS FA : SSP

L97 IAS 3782 Topics in Comparative Politics: Terrorism and Political Violence
Same as Pol Sci 3782
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA

L97 IAS 3783 Modern Art, Theory and Criticism, 1905–1960
Same as Art-Arch 3782
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : AH
Rodríguez), among others. Through these case studies, students not only get snapshots of different “Latin-American Crossings.” The class also tackles the question of new, fluid notions of Latin-American culture and identity, as well as changing notions of race, ethnicity, class and gender, as they are being redefined in the contemporary world. Prerequisite: IAS 165C Survey of Latin-American Culture.
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : IS

L97 IAS 3820 Writing Women of Imperial China
Same as Chinese 382
Credit 3 units. A&S : TH, WI A&S : IQ, HUM, LCD, WI BU : HUM

L97 IAS 3833 Reading the Scores: Understanding Brazilian Music through Social Categories
This course examines Brazilian culture and history through the lens of music and music-making. This final term “music-making” is a key term throughout the semester, as, for the purposes of this course, our interest in music is social and cultural. That is to say, we concern ourselves with sound production as a contextualized social activity, not simply notes and arrangements printed on the page. We discuss various genres of music — from folk to pop to traditional to elite “classical” pieces. Fundamentally speaking, this is a writing-intensive course, which means that we dedicate a significant amount of time and energy to the task of writing (a lot of revising and editing) about music and culture.
Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI BU : IS

L97 IAS 3833 Realism and Impressionism
Same as Art-Arch 3833
Credit 3 units. A&S : TH BU : HUM FA : AH

L97 IAS 3838 Modern Art in Fin-de-Siècle Europe, 1880–1907
Same as Art-Arch 3838
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM

L97 IAS 3834 Migration and Modernity: Human Mobility, Identity and State Formation — Russian/Soviet/post-Soviet Context
This class introduces students to a broad history of 19th- and 20th-century Russia and the Soviet Union alongside problems of migration. In this class, students are introduced to the historical, social and political dimensions of migration within, to and from the Russian Empire, the Soviet Union and its successor states. We look at the intersection of the movement of people with long-term economic, social and political transformations, but also pay attention to crucial events and phenomena of Soviet history that set large-scale migrations in motion. Course materials, for instance, address mass movements related to modernization and internal colonization, analyze the role of revolutionary change and warfare for forced displacement, and study the implications of geopolitical changes in the aftermath of the breakdown of the U.S.S.R. for human rights discourses. Alongside the historically grounded overview, the class explores concepts of citizenship, diaspora, nationality policy, gender specific experiences of migration, and the ethics and political economy of migration politics, thereby highlighting how current trends in Russian society are indicative of broader discourses on difference and social transformation.
Credit 3 units. A&S : TH, CD, SD A&S : IQ, HUM, LCD, SD EN : H

L97 IAS 386 Empire in East Asia: Theory and History (WI)
An introduction to how historians and anthropologists incorporate theoretical insights into their work, this course first “reverse engineers” the main arguments in several insightful books and articles on empire in Asia, all of which are informed by the work of Michel Foucault. Retaining our theoretical knowledge, we then focus on the more empirical aspects of the Japanese empire in Korea, including settler colonialism, the colonial economy, representations of colonialism and the long-term ramifications of empire. We conclude with a general assessment of the history of empire. In these ways, this course seeks to equip students with a knowledge of empire in East Asia in the late 19th and 20th centuries while simultaneously investigating the nature of that knowledge.
Credit 3 units. A&S : TH, CD, WI A&S : IQ, HUM, LCD, WI EN : H

L97 IAS 3875 Dada and Surrealism in Europe and the United States
Same as Art-Arch 3875
Credit 3 units. A&S : TH A&S : IQ, HUM

L97 IAS 3878 Britain and its Empire from 1688 to 1870
Same as History 3878
Credit 3 units. A&S : TH A&S : IQ, HUM BU : IS

L97 IAS 3879 Britain and Its Empire Since 1870
Same as History 3879
Credit 3 units. A&S : TH A&S : IQ, HUM BU : IS

L97 IAS 3880 The Russian Revolution
Same as History 3880
Credit 3 units. A&S : TH, WI A&S : IQ, HUM, WI BU : IS
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>L97 IAS 3881</td>
<td>Women, Men and Gender in Africa</td>
<td>3</td>
<td>A&amp;S: TH, CD, WI; A&amp;S: IQ, HUM, LCD; BU: BA</td>
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<tr>
<td>L97 IAS 3882</td>
<td>Religion and Politics in South Asia</td>
<td>3</td>
<td>A&amp;S: TH, CD, WI; A&amp;S: IQ, HUM, LCD</td>
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<tr>
<td>L97 IAS 3884</td>
<td>Terror and Violence in the Black Atlantic</td>
<td>3</td>
<td>A&amp;S: TH, SS, SD; A&amp;S: IQ, HUM, SD</td>
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<tr>
<td>L97 IAS 3891</td>
<td>East Asia Since 1945: From Empire to Cold War</td>
<td>3</td>
<td>A&amp;S: TH, CD</td>
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<tr>
<td>L97 IAS 3892</td>
<td>Modern Sculpture: Canova to Koons</td>
<td>3</td>
<td>A&amp;S: TH; A&amp;S: IQ, HUM</td>
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<tr>
<td>L97 IAS 3893</td>
<td>Imagining the African Diaspora: Slavery, Black Radicalism and Globalization</td>
<td>3</td>
<td>A&amp;S: TH, CD, SD, WI; A&amp;S: IQ, HUM, LCD</td>
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<tr>
<td>L97 IAS 3894</td>
<td>Topics in Migration and Identity</td>
<td>3</td>
<td>A&amp;S: TH; A&amp;S: IQ, HUM</td>
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<tr>
<td>L97 IAS 3895</td>
<td>South Asian Traditions in Practice: Ritual, Spectacle, Self</td>
<td>3</td>
<td>A&amp;S: TH, CD; A&amp;S: IQ, HUM, LCD; BU: ETH</td>
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<tr>
<td>L97 IAS 3896</td>
<td>Imperialism and Sexuality: India, South Asia and the World: Writing-Intensive Seminar</td>
<td>3</td>
<td>A&amp;S: TH, CD, SD, WI; A&amp;S: IQ, HUM, LCD</td>
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<tr>
<td>L97 IAS 3897</td>
<td>Worldwide Translation: Language, Culture, Technology</td>
<td>3</td>
<td>A&amp;S: LA; A&amp;S: IQ, HUM</td>
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<tr>
<td>L97 IAS 3898</td>
<td>Rivers: A Comparative Approach to Chinese and World History, 1500–1900</td>
<td>3</td>
<td>A&amp;S: TH, CD; A&amp;S: IQ, HUM, LCD; BU: IS; FA: SSP</td>
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<tr>
<td>L97 IAS 3899</td>
<td>To Russia and Return: Travel, Literature and History</td>
<td>3</td>
<td>A&amp;S: TH, WI</td>
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<tr>
<td>L97 IAS 3900</td>
<td>Independent Study</td>
<td>3</td>
<td>Prerequisite: Permission of the director of the International and Area Studies program. All tracks.</td>
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<tr>
<td>L97 IAS 3901</td>
<td>Urban Education in Multiracial Societies</td>
<td>3</td>
<td>A&amp;S: SS, WI; A&amp;S: IQ, SSC, WI</td>
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<tr>
<td>L97 IAS 3902</td>
<td>ANELL Senior Seminar: Translation</td>
<td>3</td>
<td>A&amp;S: TH, CD; A&amp;S: IQ, HUM, LCD</td>
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<tr>
<td>L97 IAS 3903</td>
<td>Interrogating Health, Race and Inequalities: Public Health, Medical Anthropology and History</td>
<td>3</td>
<td>A&amp;S: TH, CD; A&amp;S: IQ, HUM, LCD</td>
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<tr>
<td>L97 IAS 4000</td>
<td>International and Area Studies Portfolio</td>
<td>3</td>
<td>IAS prime majors may choose to fulfill their capstone requirement by producing an International and Area Studies portfolio. This course is restricted to senior IAS majors. You create a multimedia document that synthesizes and presents what you have learned in your IAS major. Specifically, you take two 400-level seminars (at least one of which must be taken in the senior year) in two different departments or programs, and synthesize them in a three- to five-page written statement and a graphical representation in the form of a poster presentation,</td>
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<tr>
<td>L97 IAS 4001</td>
<td>Urban Education in Multiracial Societies</td>
<td>3</td>
<td>A&amp;S: SS, WI; A&amp;S: IQ, SSC, WI</td>
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<tr>
<td>L97 IAS 4002</td>
<td>ANELL Senior Seminar: Translation</td>
<td>3</td>
<td>A&amp;S: TH, CD; A&amp;S: IQ, HUM, LCD</td>
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<tr>
<td>L97 IAS 4003</td>
<td>Interrogating Health, Race and Inequalities: Public Health, Medical Anthropology and History</td>
<td>3</td>
<td>A&amp;S: TH, CD; A&amp;S: IQ, HUM, LCD</td>
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</table>

The course titles and descriptions are listed in a table format, with each course code followed by its name and credit hours. The table also includes the prerequisites for each course.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Restrictions</th>
<th>Cross-Listed Courses</th>
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<tbody>
<tr>
<td>L97 IAS 4033</td>
<td>Topics in East Asian Religion and Thought</td>
<td>3 units</td>
<td>A&amp;S : TH, CD A&amp;S : IQ, HUM</td>
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<tr>
<td>L97 IAS 4034</td>
<td>Culture, Illness and Healing in Asia</td>
<td>3 units</td>
<td>A&amp;S : SS, CD A&amp;S : IQ, SSC, LCD</td>
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<td>L97 IAS 4040</td>
<td>Germany Today</td>
<td>3 units</td>
<td>A&amp;S : TH, CD A&amp;S : IQ, HUM, LCD</td>
<td>BU : IS</td>
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<td>L97 IAS 4041</td>
<td>Islam and Politics</td>
<td>3 units</td>
<td>A&amp;S : SS, CD A&amp;S : IQ, SSC, LCD</td>
<td>BU : IS</td>
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<tr>
<td>L97 IAS 4042</td>
<td>Islam Across Cultures</td>
<td>3 units</td>
<td>A&amp;S : TH, CD A&amp;S : IQ, HUM, LCD, LS</td>
<td>FA : SSP</td>
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<tr>
<td>L97 IAS 4043</td>
<td>Competing Ideologies and Nationalisms in the Arab-Israeli Arena</td>
<td>3 units</td>
<td>A&amp;S : SS A&amp;S : IQ, SSC</td>
<td>BU : IS</td>
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<tr>
<td>L97 IAS 4044</td>
<td>The Politics of Secularism</td>
<td>3 units</td>
<td>A&amp;S : SS A&amp;S : IQ</td>
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<tr>
<td>L97 IAS 4046</td>
<td>Greater Central Asia in Crisis</td>
<td>3 units</td>
<td>A&amp;S : SS, CD A&amp;S : IQ, SSC, LCD</td>
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<tr>
<td>L97 IAS 4050</td>
<td>Diaspora in Jewish and Islamic Experience</td>
<td>4 units</td>
<td>A&amp;S : TH A&amp;S : IQ, HUM</td>
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<tr>
<td>L97 IAS 4070</td>
<td>Global Justice</td>
<td>3 units</td>
<td>A&amp;S : SS A&amp;S : IQ</td>
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<tr>
<td>L97 IAS 4090</td>
<td>Gender, Sexuality and Change in Africa</td>
<td>3 units</td>
<td>A&amp;S : SS, SD A&amp;S : IQ, SSC, SD, WI</td>
<td>FA : SSP</td>
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<td>L97 IAS 4092</td>
<td>Place in Jewish and Islamic Traditions</td>
<td>3 units</td>
<td>A&amp;S : TH, CD A&amp;S : IQ, HUM, LCD</td>
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<td>L97 IAS 4101</td>
<td>German Literature and Culture, 1750–1830</td>
<td>3 units</td>
<td>A&amp;S : TH, CD A&amp;S : IQ, HUM, LCD, LS</td>
<td>FA : Lit</td>
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<tr>
<td>L97 IAS 4102</td>
<td>German Literature and Culture: 1830–1914</td>
<td>3 units</td>
<td>A&amp;S : TH, CD A&amp;S : IQ, HUM, LCD, WI, LS</td>
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L97 IAS 4103 German Literature and Culture: 1914 to the Present: East German Literature after 1989
Same as German 4103
Credit 3 units. A&S : TH, CD, WI A&S : IQ, HUM, LCD, WI, LS FA : Lit

L97 IAS 4104 Studies in Genre
Same as German 4104
Credit 3 units. A&S : TH, CD, WI A&S : IQ, HUM, LCD, WI, LS FA : SSP

L97 IAS 4105 Topics in German Studies
Same as German 4105
Credit 3 units. A&S : TH, CD, WI A&S : IQ, HUM, LCD, WI, LS FA : SSP

L97 IAS 4134 The AIDS Epidemic: Inequalities, Ethnography and Ethics
Same as Anthro 4134
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD

L97 IAS 4140 Readings in Classical Chinese Philosophy
Same as Chinese 414
Credit 3 units. A&S : TH, CD

L97 IAS 4154 Postcolonial South Asia: Nations, Cultures and Identities
Same as History 4154
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD

L97 IAS 417 Topics in African History: Middle Passages: African Americans and South Africa
Same as AFAS 417
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : BA

L97 IAS 4180 Gender and Sexuality in East Asian Religions
Same as Re St 418
Credit 3 units. A&S : TH, CD, SD A&S : IQ, HUM, LCD

L97 IAS 4191 The French Islands: Isles and Exiles: Literature of the Francophone Tropics
Same as French 4191
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

L97 IAS 4192 Tragedy and Farce in African Francophone Literature
Same as French 4192
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

L97 IAS 420 Islam, Immigrants and the Future of European Culture
Coming from Turkey, North and West Africa, Pakistan and elsewhere, Muslim immigrants in Europe are changing what it means to be a European. In the process, they have brought questions of cultural identity into the international media. Examining literature, the press and secondary studies, this writing-intensive course studies the ways in which national governments and institutions have chosen to deal with the arrival of large numbers of Muslims as permanent residents. We consider what the various controversies and prejudices surrounding their presence mean for the future of European culture. Such issues as citizenship, assimilation, the right to cultural difference and the use of cultural and religious symbols are among our major interests. No foreign language background is assumed. Priority is given to IAS majors for this WI course.
Credit 3 units. A&S : TH, WI A&S : IQ, HUM, WI

L97 IAS 4215 Anthropology of Food
Same as Anthro 4215
Credit 3 units. A&S : SS A&S : IQ, SSC

L97 IAS 422 Europe, Questions of Identity and Unity
Nation states and their cultures have been changed by globalization. Within this process, continentalization has played an important role. The European Union is only half a century old, but continental unity has been discussed and demanded by European writers and thinkers for hundreds of years. We read essays on Europe (its identity, its cultural diversity and its cultural roots, contemporary problems and future goals) by writers such as Coleridge, Madame de Staël, Novalis, Chateaubriand, Heine, Nerval, Hugo, Thomas Mann, Ernst Jünger, T.S. Eliot, Klaus Mann, de Madariaga, Kundera, Enzensberger, Frischmuth and Drakulic; we discuss studies reinventing Europe by philosophers such as the Abbé de Saint-Pierre, Kant, Hegel, Nietzsche and Ortega y Gasset; we deal with the mythological figure of Europa and her resurrections in the world of art; we study the Nazarene painters of the early 19th century in Rome and discuss portraits of Bonaparte by French painters of the time. Comparative Literature students meet with the instructor for an additional two hours per month.
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : BA

L97 IAS 4232 Contemporary Issues in Latin America
Same as Pol Sci 4231
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Core Courses (A&amp;S)</th>
<th>Other Courses</th>
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<td>L97 IAS 4240</td>
<td>Latin-American Literature and Theory: Reading the State, Culture and Desire</td>
<td>3</td>
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<td>L97 IAS 4241</td>
<td>Topics in Literature: Modernisms in America</td>
<td>3</td>
<td>TH, IQ, HUM</td>
<td>FA, Lit</td>
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<td>L97 IAS 4242</td>
<td>Social Movements</td>
<td>3</td>
<td>SS, CD, CD</td>
<td>IQ, SSC, LCD, FA, SSP</td>
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<td>L97 IAS 4244</td>
<td>19th- and 20th-Century French Poetry</td>
<td>3</td>
<td>TH, IQ, HUM, LCD</td>
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<td>L97 IAS 4245</td>
<td>Senior Project Seminar</td>
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<td>L97 IAS 4250</td>
<td>Zen Buddhism</td>
<td>3</td>
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<td>L97 IAS 4253</td>
<td>Researching Fertility, Mortality and Migration</td>
<td>3</td>
<td>SS, WI</td>
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<td>L97 IAS 4260</td>
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<td>L97 IAS 4262</td>
<td>Racialization, Engendering and Articulation: Theories of Identity Formation</td>
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<td>L97 IAS 4263</td>
<td>The Erotics of Violence in Latin America</td>
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<td>L97 IAS 4274</td>
<td>Palestine, Israel and the Arab-Israeli Conflict</td>
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<td>L97 IAS 4280</td>
<td>Creative Difference: Reclaiming Spanish-American “Traditional” Novel</td>
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<td>L97 IAS 4281</td>
<td>Comparative Political Parties</td>
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<td>Political Ecology</td>
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<td>L97 IAS 4284</td>
<td>The New Sicilian School</td>
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<td>TH, WI</td>
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<td>L97 IAS 4300</td>
<td>Latin-American Essay</td>
<td>3</td>
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<td>L97 IAS 4301</td>
<td>Print and Power in 19th-Century Latin America</td>
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<td>L97 IAS 4302</td>
<td>Divergent Voices: Italian Women Writers</td>
<td>3</td>
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L97 IAS 4323 Latin-American Poetry II  
Same as Span 432  
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD FA : Lit

L97 IAS 4324 Divergent Voices: Italian Women Writers  
Same as Ital 432  
Credit 3 units. A&S : TH A&S : IQ, HUM LCD, SD FA : Lit

L97 IAS 4325 Global Art Cinema  
Same as Film 432  
Credit 3 units. A&S : TH A&S : IQ, HUM

L97 IAS 4330 Literature of the Italian Enlightenment  
Same as Ital 433  
Credit 3 units. A&S : TH, WI FA : Lit

L97 IAS 4331 Topics in Comparative Politics  
Same as Pol Sci 4331  
Credit 3 units. A&S : SS A&S : IQ, SSC

L97 IAS 4352 Open Economy Macroeconomics  
Same as Econ 435  
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L97 IAS 4362 Local Genders, Global Transformations  
Same as Anthro 4362  
Credit 3 units. A&S : SS FA : SSP

L97 IAS 4363 Sex, Gender and Power  
Same as Anthro 4363  
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD

L97 IAS 4366 Europe’s New Diversities  
Same as Anthro 4366  
Credit 3 units. A&S : SS A&S : IQ, SSC

L97 IAS 4370 Global Feminisms  
Same as WGSS 437  
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD

L97 IAS 4371 Caffe, Cadavers, Comedy and Castrati: Italy and the Age of the Grand Tour

Same as Ital 437  
Credit 3 units. A&S : TH, WI A&S : IQ, HUM, LCD BU : HUM

L97 IAS 4372 Contemporary Korean I: Topics in Korean Literature and Culture  
Same as Korean 437  
Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : IS

L97 IAS 4380 Contemporary Korean II: Topics in Korean Literature and Culture  
Same as Korean 438  
Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : IS

L97 IAS 4382 Aesthetics  
Same as Comp Lit 438  
Credit 3 units. A&S : TH A&S : IQ, HUM FA : AH, SSP

L97 IAS 4392 Capitalism and Culture: New Perspectives in Economic Anthropology  
Same as Anthro 4392  
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD

L97 IAS 4408 Trauma and Memory  
Same as Psych 4408  
Credit 3 units. A&S : SS A&S : IQ, SSC

L97 IAS 4420 Oil Wars: America and the Cultural Politics of Global Energy  
Same as AMCS 442  
Credit 3 units. A&S : SS A&S : IQ, SSC

L97 IAS 4440 Topics in Chinese Language Cinema  
Same as Film 444  
Credit 3 units. A&S : TH A&S : IQ, HUM

L97 IAS 4442 The Jewish Experience in Eastern Europe  
Same as History 4442  
Credit 3 units. A&S : TH, CD FA : SSP

L97 IAS 4446 European Social History: 1750–1930  
Same as History 4446  
Credit 3 units. A&S : TH

L97 IAS 4450 Japanese Fiction  
Same as Japan 445
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<td>L97 IAS 4451</td>
<td>Contemporary Politics in India</td>
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<td>L97 IAS 4472</td>
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<td>L97 IAS 4481</td>
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<td>L97 IAS 4482</td>
<td>Russian History to the 18th Century</td>
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<td>L97 IAS 4485</td>
<td>Topics in Irish Literature</td>
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<td>L97 IAS 449C</td>
<td>Imperial Russia</td>
<td>3</td>
<td>A&amp;S : TH</td>
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<td>L97 IAS 4501</td>
<td>Special Topics in Hispanic Literature and Culture</td>
<td>3</td>
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<td>L97 IAS 4510</td>
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<td>L97 IAS 4517</td>
<td>Anthropology and Development</td>
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<td>L97 IAS 4520</td>
<td>Immigration, Identity and New Technology</td>
<td>3</td>
<td>A&amp;S : TH</td>
<td>A&amp;S : IQ, SSC, SD</td>
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L97 IAS 455 Topics in Korean Literature and Culture
Same as Korean 455
Credit 3 units. A&S : LA, CD A&S : IQ, LCD

L97 IAS 4550 English Novel of the 19th Century
Same as E Lit 456
Credit 3 units. A&S : TH A&S : IQ, HUM FA : Lit

L97 IAS 457 Gender and Modernity in Latin America
The purpose of this course is to introduce students to the particular forms modernity assumes in Latin-American countries and to the ways in which national cultures, identity politics and gender issues interweave during the 20th century. The course discusses three particular articulation of this topic: (1) gender and the national question in Argentina: Eva Peron; (2) gender and visual arts: Frida Kahlo; and (3) gender and ethnicity: Rigoberta Menchu. Through these iconic figures students are introduced to the specific features that characterized three very different but representative cultural scenarios in Latin America. In each case, the context for the emergence of these highly influential public figures is studied from historical, social and cultural perspectives. In order to explore the cultural and political significance of Eva Peron, Frida Kahlo and Rigoberta Menchu, the course uses literary texts (speeches, letters, diaries, etc.), visual materials (photography, films and paintings) and critical bibliography.
Credit 3 units. A&S : TH A&S : IQ, HUM

L97 IAS 4572 Primitivism and Modernity in Latin America
This course is an interdisciplinary approach to a) the critique of modernity in peripheral societies and b) the associated notions of otherness (particularly the ideas of the primitive, the barbarian, the archaic, the savage) that complement the discursive construction of modernity in Latin America. Special emphasis is placed on ethnicity and identity issues and on questions related to the symbolic representation of otherness, alterity, premodernity, exoticism and "the primitive." Since the topic calls for the analysis of the interweaving of aesthetic, ethical and political issues, students are exposed to bibliographical sources that elaborate on philosophical, anthropological and historical problems related to the region. The course is based on a combination of theoretical, critical and literary texts that explore perspectives on/from Latin America in which issues of cultural difference, social inequality, and racial diversity are predominant. Some of the materials analyzed in class are essays, fiction and travel literature, as well as critical and theoretical articles on colonialism, magical realism, modernity and postmodernity. The course is conducted in English.
Credit 3 units. A&S : TH A&S : IQ, HUM

L97 IAS 4581 Bubblegum, Baseball and Boom: Latin-American Cities Go Pop
The goal of this course is two-fold. First, it aims at greater familiarization with urban Latin America vis-à-vis popular culture ("bubblegum"), sports ("baseball") and post-dictatorship/violence literature ("boom"). Second, the course offers a range of theoretical texts in social sciences, cultural studies and literary criticism focused on Latin America empirically but of a larger, more general value. In addition, this is a writing-intensive course, the mechanics of which help structure the nuts-and-bolts of the course. Students are evaluated on how they are able to articulate the ideas and descriptions embedded in the reading material to their own interpretations and their own mini-projects. This is an advanced undergraduate/graduate course, in which students must come prepared to engage in an intense schedule of reading, writing and discussion.
Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI

L97 IAS 4590 Writing North Africa
Same as French 459
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

L97 IAS 460 Postmodern Narratives in Latin America
This course analyzes some critical and theoretical texts on modernity/postmodernity as well as representative novels and films of the post-Boom era that illustrate the topics of urban violence, sexuality and marginality in several Latin-American countries.
Credit 3 units. A&S : TH A&S : IQ, HUM

L97 IAS 461 Latin-American Cultural Studies: Critical and Theoretical Approaches
The goal of the course is to provide students with critical and theoretical tools that could be used for the analysis of Latin-American cultural history from a transdisciplinary perspective, from colonial times to the present. Some of the concepts discussed in class are: colonialism and coloniality, national culture, dependency theory, cultural anthropofagia, lettered city, miscegenation, heterogeneity, hybridity, transculturation, peripheral modernity, media and mediation, postmodernity, postcoloniality and collective memory.
Credit 3 units. A&S : TH A&S : IQ, HUM

L97 IAS 4611 Latin American Populism and Neo-Populism
A salient feature of Latin America in the 20th and early 21st centuries has been the recurrence of populism. Mass-based political and social movements animated by nationalist and reformist impulses dominated Latin American politics in the 1920s, 1930s-’60s, and 1980s to the present. This course provides a general historical and theoretically informed analysis of the origins, internal dynamics and outcomes of classical
to the issues of race, class and gender. The course, which uses historical and geocultural contexts. Particular attention is paid to the development of "high" and "popular" cultures within different cities, the definitions of citizenship, and the role of modernity in discussing the connections between the formation and expansion of urban cultures have had in Latin America, with particular emphasis on contemporary times. The goal of the course is to focus on the key role urban development and the interweaving of "coloniality" and modernity. Prerequisite: IAS 165C Survey of Latin-American Culture.
Credit 3 units. A&S : CD A&S : IQ, HUM, LCD EN : H

**L97 IAS 4615 Caricature: The Culture and Politics of Satire**
Same as Art-Arch 4615
Credit 3 units. A&S : TH A&S : IQ, HUM

**L97 IAS 462 Latin America and the West**
From the perspective of postcolonial theory, the course covers different aspects related to Latin America's cultural history, from the Discovery to the present. Some of the issues discussed in class are: the colonial encounter; Baroque culture and the emergence of Creole societies in the "New World," the connections between Enlightenment and nationalism, as well as the interweaving of "coloniality" and modernity. Prerequisite: IAS 165C Survey of Latin-American Culture or an advanced-level course on Latin America.
Credit 3 units. A&S : TH A&S : IQ, HUM

**L97 IAS 4622 Labor and Labor Movements in Global History**
Moving away from a traditional national approach to labor history, this course seeks to explore the connections between work, types of workers, labor movements and labor politics from a global historical perspective. It focuses on the period from the mid-19th century until the present. Global phenomena such as expanding world trade, international labor markets, industrialization, urbanization, colonialism, imperialism, capital and labor mobility, and the spread of radical ideologies are analyzed to assess their impact on the nature of work, labor organization and workers' collective action. Labor in the global south receive special attention. This course requires no prior knowledge of global labor history. However, some background in labor studies and labor history is recommended.
Credit 3 units. A&S : SD A&S : IQ, SSC, SD EN : S

**L97 IAS 463 Seminar on Urban Cultures in Latin America**
The course focuses on the key role urban development and urban cultures have had in Latin America, with particular emphasis on contemporary times. The goal of the course is to discuss the connections between the formation and expansion of cities, the definitions of citizenship, and the role of modernity in the development of "high" and "popular" cultures within different historical and geocultural contexts. Particular attention is paid to the issues of race, class and gender. The course, which uses an interdisciplinary and comparative approach, also focuses on the phenomena of marginality, cultural resistance, nationalism and consumerism as well as on the role played by the media in contemporary Latin-American societies. Some of the cultural expressions analyzed in the course are music (rock, pop, rap), sports, film and video. Prerequisite: IAS 165C Survey of Latin-American Culture.
Credit 3 units. A&S : TH A&S : IQ, HUM

**L97 IAS 464 Nation and Desire in Latin America**
The purpose of this course is to analyze the process of nation formation in Latin America from the imaginaries of the "Creole nation" to the first half of the 20th century. Class discussion encompasses the study of theories on nation formation and nationalism as well as textual representations of national projects, such as Simon Bolivar's letters and discourses, selections from Facundo, Civilization and Barbarism by Domingo F. Sarmiento; selected texts by Andres Bello, Alfonso Reyes, et al; Ariel, by J.E. Rodo; Pedro Henriquez Urena's Seis ensayos en busca de nuestra expresion; Jose Vasconcelos' La raza cosmica; Jose Carlos Mariategui's Siete ensayos de interpretacion de la realidad peruana; and Jose Marti's "Nuestra America" and other essays. Some of the main topics discussed are the leading role of Creole elites in the consolidation of national cultures, the marginalization of women as well as indigenous and Afro-Hispanic populations, and the role of nationalism in the shaping of modern societies. Colonialism, Occidentalism, liberalism, positivism, nationalism and modernity are some of the concepts that are explored both theoretically and in their particular discursive usages. Finally, the concept of nation(alism) is studied as a political/rhetorical device and as the resulting expression of agency, interest and desire, in peripheral societies.
Credit 3 units. A&S : TH A&S : IQ, HUM

**L97 IAS 4641 Japanese Textual Analysis**
Same as Japan 464
Credit 3 units. A&S : LA A&S : IQ, LCD

**L97 IAS 467 The Chinese Theater**
Same as Chinese 467
Credit 3 units. A&S : TH, CD, SD A&S : IQ, HUM, LCD, SD FA : AH

**L97 IAS 4675 Beyond the Harem: Women, Gender and Revolution**
Same as History 4675
Credit 3 units. A&S : TH, CD, SD A&S : IQ, HUM, LCD BU : BA

**L97 IAS 4700 Readings in Chinese Literature**
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<tr>
<td>L97 IAS 4715</td>
<td>The Last Good Fight: The Spanish Civil War in Culture and History</td>
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<td>L97 IAS 4752</td>
<td>Topics in International Politics</td>
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<td>L97 IAS 4761</td>
<td>Reading Seminar in Chinese Traditional Fiction</td>
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Arts & Sciences

L97 IAS 477 Cultures of Memory in Post-war Germany and Japan
Post-war German and Japanese societies have long grappled with the issue of how to confront and commemorate World War II. This interdisciplinary course, team-taught by specialists in these fields, explores key aspects of postwar culture under four central rubrics: defeat, guilt, memory and renewal. We examine constructions of memory in a diverse range of texts, including historical, literary and cinematic narratives. Several key questions guide our discussions. What is the relationship between perpetration and suffering? How do different cultures represent and repress wartime experience and how do these articulations and omissions shape memory? How are memories of war participation and trauma shared and transmitted across generations? What do we remember and why?.
Credit 3 units. A&S : TH A&S : IQ, HUM

L97 IAS 4770 Reading Seminar in Chinese Traditional Poetry
Same as Chinese 477
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD FA : Lit

L97 IAS 4780 Topics in Buddhist Traditions
Same as Re St 480
Credit 3 units. A&S : TH A&S : IQ, HUM FA : SSP

L97 IAS 4790 Seminar in Religious Studies
Same as Re St 479
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD

L97 IAS 4792 Globalization and National Politics
Same as Pol Sci 4792
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L97 IAS 4794 Core Seminar in East Asian Studies: East Asia in Scholarly Literature
Credit 3 units. A&S : SS A&S : IQ, SSC

L97 IAS 4800 Topics in Buddhist Traditions
Same as Re St 480
Credit 3 units. A&S : TH A&S : IQ, HUM FA : SSP

L97 IAS 481 Reading Seminar in Religion and Chinese Literature
Same as Chinese 481
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD FA : Lit

L97 IAS 4816 Art and Culture in Fin-de-Siècle Europe
Same as Art-Arch 4816
Credit 3 units. A&S : TH FA : AH

L97 IAS 483 Bodily Injuries: Violence, Fear and Representation in Latin America
The course focuses on the definitions, uses and “languages” of violence in Latin America, particularly during the last decades of the 20th century and the beginning of the 21st century. Students are introduced to philosophical, ethical and political issues related to the existence of “structural” violence and to the problems connected to the symbolic representation of this phenomenon in literature, fictional/documentary films and visual arts. One of the course’s objectives is to problematize the conceptualization of violence and to promote critical thinking about its emergence, significance and effects on local/global societies. Some of the topics to be analyzed are the body in its multiple manifestations (the body politic, the social body, the individual body, the treatment of the corpse, etc.), the narrativization of violence (violence as discourse, documentation and fictional elaborations, violence and the media, violence and ideology, etc.), violence and the city, citizenry and otherness, biopolitics, etc. Finally, violence is presented in different contexts and associated to different activities (ordinary crime, narco-cultures, maras, political movements, domestic environments) and different situations (e.g. violence in rural areas, violence in the borders, violence and migration). In all cases, the course calls for a reflection on the interrelations between private/public spheres, gender politics, ideological/aesthetic values and individual/institutional levels. The role of memory and emotions are emphasized as a crucial element for the construction / mobilization of subjectivity and for the elaboration of agendas that challenge the State’s monopoly of legitimate violence and propose alternative and often perverse forms of association and mobilization at the margins of institutional configurations.
Credit 3 units. A&S : TH A&S : IQ, HUM EN : H

L97 IAS 4834 Health, Healing and Ethics: Comparative Perspectives on Sickness and Society
Same as Anthro 4834
Credit 3 units. A&S : IQ, SSC
Same as East Asia 484  
Credit 3 units. A&S : TH, CD  A&S : IQ, HUM, LCD  FA : SSP  

L97 IAS 4842 The Japanese Empire in Asia, 1874–1945  
Same as History 4842  
Credit 3 units. A&S : TH, CD  

L97 IAS 4844 Women and Confucian Culture  
Same as History 4844  
Credit 3 units. A&S : TH  

L97 IAS 485 Preparation for IAS Honors Thesis  
Prerequisites: a GPA of 3.5 at the time of application to the thesis program; the identification of a thesis supervisor; the production of a thesis proposal and critical bibliography; and the approval of the IAS capstone coordinator.  
Credit 3 units.  

L97 IAS 4854 Gauguin in Polynesia: the Late Career  
Same as Art-Arch 4854  
Credit 3 units. A&S : TH  A&S : IQ, HUM  

L97 IAS 4856 French Art and Politics in the Belle Epoque  
Same as Art-Arch 4856  
Credit 3 units. A&S : TH  A&S : IQ, HUM  

L97 IAS 4860 20th-Century Spanish Novel  
Same as Span 486  
Credit 3 units. A&S : TH  A&S : IQ, HUM, LCD  FA : Lit  

L97 IAS 4864 Exoticism and Primitivism in Modern Art  
Same as Art-Arch 4864  
Credit 3 units. A&S : TH  A&S : IQ, HUM  FA : AH  

L97 IAS 4867 The Impressionist Landscape: Style, Place and Global Legacies 1870–1920  
Same as Art-Arch 4867  
Credit 3 units. A&S : TH  A&S : IQ, HUM, LCD  

L97 IAS 4872 Colonial Cities and the Making of Modernity  
Same as History 4872  

L97 IAS 4878 Cold War Cultures, U.S. and Europe, ca. 1945–1955  
Same as Art-Arch 4878  
Credit 3 units. A&S : TH  A&S : IQ, HUM  

L97 IAS 4882 Anthropology and Public Health  
Same as Anthro 4882  
Credit 3 units. A&S : SS  A&S : IQ, SSC  FA : SSP  

L97 IAS 4883 The Political Economy of Health  
Same as Anthro 4883  
Credit 3 units. A&S : SS  A&S : IQ, SSC  FA : SSP  

L97 IAS 4889 Topics in Modern Chinese Literature  
Same as Chinese 489  
Credit 3 units. A&S : TH  A&S : IQ, HUM, LCD  FA : Lit  

L97 IAS 4895 Cities of the Past Future: Literary Institutions & Peripheral Modernity in the Latin-Am. Avant-Garde  
Same as Span 489  
Credit 3 units. A&S : TH  A&S : IQ, HUM, LCD  

L97 IAS 4910 Topics in Islamic Thought  
Same as Re St 490  
Credit 3 units. A&S : TH  A&S : IQ, HUM  

L97 IAS 4912 The Nativist Dimension in Modern Japanese Culture  
Same as East Asia 4911  
Credit 3 units. A&S : TH  A&S : IQ, HUM  

L97 IAS 4914 Advanced Seminar in History: Japan in WWII, History and Memory  
Same as History 4914  
Credit 4 units. A&S : TH  A&S : IQ, HUM, LCD  FA : SSP  

L97 IAS 4918 Postmodernism  
Same as Ital 491  
Credit 3 units. A&S : TH, WI  

L97 IAS 4920 The Italian Detective Novel  
Same as Ital 492  
Credit 3 units. A&S : TH, WI  FA : Lit
L97 IAS 4945 Comparative Lit Seminar: Diverse Topics in Literature
Same as Comp Lit 494
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM

L97 IAS 4952 Seminar in Comparative Literature
Same as Comp Lit 495
Credit 3 units. A&S : TH A&S : IQ, HUM FA : Lit

L97 IAS 495A Research and Editorial Methods in International and Area Studies
This practicum trains IAS majors in the basic scholarly research and editorial methodologies central to the interdisciplinary fields encompassed by International and Area Studies. Students in the class serve as the editorial board for the online IAS Undergraduate Journal and run the IAS undergraduate research conference. Course work covers the interdisciplinary principles of international studies, basic editorial techniques, promotional strategies using conventional and digital media, running the IAS conference, and editing and publishing the Undergraduate Journal. There are guest lectures on editing by professionals in the field. The practicum consists of a two-semester sequence. In the fall, students earn 1 credit for the work involved in planning and promoting the IAS Journal and conference. The substantive course work in the spring brings 3 credits. This course sequence fulfills the capstone requirement for the IAS major for fourth-year students enrolled as senior editors. Interested students must apply for admission to the practicum instructor before the start of the fall semester.
Credit 1 unit.

L97 IAS 495B Research and Editorial Methods in International and Area Studies
This practicum trains IAS majors in the basic scholarly research and editorial methodologies central to the interdisciplinary fields encompassed by International and Area Studies. Students in the class serve as the editorial board for the online IAS undergraduate journal and run the IAS undergraduate research conference. Course work covers the interdisciplinary principles of international studies, basic editorial techniques, promotional strategies using conventional and digital media, running the IAS conference, and editing and publishing the undergraduate journal. There are guest lectures on editing by professionals in the field. The practicum consists of a two-semester sequence. In the fall, students earn 1 credit for the work involved in planning and promoting the IAS Journal and conference. The substantive course work in the spring brings 3 credits. This course sequence fulfills the capstone requirement for the IAS major for fourth-year students enrolled as senior editors. Interested students must apply for admission to the practicum instructor before the start of the fall semester.
Credit 1 unit.

L97 IAS 4970 Guided Readings in Korean
Same as Korean 497
Credit -3 unit. A&S : LA

L97 IAS 4975 Collecting Cultures: Taste, Passion and the Making of Art Histories
Same as Art-Arch 4975
Credit 3 units. A&S : TH A&S : IQ, HUM EN : H

L97 IAS 4977 Advanced Seminar in History: A Long Road to Uhuru and Nation: the Social History of Modern Kenya
Same as History 4977
Credit 4 units. A&S : TH, CD A&S : IQ, HUM, LCD

L97 IAS 4979 Advanced Seminar in History: Gender, Race and Class in South Africa, 1880–Present
Same as History 4979
Credit 4 units. A&S : TH, SD A&S : IQ, HUM, SD

L97 IAS 498 Guided Readings in Chinese
Same as Chinese 498
Credit -3 unit. A&S : LA

L97 IAS 4981 Advanced Seminar in History: Historical Perspectives on Human Rights and Globalization
Same as History 4981
Credit 4 units. A&S : TH A&S : IQ, HUM

L97 IAS 4982 Advanced Seminar in History: Women and Confucian Culture in Early Modern East Asia
Same as History 4982
Credit 4 units. A&S : TH

L97 IAS 4988 Advanced Seminar in History: the French Revolution
Same as History 4988
Credit 4 units. A&S : TH A&S : IQ, HUM

L97 IAS 499 Guided Readings in Japanese
Same as Japan 499
Credit -3 unit. A&S : LA

L97 IAS 4994 Advanced Seminar in History: Religion and Society in Modern Europe, 1750–1930
Concentration in Development Studies (IAS)

The Major in International and Area Studies — Concentration in Development Studies

This track focuses on the challenges of development. Why do some societies develop while others languish? What accounts for disparities in wealth and opportunity in the world? What explains differences in political, civil and economic liberties? What are the implications of such differences? These are more than purely economic puzzles as growth and development create surplus that can be allocated to other tasks. A gap exists between how neoclassical economic theory describes development and empirical observation. History matters. What happens today, or yesterday, can dramatically influence the future. Political and social institutions vary across societies and such difference can influence incentives and behavior. Culture can affect curiosity, propensity for risk-taking, ability to embrace rather than resist change, and attitudes toward change in societies. All these forces can affect economic and political development. This track explores the interaction of politics, history, culture, society and economics as we try to understand what governments and societies do to promote or hinder growth and development, and how those actions influence social arenas.

This track requires 36 units of course work:

• 3 units of introductory political science course work
• 3 units of introductory economics course work
• 3 units of elective introductory course work
• 3 units of research methods course work
• 24 units of advanced course work from a minimum of three academic disciplines (at least three must be at the 400 level)

A single course may satisfy more than one of these distribution requirements. Some of these requirements may be completed while abroad.

Additional requirements:

• Students must fulfill the standard IAS language requirement with a language consistent with their study abroad location and their regional specialization, if feasible (e.g., students who wish to study in Latin America must satisfy their language requirement with either Spanish or Portuguese).
• We strongly encourage students to study abroad. For those students who do not study abroad, an additional 3 unit course at the 300 or 400 level is required.
• Throughout the course of completing the Development Studies major, students must show depth in at least one world area by taking a minimum of two courses focused on the same area, and breadth by taking a third course focused on a different area. We consider world areas to be Africa, East Asia, Europe, Latin America, Middle East and South Asia.
• All prime IAS majors must complete a capstone experience.

Introductory courses:

• Political Science (3 units): Pol Sci 103B International Politics OR Pol Sci 102B Introduction to Comparative Politics
• Economics (3 units): Econ 1011 Introduction to Microeconomics OR Econ 1021 Introduction to Macroeconomics
• Elective (3 units): any of the Political Science or Economics courses listed above OR Anthro 160B Introduction to Cultural Anthropology

These two courses may be substituted for IAS 102B or IAS 104B:

• IAS 314B International Politics
• IAS 328B Gateway to Development

Research methods (choose one from this list, 3 units):

• Econ 413 Introduction to Econometrics
• Math 2200 Elementary Probability and Statistics
• Pol Sci 363 Quantitative Political Methodology
• QBA 120 or 121 Quantitative Business Analysis I or II (Business School)

Advanced courses (choose six courses from current relevant internationally focused course offerings in the following departments*. All courses must be approved by your IAS adviser in order to count for the major):

• African and African-American Studies
• Anthropology
• Applied Statistics
• East Asian Languages and Cultures
• Economics
• Environmental Studies
• History
• International and Area Studies
• Political Science

*Students may petition to have courses in the following departments or disciplines count toward the major: Art History, Film and Media Studies, Literature, Music, Philosophy, and Women, Gender and Sexuality Studies.

Additional Information

Language Requirement for the Major in Development Studies/International and Area Studies: All IAS majors and minors must satisfy a foreign language requirement that entails the successful completion of four semesters of a language appropriate to their concentration while at Washington University. For some students, this may mean the first four semesters of a language; for others who place into advanced language classes this may include literature, culture, oral communications and linguistic courses in the target language, once they complete the basic language sequence. Advanced courses in literature, social sciences and culture used to satisfy this requirement may be counted as advanced credit for IAS majors and minors as long as they are cross-listed with IAS or approved for IAS study abroad credit and are not applied toward a language major or minor. A maximum of two of these classes may be completed while abroad on a Washington University approved program in the target language (may be within the same semester abroad). Native speakers of a foreign language must satisfy the four-semester requirement in another language appropriate to their concentration. Heritage speakers must seek appropriate placement by the coordinator of the language program and complete the four-semester requirement.

Study Abroad: You are strongly encouraged to study abroad in one of Washington University’s Overseas Programs during your junior year or the summer. Some credit for courses taken abroad may be applied to the major. For those who do not study abroad, an additional 3-credit course at the 300 or 400 level is required.

Senior Honors: You must confidently expect to graduate with an overall GPA of 3.5 or higher in order to qualify for Senior Honors. You should enroll in IAS 485 Preparation for IAS Honors Thesis in the fall of your senior year (under the corresponding section number of the faculty member overseeing your thesis), and in IAS 486 IAS Senior Honors Thesis in the spring of your senior year in order to be properly tracked by the IAS capstone coordinator.

Concentration in Eurasian Studies (IAS)

The Major in International and Area Studies — Concentration in Eurasian Studies: New Silk Roads

This track focuses on the social, cultural and economic interconnections among the peoples of Eurasia. We define Eurasia as the vast landmass stretching east/west from China to Europe and north/south from Siberia into the Caucasus, the Crimean Peninsula, Central Asia and the Himalayas. Ancient trade routes that crisscrossed the interior spaces of Europe and Asia, known collectively as the Silk Road, served as a globalizing thoroughfare for the movement of peoples, cultural practices, religious values and commodities. Recent infrastructural improvements in these areas, as well as international economic, environmental and political concerns, have once again opened up transnational economic networks and cross-cultural exchange along these “new silk roads.” For this concentration, students pull from a variety of disciplines to study not only specific geographical regions but also vital intersections and interrelationships among regions and peoples.

This track requires 36 units of course work:

• 3 units of core course work
• 3 to 6 units of introductory course work
• 27 to 30 units of advanced course work from a minimum of three academic disciplines [at least two must be at the 400 level], and dealing with three different regions (Eastern, Western and Central Eurasia) or with a transregional focus.

A single course may satisfy more than one of these distribution requirements. Some of these requirements may be completed while abroad.

Additional requirements:

• Students must fulfill the standard IAS language requirement with Arabic, Chinese, Hebrew, Hindi, Persian, Russian or another Eurasian language as decided in consultation with an IAS adviser.
• We strongly encourage students to study abroad. For those students who do not study abroad, an additional 3-unit course at the 300 or 400 level is required.

• All prime IAS majors must complete a capstone experience.

Core course (3 units):
Anthro 3775 Ancient Eurasia and the New Silk Roads

Introductory courses (choose one to two from this list; 3 to 6 units):
Anthro 204B Anthropology and the Modern World
JINE 210C Introduction to Islamic Civilization
Russ 215C Introduction to Russian Civilization
IAS 216 Introduction to South Asian Civilization
IAS 223 Korean Civilization
Chinese 227C Chinese Civilization

Advanced courses (choose nine to 10 courses from the current internationally focused course offerings in the following areas of study. All courses must be approved by your IAS adviser in order to count for the major):

• Anthropology
  Anthro 3051 Anthropology of Tibet and the Himalayas
  Anthro 3053 Nomadic Strategies and Extreme Ecologies
  Anthro 305B Greater Central Asia in Crisis
  Anthro 3122 From Country to Heavy Metal: Ancient Civilizations of the Old World
  Anthro 4041 Islam and Politics
  Anthro 4243 “Terrorism” and “The Clash of Civilizations”

• Art History
  Art-Arch 3415 Early Chinese Art: From Human Sacrifice to the Silk Road

• History
  History 3124 9/11 in World History
  History 314C Islamic History: 1200–1800
  History 3350 Out of the Shtetl: Jews in Central and Eastern Europe Between Empire, State and Nation
  History 3371 Modern Eurasia: Afghanistan and Central Asia
  History 346C Greek History: The Age of Alexander
  History 356C 20th-Century Russian History
  History 38R8 The Russian Revolution: Writing-Intensive Seminar
  History 39SC Imperialism and Sexuality: India, South Asia and the World: Writing-Intensive Seminar
  History 4154 Postcolonial South Asia: Nations, Cultures and Identities in Transnational Perspective
  History 449C Imperial Russia
  History 49EM Advanced Seminar: the Collapse of Communism

• International and Area Studies

• Literature and Culture
  Chinese 341 Literature of Early and Imperial China
  Russ 350C The 19th-Century Russian Novel (WI)
  IAS 374 Russian Literature and Empire
  IAS 3750 Topics in Russian Culture: Madmen or Visionaries? (WI)
  Comp Lit 390 Lyrics of Mystical Love, East and West

• Political Science
  Pol Sci 4432 Politics of Post-Soviet Countries

• Psychology
  Psych 413 Contemporary Topics in Social Psychology: Intolerance and Prejudice

• Religious Studies
  Re St 311 Buddhist Traditions
  Re St 348 Hindu Traditions
  History 39T8 Sufism: Mystics in Islamic History: Writing-Intensive Seminar

Additional Information

Language Requirement for the Major in Eurasian Studies/International and Area Studies: All IAS majors and minors must satisfy a foreign language requirement that entails the successful completion of four semesters of a language appropriate to their concentration while at Washington University. For some students, this may mean the first four semesters of a language; for others who place into advanced language classes this may include literature, culture, oral communications and linguistic courses in the target language, once they complete the basic language sequence. Advanced courses in literature, social sciences and culture used to satisfy this requirement may be counted as advanced credit for IAS majors and minors as long as they are cross-listed with IAS or approved for IAS study abroad credit and are not applied toward a language major or minor. A maximum of two of these classes may be completed while abroad on a Washington University approved program in the target language (may be within the same semester abroad). Native speakers of a foreign language must satisfy the four-semester requirement in another language appropriate to their concentration. Heritage speakers must seek appropriate placement by the coordinator of the language program and complete the four-semester requirement.

Study Abroad: You are strongly encouraged to study abroad in one of Washington University’s Overseas Programs during your junior year or the summer. Some credit for courses taken abroad
may be applied to the major. For those who do not study abroad, an additional 3-credit course at the 300 or 400 level is required.

**Senior Honors:** You must confidently expect to graduate with an overall GPA of 3.5 or higher in order to qualify for Senior Honors. You should enroll in IAS 485 Preparation for IAS Honors Thesis in the fall of your senior year (under the corresponding section number of the faculty member overseeing your thesis), and in IAS 486 IAS Senior Honors Thesis in the spring of your senior year in order to be properly tracked by the IAS capstone coordinator.

### Concentration in Global Cultural Studies (IAS)

#### The Major in International and Area Studies — Concentration in Global Cultural Studies

This track focuses on the practical and theoretical issues arising from cross-cultural encounters around the world. It studies these both by examining traditional cultural products (literature, film, visual art and music), but also by investigating their broader political and social contexts. This track addresses compelling issues of cultural interchange for students interested in cultures for their own sake, as well as in careers in NGOs and international business and law. It is committed to interdisciplinary approaches to contemporary problems, and students may take courses in the traditional language-and-literature disciplines, as well as in anthropology, art history, film, history, music and philosophy.

This track requires **36 units of course work**:

- 6 units of disciplinary introductions and methods course work
- 6 units of world area course work (any level)
- 24 units of advanced course work from a minimum of three academic disciplines [at least one course must focus on gender, race or class, and at least two must be at the 400 level]

A single course may satisfy more than one of these distribution requirements. Some of these requirements may be completed while abroad.

**Additional requirements:**

- Students must fulfill the standard IAS language requirement with a language consistent with their study abroad location and their regional specialization, if feasible (e.g., students who wish to study in Latin America must satisfy their language requirement with either Spanish or Portuguese).
- We strongly encourage students to study abroad. For those students who do not study abroad, an additional 3 unit course at the 300 or 400 level is required.
- All prime IAS majors must complete a capstone experience.

**Disciplinary introductions and methods** (choose two from this list*: 6 units):

- Music 1021 Musics of the World
- Phil 131 Present Moral Problems
- Anthro 160B Introduction to Cultural Anthropology
- History 164 Introduction to World History: Theory and Practice
- Anthro 204B Anthropology and the Modern World
- Art-Arch 215 Introduction to Modern Art, Architecture and Design
- Film 220 Introduction to Film Studies
- IAS 260 Migrations in Past and Present: Introduction to Migration Studies
- Introduction to Literature courses as appropriate (English, Comp Lit or foreign language)

* Students may petition to have courses that are not listed count for this requirement.

**World area courses:**

Throughout the course of completing the Global Cultural Studies major, students must show **depth** in at least one world area by taking a minimum two courses focused on the same area, and **breadth** by taking a third course focused on a different area. We consider world areas to be Africa, East Asia, Europe, Latin America, Middle East and South Asia.

Of these three courses, one must be at advanced level and will count toward the 24 credits of advanced work needed to complete the major.

The other two courses may be taken at any level; however, if advanced courses are used to fulfill any of these 6 credits, they will not be counted toward the required 24 credits of advanced course work. See below for examples of lower-level classes that may be used to satisfy this requirement.

- IAS 165C Survey of Latin-American Culture
- IAS 208 History, Text and Identity: Introduction to Jewish Civilization
- IAS 209B African Studies: An Introduction
- IAS 210C Introduction to Islamic Civilization
- IAS 215C Introduction to Russian Civilization
- JINE 215C Crossing the Bridge: Modern Turkey in Film and Literature
- IAS 216 Introduction to South Asian Civilization
- IAS 223 Korean Civilization
• IAS 226 Japanese Civilization
• IAS 227 Chinese Civilization

Advanced courses (choose eight courses from current relevant internationally focused course offerings in the following departments. All courses must be approved by your IAS adviser in order to count for the major):
  • African and African-American Studies
  • Anthropology
  • Art History
  • Drama
  • Film and Media Studies
  • History
  • Interdisciplinary Project in the Humanities
  • International and Area Studies
  • Languages and Literatures
  • Music
  • Philosophy
  • Political Science
  • Religious Studies
  • Women, Gender and Sexuality Studies

Additional Information

Language Requirement for the Major in Global Cultural Studies/International and Area Studies: All IAS majors and minors must satisfy a foreign language requirement that entails the successful completion of four semesters of a language appropriate to their concentration while at Washington University. For some students, this may mean the first four semesters of a language; for others who place into advanced language classes this may include literature, culture, oral communications and linguistic courses in the target language, once they complete the basic language sequence. Advanced courses in literature, social sciences and culture used to satisfy this requirement may be counted as advanced credit for IAS majors and minors as long as they are cross-listed with IAS or approved for IAS study abroad credit and are not applied toward a language major or minor. A maximum of two of these classes may be completed while abroad on a Washington University approved program in the target language (may be within the same semester abroad). Native speakers of a foreign language must satisfy the four-semester requirement in another language appropriate to their concentration. Heritage speakers must seek appropriate placement by the coordinator of the language program and complete the four-semester requirement.

Study Abroad: You are strongly encouraged to study abroad in one of Washington University’s Overseas Programs during your junior year or the summer. Some credit for courses taken abroad may be applied to the major. For those who do not study abroad, an additional 3-credit course at the 300 or 400 level is required.

Senior Honors: You must confidently expect to graduate with an overall GPA of 3.5 or higher in order to qualify for Senior Honors. You should enroll in IAS 485 Preparation for IAS Honors Thesis in the fall of your senior year (under the corresponding section number of the faculty member overseeing your thesis), and in IAS 486 IAS Senior Honors Thesis in the spring of your senior year in order to be properly tracked by the IAS capstone coordinator.

Concentration in Sustainable Development (IAS)

The Major in International and Area Studies — Concentration in Sustainable Development

This concentration focuses on the practical challenges and ethical dilemmas the world faces in health, environment, population and uneven development. Students can select from courses in environmental studies, anthropology, history, economics, philosophy, political science, and women, gender and sexuality studies. This concentration is particularly designed for students with an interest in international development policy and practice at the grass-roots level, and students are strongly encouraged to study abroad for a summer or semester in an approved IAS program in the developing world (Africa, Middle East, Latin America and Asia) where they will undertake independent research. Programs offered by the School for International Training (SIT) may be a particularly good fit for this concentration.

This track requires 36 units of course work:
  • 6 to 12 units of introductory course work
  • 24 to 30 units of advanced course work from a minimum of three academic disciplines (at least two must be at the 400 level)

The 36 units must be selected according to the following distribution requirements:
  • 6 units of global health
  • 6 units of environmental/sustainable development
  • 3 units of ethics and justice
  • 3 units of gender studies

In addition, students must show depth in at least one world area by taking a minimum two courses focused on the same area, and breadth by taking a third course focused on a different area. We consider world areas to be Africa, East Asia, Latin America, Middle East and South Asia.
A single course may satisfy more than one of these distribution requirements. Some of these requirements may be completed while abroad.

Additional requirements:
- Students must fulfill the standard IAS language requirement with a language consistent with their study abroad location and their regional specialization, if feasible (e.g., students who wish to study in Latin America must satisfy their language requirement with either Spanish or Portuguese).
- We strongly encourage students to study abroad. For those students who do not study abroad, an additional 3-unit course at the 300 or 400 level is required.
- All prime IAS majors must complete a capstone experience.

Introductory courses (choose two to four from this list; 6 to 12 units):
- Anthro 2048 Anthropology and the Modern World
- Anthro 3283 Introduction to Public Health
- Anthro 3874 International Public Health
- EPSc 111 Introduction to Global Climate Change in the 21st Century
- EPSc 116A Resources of the Earth
- EPSc 201 Earth and the Environment
- EPSc 219 Energy and the Environment
- EPSc 221A Human Use of the Earth
- IAS 218 Culinary Citizenship: Food, Identity and Belonging in the 20th Century
- IAS 260 Migrations in Past and Present: Introduction to Migration Studies
- Phil 131F Present Moral Problems
- Phil 233F Biomedical Ethics
- Phil 235F Introduction to Environmental Ethics
- Pol Sci 2010 Introduction to Environmental Policy
- * WGSS 100B Introduction to Women and Gender Studies
- * WGSS 105 Introduction to Sexuality Studies

*May only be taken as a third or fourth introductory course.

Advanced courses (choose eight to 10 courses from current internationally focused course offerings in the following departments. All courses must be approved by your IAS adviser in order to count for the major):
- African and African-American Studies
- Anthropology
- Comparative Literature
- Earth and Planetary Sciences
- East Asian Languages and Cultures
- Economics
- Environmental Studies
- History
- International and Area Studies
- Philosophy
- Political Science
- Women, Gender and Sexuality Studies

Additional Information

Language Requirement for the Major in Sustainable Development/International and Area Studies: All IAS majors and minors must satisfy a foreign language requirement that entails the successful completion of four semesters of a language appropriate to their concentration while at Washington University. For some students, this may mean the first four semesters of a language; for others who place into advanced language classes this may include literature, culture, oral communications and linguistic courses in the target language, once they complete the basic language sequence. Advanced courses in literature, social sciences and culture used to satisfy this requirement may be counted as advanced credit for IAS majors and minors as long as they are cross-listed with IAS or approved for IAS study abroad credit and are not applied toward a language major or minor. A maximum of two of these classes may be completed while abroad on a Washington University approved program in the target language (may be within the same semester abroad). Native speakers of a foreign language must satisfy the four-semester requirement in another language appropriate to their concentration. Heritage speakers must seek appropriate placement by the coordinator of the language program and complete the four-semester requirement.

Study Abroad: You are strongly encouraged to study abroad in one of Washington University’s Overseas Programs during your junior year or the summer. Some credit for courses taken abroad may be applied to the major. For those who do not study abroad, an additional 3-credit course at the 300 or 400 level is required.

Senior Honors: You must confidently expect to graduate with an overall GPA of 3.5 or higher in order to qualify for Senior Honors. You should enroll in IAS 485 Preparation for IAS Honors Thesis in the fall of your senior year (under the corresponding section number of the faculty member overseeing your thesis), and in IAS 486 IAS Senior Honors Thesis in the spring of your senior year in order to be properly tracked by the IAS capstone coordinator.

Italian

If you’re a lover of ancient Rome or Renaissance Florence, of soccer, pasta or Petrarch, you’ll find something for you in the Italian program. Our undergraduate curriculum affords preparation in language, literature and culture as well as
opportunities for travel and study abroad. We offer a rich variety of courses in Italian language, literature and culture, with particular attention to their relation to history, politics and the arts. Our summer, semester and year-long study abroad programs in the Castelraimondo (Le Marche) and Padua also will enable you to immerse yourself in Italian culture and thereby deepen your understanding of it. The study of Italian will prepare you for a career in international business, international medicine, international law, international relations or diplomacy, as well as in the fine arts and teaching. If you major in Italian and plan to apply to professional schools or to pursue graduate studies in Italian literature, comparative literature, philosophy, history, art history, music, film or other related fields, we encourage you to pursue independent research in your senior year. Writing a senior honors thesis will provide you with a unique opportunity to apply the knowledge you acquire in your courses to a topic of your choosing, through close collaboration with a member of our faculty. In this and all aspects of your preparation we take an active interest in you, providing support and encouragement throughout your studies as you become a dynamic, conscientious and informed member of today’s global community. Nor is our program limited to the courses we teach. We also offer ongoing series of lectures, films and artistic performances, as well as student-organized social activities through ITALO, our student organization, all of which contribute to the intellectually dynamic and personally rewarding social environment of our section. Benvenuti a tutti!

Contact Person: Helene Abrams
Phone: 314/935-5173
E-mail: hcabrams@wustl.edu
Departmental website: http://rll.wustl.edu

For a list of affiliated faculty, please see the Department of Romance Languages and Literatures faculty (p. 666) page.

The Major in Italian

Total units required: 30 units (27 units for second majors).

Required courses:

In Italian, you are required to complete a minimum of 30 units in advanced courses, of which 18 units must be taken in residence; 3 units may be taken outside the department with permission of your major adviser. At least two courses (6 units) must be at the 400 level. (To complete a double major, you are required to complete 27 units.)

For Italian, you are required to complete Ital 307D and Ital 308D, plus two of the following three courses: Ital 323C Italian Literature I, Ital 324C and Ital 327 History of the Italian Language. All primary majors must complete a capstone experience by achieving a B+ or better in one of the 400-level seminars. Students who take Ital 201 or 215 at the university may count it as one course toward the major (out of nine for the second or 10 for the prime).

Additional Information

Study Abroad: You are encouraged to participate in a study abroad program. Programs are available in Padua, Italy, and the Summer Language Institute in Castelraimondo, La Marche region, Italy.

Senior Honors: You are encouraged to work toward Latin Honors (cum laude, magna, summa). To qualify for Latin Honors in the major by thesis, you must complete special literary research and prepare and orally defend an Honors thesis, which is judged by an Honors faculty committee. To qualify for Latin Honors by course work, you must complete four literature courses at the 400 level, including two in language before 1800, and present two critical essays written for those courses to be judged by an honors faculty committee. Recommendations for honors are based on your performance and the quality of the thesis or critical essays, plus your cumulative grade point average.

Transfer Credits: 18 of the 27 units required for the major must be taken in residence. Non-WU courses may count toward the major with departmental permission.

The Minor in Italian

Units required: 18

Required courses:

18 units required, of which 12 must be taken in residence, as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>Ital 307D</td>
<td>Grammar and Composition I</td>
<td>3</td>
</tr>
<tr>
<td>Ital 308D</td>
<td>Grammar and Composition II</td>
<td>3</td>
</tr>
<tr>
<td>Ital 323C</td>
<td>Italian Literature I</td>
<td>3</td>
</tr>
<tr>
<td>Ital 324C</td>
<td>Italian Literature II</td>
<td>3</td>
</tr>
<tr>
<td>Ital 327</td>
<td>History of the Italian Language</td>
<td>3</td>
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</table>

Elective courses: Remainder of units from:

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<th>Course</th>
<th>Title</th>
<th>Units</th>
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<td>Ital 301</td>
<td>Oral Communication I</td>
<td>3</td>
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<td>Ital 319</td>
<td>Advanced Conversational Italian</td>
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<td>Ital 332</td>
<td>Topics in Film Studies: Italian Cinema</td>
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<td>Ital 322</td>
<td>Topics</td>
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Italian

L36 Ital 1015 Introductory Italian for Visual Arts

This course offers an introduction to the study of Italian in an art and art-historical context. Students learn methods of oral communication in everyday situations and a working vocabulary for the visual arts: drawing, painting, sculpture, architecture, photography, the museum, etc. By semester’s end students are
able to talk and write about works of art — either their own or others’ — in Italian.
Credit 4 units. A&S : LA A&S : IQ, LCD, LS

L36 Ital 101D Elementary Italian, Level I
Beginning language program stressing rapid acquisition of spoken ability, with some attention to the development of reading, writing, and listening skills as well. Designed for students with no prior knowledge of Italian or minimal experience in another Romance language.
Credit 4 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L36 Ital 102D Elementary Italian, Level II
Continuation of Ital 101D. Course stresses rapid acquisition of spoken ability with increased attention to the development of reading, writing and listening skills. Prerequisite: Ital 101D or placement by examination.
Credit 4 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L36 Ital 106D Accelerated Beginning Italian I
Designed for students whose previous study of French or Spanish enables them to grasp the principles and rules of Italian grammar more efficiently. Emphasis on all four language skills: speaking, listening, reading, writing. Prerequisites: undergraduates, four years of high school French or Spanish, or French/Span 201D; no prerequisite for graduate students in Romance languages; graduate students in other fields admitted by permission of instructor.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L36 Ital 107D Accelerated Elementary Italian II
Continuation of Italian 106D. Designed for students whose previous study of French or Spanish enables them to grasp the principles and rules of Italian grammar more efficiently. Emphasis on all four language skills: speaking, listening, reading, writing. Prerequisite: Italian 106D or permission of instructor.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : IS

L36 Ital 201D Italian, Level III
This course offers an intensive review of the basics of Italian grammar and introduces new features of Italian necessary for the advancing student. Readings appropriate to the third semester complement the grammar study. Students will speak and write in Italian at all times in an effort to integrate what they have learned. Regular compositions and exams, as well as a final exam. Prereq: Ital 102D or higher.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L36 Ital 215 Conversation/Culture
This course examines popular culture through a focus on what is said and performed. The course consists of thematic units focusing on everyday occurrences and themes that mark the Italian experience, such as conversation in the Italian bar; poignant views of life expressed in films and other media; daily experiences depicted in poems and songs; public and private politics; the role of the meal in real life, art and literature. As students advance through each thematic module, they develop a creative project in which they put into practice (by a skit/presentation/text/art work) what they have learned. Prerequisite: Ital 102D or the equivalent.
Credit 3 units. A&S : LA A&S : IQ, LCD BU : IS

L36 Ital 216 Conversation
A continuation of Ital 215, this course emphasizes the development of speaking skills in Italian through study of aspects of contemporary Italian culture in particular art, music, film and politics.
Credit 2 units.

L36 Ital 247 Freshman Seminar
Taught in English. Small group seminar devoted to readings and study of other texts such as films, paintings, etc.; discussion and writing. Topics vary; interdisciplinary focus.
Credit 3 units.

L36 Ital 249 Refracted Light: How Others View Italy
Throughout the centuries Italy has both enjoyed and suffered the fascinated gaze of foreigners, who have written about it, painted it, made music and films about it. Drawing principally on prose writings from the 18th through the 20th centuries, in such varied genres as the short story, the novel, the mystery novel, travel writing and the memoir, this course examines the images of Italy that non-Italians project. Beyond learning about Italy, students consider their own “idea” of Italy, examine their own frame of reference and cultural biases, interrogate a variety of stereotypes, and ponder how well one can truly understand a place as an outsider or reader. Authors studied include Stendhal, Dickens, James and Forster and Mann, as well as such contemporary writers as Michael Dibdin and Shirley Hazzard.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD BU : HUM

L36 Ital 2991 Undergraduate Independent Study
Prerequisite: Ital 201D and permission of the department. No more than 6 units may be earned by a student.
Credit 3 units.

L36 Ital 301 Oral Communication I
Designed to offer students an opportunity to practice and refine their conversational skills while expanding their practical vocabulary. Wide variety of topics for discussion; brief oral reports. Regular homework assignments with emphasis on web-based research and learning. Prerequisite: Ital 201D.
Italian literature of the 20th century, as well as an array of other include works by authors who are particularly significant to the history and society of contemporary Italy. Readings express themselves in Italian while presenting an overview affiliated. The course focuses on refining students' ability to program in Padua, Italy, with which Washington University is affiliated. The course is taught every year in the Boston University program with Boston University. Credit 4 units.

L36 Ital 319 Advanced Conversational Italian
Designed to offer students with strong proficiency in Italian an opportunity to practice and refine their conversational skills through the study, rehearsal and performance of theatrical scenes or an Italian comedy from the repertoire of such chief literary figures as Machiavelli, Goldoni, Pirandello, Natalia Ginzburg and Dario Fo. Prerequisite: Ital 215 or placement by examination. Credit 3 units. A&S : LA A&S : IQ, LCD BU : IS

L36 Ital 321 Independent Study
Credit -3 unit.

L36 Ital 322 Topics: The Jewish Experience in Italy
This course examines the social and political history of the Jews of Italy from the period of Italian unification through the end of World War II. We look through two different prisms: first, the constant of Jews’ minority status in a Catholic country at a time when Church doctrine was hostile to them, and second, their changing status during significant moments in the brief history of the Italian monarchy. Under the latter rubric, we study the rehabilitation of the Jews under liberal political philosophies, their problematic relationship with Fascism, and finally the arrival of the Holocaust in Italy and efforts to defend Jews against Nazi genocide. We approach these topics wherever possible through primary texts, including essays, memoirs and novels. Reading knowledge of Italian is not required. Readings in English; some readings in Italian for Italian majors. Discussion in English. Three five-page papers. Please note: the Ital 5221 cross-listing course is for graduate students only. Prerequisite for Italian majors: Ital 307D; no prerequisite for students in other majors. Credit 3 units. A&S : TH A&S : IQ, HUM, LCD BU : HUM
**L36 Ital 323W Italian Literature I — Writing-Intensive Seminar**

Introductory survey of Italian literature from its beginnings in the Middle Ages through the late Renaissance. Analysis of the predominant genres: lyric, religious narrative, novella, treatise, chivalric epic. This is a writing-intensive version of the previously offered course Ital 323C. Prerequisite: Ital 201D. Previous or concurrent enrollment in Ital 307D or 308D recommended. Credit 3 units. A&S : TH A&S : IQ, HUM, LCD BU : HUM, IS FA : Lit

**L36 Ital 324W Italian Literature II — Writing-Intensive Seminar**

Framed by the age old questions of Italian national identity and language, this introductory literature course undertakes a chronological survey of the history of Italian literature from the 1600s to the present day. We study select works by major authors, including Galileo Galilei’s “heretical” dialogues, the realistic comedies of Carlo Goldoni, poems and essays by the Romantic poet Giacomo Leopardi, the revolutionary dramas of Luigi Pirandello, the Futurist’s celebration of speed, war and technology in the visual and literary arts, and the postmodern fiction of Italo Calvino. This is a writing-intensive version of the previously offered course Ital 324C. Prerequisite: Ital 201D. Previous or concurrent enrollment in Ital 307D or 308D recommended. Credit 3 units. A&S : TH, WI A&S : IQ, HUM, LS EN : H

**L36 Ital 327 History of the Italian Language**

In this course we trace the evolution of Italian from its very earliest written manifestations to its increasing internationalization in the 20th and 21st centuries. We study the natural evolution of Italian up until the 16th century; its codification as a literary language during the 16th century; the debates over the institution of a national language that coincided with the unification of Italy in the 19th century; the recovery of dialects as literary languages in the 20th century; and the more recent incorporation of words and phrases originating outside of Italy. Along the way we come to understand the reasons why we study a particular form of Italian in school, and we consider the implications of these choices not only for our own learning but for Italian literature and its sense of nationhood. Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, WI, LS

**L36 Ital 332 Topics in Film Studies: Italian Cinema**

The evolution of Italian cinema from its origins to the present. Study of cinematic works and periods from a variety of theoretical perspectives. Specific areas of discussion include: cinema as a revolutionary aesthetic; mass culture vs. high art; early genre; divismo (stardom); the avant-garde; the advent of film sound; the representation of politics and history; neorealism; postwar popular genre; modernism; metacinema; literary adaptation; postmodernism. Discussions are based on works by major Italian filmmakers such as Pastrone, Blasetti, Rossellini, De Sica, Visconti, Fellini, Antonioni, Monicelli, Leone, Pasolini, Bertolucci, Nichetti, Moretti. Some emphasis on the relationship between literature and film. Course conducted in English: Italian majors read in Italian, others in English translation. Two to three hours of film-viewing plus three class hours a week. Taught in English. Prerequisite for Italian majors: Ital 307D or permission of instructor. Credit 3 units. A&S : TH A&S : IQ, HUM, LCD BU : IS FA : AH, Lit

**L36 Ital 334 Topics in Italian Cinema**

A companion to Ital 332, this course focuses on a select topic in the history of Italian cinema, such as the work of a single director or a significant cinematic movement. Course conducted in English. Italian majors read in Italian, others in English translation. Prerequisite for Italian majors: Ital 307D. Prerequisite for nonmajors: Ital 332, Film 220, or permission of instructor. Credit 3 units. A&S : TH BU : IS FA : AH

**L36 Ital 404 Senior Independent Study in Italian**

Prerequisites: senior status; Ital 307D, 308D, 323C, 324C; and permission of instructor. Credit 3 units. A&S : TH

**L36 Ital 419 Feminist Literary and Cultural Theory**

Same as WGSS 419

Credit 3 units. A&S : TH A&S : IQ, HUM

**L36 Ital 428 The New Sicilian School**

The unification of Italy in the mid-19th century led to the creation of a new “Sicilian School,” the first since that of the court poets associated with Frederick II in the 13th century. These new Sicilian writers have given us many narrative masterpieces, focusing on common concerns such as the island’s identity over two millennia and the impact of Italian nationalism; the rise of bourgeois culture and the decline of indigenous patriarchal structures; the rule of law and the role of the Mafia; and the politics of language. We read novels by Verga, Pirandello, Vittorini, Brancati, Tomasi di Lampedusa and Sciascia. Course taught in Italian or English.

Credit 3 units. A&S : TH, WI A&S : IQ, HUM, LCD, FA : Lit

**L36 Ital 430 Divergent Voices: Italian Women Writers**

This course examines select novels and theoretical and political writings by and about Italian women writers from the 17th century to the present day. The aim of the course is to familiarize students with the rich literary production, cultural influence, and artistic and political views of Italian women writers through history. In order for students to understand
the distinct circumstances that influenced the production of these texts, special attention is paid to the historical, political and cultural contexts that influenced authors and their work. A major emphasis is placed on the acquisition of skills of literary analysis by exploring themes, styles and rhetorical and narrative structures. Students are expected to familiarize themselves not only with the primary texts of the course but with secondary sources as well. A workshop environment is encouraged wherein instructor and students work cooperatively toward the realization of course goals. Taught in English.
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM  EN : H

L36 Ital 432 Divergent Voices: Italian Women Writers
This course examines select novels, poetry and political writings by such noted authors as Sibilla Aleramo, Dacia Maraini, Luisa Muraro and Anna Banti. Special attention is paid to the historical, political and cultural contexts that influenced authors and their work. Textual and critical analysis focuses on such issues as historical revisionism in women’s writing, female subjectivity and the origins and development of contemporary Italian feminist thought and practice. Taught in English.
Credit 3 units.  A&S : TH, SD, WI  A&S : IQ, HUM, LCD, SD  FA : Lit

L36 Ital 433 Literature of the Italian Enlightenment
This course aims to explore the spectrum of intellectual and literary discourse of the Italian Enlightenment by examining a wide array of texts and genres. Readings include selections from Enlightenment and popular periodicals, scientific tracts on human anatomy, women’s fashion magazines, the reformed theater of Carlo Goldoni, as well as Arcadian poetry, and literary criticism. We study the rise and characteristics of “coffee culture” during this age. We pay special attention to the “woman question,” which stood at the center of 18th-century Italian intellectual discourse, and which was critical to the contemporary drive to define the enlightened nation-state. The class is conducted as a workshop in which students and instructor collaborate in the realization of course goals. Readings in Italian or English; discussion in English. Prerequisite: Ital 323C or Ital 324C.
Credit 3 units.  A&S : TH, WI  FA : Lit

L36 Ital 437 Caffe, Cadavers, Comedy and Castrati: Italy in the Age of the Grand Tour
Taught in English. With French libertine philosopher the Marquis de Sade, German novelist Johann Wolfgang von Goethe, Romantic poet Lord Byron and other illustrious travelers of high birth and good fortune who sought finishing enrichment by making their Grand Tour to Italy from the mid-18th through the early 19th centuries, we explore the richness and variety of Italian life and culture as depicted by both Grand Tourists as well as their Italian interlocutors. Chief among our destinations are Venice, Bologna, Florence and Rome. Attractions typical of the early modern Tour circumscribe our journey. Coffee houses first appeared in the eighteenth century and, in ways strikingly similar to their function today, became the real and symbolic centers of social, intellectual and civil exchange. We explore 18th-century coffee culture through comedies and Enlightenment and popular journals that took them as their theme, as well as through a study of the coffee houses themselves, a number of which are still in existence. Theaters, concert halls, gaming houses, literary and scientific academies, galleries, churches and universities are part of the standardized itinerary we follow. During the period, anatomy and physiology attained new legitimacy as crucial scientific disciplines and we visit both the anatomical theater at the University of Bologna, where the annual Carnival dissection took place, as well as the first museum of anatomy and obstetrics founded in the Bolognese Institute of Sciences in 1742 by Pope Benedict XIV. We visit archeological excavation sites, in particular Pompeii, first unearthed in 1748. Fashion, an obsessive preoccupation of the day, also is a point of interest in our travels. Through primary and recently published secondary sources we also encounter the remarkable authority of Italian women unmatched anywhere else in Europe at the time. Readings in Italian or English. Prerequisite: at least one 300-level literature course.
Credit 3 units.  A&S : TH, WI  A&S : IQ, HUM, LCD  BU : HUM

L36 Ital 456 Romance Philology
Same as French 456
Credit 3 units.  A&S : LA

L36 Ital 456 Romance Philology
Same as French 456
Credit 3 units.  A&S : LA

L36 Ital 473 Machiavelli and Guicciardini
The development of modern political science in 16th-century Italy. We address questions of both theory and methodology in Machiavelli’s and Guicciardini’s political visions. We also pay close attention to the Florentine context of their work, as well as to the influence of historical examples, both classical and contemporary, in the development of their analyses. Finally, we ask how the examples they set, and the theories they promulgate, can have resonance in addressing political questions in our own age. Readings in Italian or English; discussion in English.
Credit 3 units.  A&S : TH, WI  A&S : IQ, HUM, LCD  BU : HUM

L36 Ital 481 Dante
A study of the Divina commedia with emphasis on the “Inferno.” Conducted in English. Reading knowledge of Italian recommended but not required.
Credit 3 units.  A&S : TH  A&S : IQ, HUM, LCD  FA : SSP

L36 Ital 483 Boccaccio: Decameron
The unrivaled master of late medieval Italian prose, Boccaccio is also a strikingly modern author whose works address such questions as the relationship between literature and history; God
and man; storyteller and audience; gender, language and power; literature and truth. With these and other concerns in mind, we read his masterpiece, the Decameron, a collection of 100 tales set in the Black Plague of 1348. We then contrast it to his late Corbaccio, ostensibly a misogynist novel but a text that finally resists such a flattening judgment. Readings in Italian or English; discussion in English. Prerequisite: 3 units of literature. Credit 3 units. A&S : TH , WI A&S : IQ , HUM , LCD FA : Lit

L36 Ital 485 Ariosto: Orlando Furioso
A close reading of this Renaissance masterpiece with attention to questions of structure and sources, the themes of love and madness, the representation of court life. Readings in Italian or English; discussion in English. Credit 3 units. A&S : TH A&S : IQ , HUM , LCD FA : Lit

L36 Ital 491 Postmodernism
This course explores the complex significance of Italian Postmodernism through an examination of the theoretical arguments and literary works that have shaped the cultural and political debate of the past 50 years. Students study, among others, the critical theories of “open work” (Umberto Eco), “literature as lie” (Manganelli), and “weak thought” (Gianni Vattimo) that developed from the neo–avant-garde movement of the 1960s. Analysis focuses on the novels of four authors who have had a defining influence on Italian postmodern thought and narrative forms: Carlo Emilio Gadda, Italo Calvino, Luigi Malerba and Umberto Eco. Course conducted in English; Italian majors read in Italian, others in English translation. Prerequisite for Italian majors: Ital 307D or permission of instructor. Credit 3 units. A&S : TH

L36 Ital 492 The Italian Detective Novel
The detective novel has an unusual and exceptionally brief history in Italy. Only within the past 35 years has an Italian version or, more precisely, subversion of the genre emerged and come to dominate the Italian literary scene. Prominent Italian writers such as Italo Calvino, Umberto Eco, Leonardo Sciascia and Luigi Malerba have deconstructed the conventions of the detective novel in order to portray the disorder and arbitrary meaning of the postmodern world. This course explores the history of the “anti-detective” novel in Italy and the philosophical and political questions the genre evokes. Readings in Italian and English. Conducted in English. Credit 3 units. A&S : TH, WI FA : Lit

L36 Ital 495 Senior Honors
Prerequisites: senior standing, at least one course at the 400 level, and acceptance into the Honors program. Credit 3 units. A&S : TH

L36 Ital 4951 Honors
Prerequisites: senior standing, at least one course at the 400 level, and acceptance into the Honors program. Credit 3 units. A&S : TH

Japanese
The Department of East Asian Languages and Cultures offers a major and a minor in Japanese Language and Culture. As a major in Japanese, a student can expect to gain proficiency in the language, study the area’s literary and cultural landmarks, and gain familiarity with Asian history and civilizations. All students majoring in Japanese normally must complete the fourth-level modern language course or its equivalent. They also must complete a prerequisite 200-level foundational course, at least one semester of relevant classical literary language, the historical survey of the relevant literature, and the EALC Senior Symposium. The department strongly encourages overseas study during students’ junior year. As majors, students are expected to maintain at least a B– average in all departmental courses.

Language Placement: Placement tests are required for all students entering our language programs, with the exception of those students who have had no previous knowledge of the language and are planning to enroll in the first semester of the first year of instruction. Students who test into second-year Japanese and satisfactorily complete (with a grade of B– or better) at least one semester of language study may petition for 3 units of retroactive credit; students who test into third year or above and satisfactorily complete (with a grade of B– or better) at least one semester of language study may petition for 6 units of retroactive credit. Credit is limited to 3 units for testing into second year and 6 units for testing into third year or above.

Please note that students with native language proficiency as determined by the individual language section, as well as students who enroll in a course below their placement level, are ineligible for retroactive credit units. Students who misrepresent the extent of their background so as to gain entrance to a course at the elementary or intermediate level will be dropped from that course.

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For a list of affiliated faculty, please see the Department of East Asian Languages and Cultures faculty (p. 310) page.
The Major in Japanese Language and Culture

Units required: 27 upper-level (300-level or above) units, no more than 12 of which may be language courses.

Prerequisites:
1. First- and second-level Modern Japanese or the equivalent
2. Japan 226C Japanese Civilization

Requirements:
2. A minimum of one semester of Pre-modern Japanese (Japan 460 Pre-Modern Japanese I or Japan 461 Pre-Modern Japanese II) or the equivalent. Japanese 460 can only be counted as a language course; Japanese 461 may be counted as either a language or a literature course.
4. Three additional upper-level courses in Japanese literature and/or culture
5. A capstone experience. Students may satisfy the capstone requirement in one of two ways, both of which require a presentation in the EALC Senior Symposium in the spring.
   a) Successful completion of a senior honors thesis. This option, which also entitles the student to Latin Honors, requires a minimum of a 3.65 GPA. The thesis is researched and written over two semesters, for a total of 6 units, which are in addition to the 27 upper-level units required for the major.
   b) Successful completion of an approved 400-level seminar course, to be taken in the senior year. (This course may be included among the three additional required upper-level courses for the major.)

Additional Notes
1. Students must earn at least a B– in language courses in order to continue to the next level. They must also maintain at least a B– average in all required courses for the major. Students who do not meet this requirement may either repeat the course(s) in question or earn at least a B– in an approved equivalent course or courses (either during the summer or in a study abroad program).
2. Courses for the major may not be taken Credit/No Credit.
3. Normally, no more than 6 units of transfer or study-abroad non-language courses may be applied to the major.
4. Normally, no more than 3 units of Independent Study may be counted toward the required upper-level 27 units.

The Minor in Japanese Language and Culture

Units required: 18 units, no more than 12 of which may be in language.

Requirements:
1. At least two years of modern Japanese or the equivalent.
2. At least 9 units must be 300-level or above.
3. And the following 3 courses:
   - Japan 226C Japanese Civilization
   - Japan 332C The Classical Voice in Japanese Literature
   - Japan 333C The Modern Voice in Japanese Literature

Additional Information
1. Students must earn at least a B– in their language courses in order to continue to the next level. They must also maintain at least a B– average in all courses taken to fulfill the minor requirements. Students who do not meet this requirement may either repeat the course(s) in question or successfully complete an approved equivalent course or courses (either during the summer or in a study abroad program).
2. Courses for the minor may not be taken Credit/No Credit.
3. Normally, no more than 3 units of transfer or study-abroad non-language courses may be applied to the minor.

Japanese

L05 Japan 103D First-Level Modern Japanese I
An introduction to spoken Japanese following a systematic study of grammatical structures presented in context. Emphasis is on developing skills in oral communication through performance. Students with some previous Japanese language background must take the placement examination.
Credit 5 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L05 Japan 104D First-Level Modern Japanese II
Continuation of Japan 103D. An introduction to spoken Japanese following a systematic study of grammatical structures presented in context. Emphasis is on developing skills in oral communication through performance. Prerequisite: grade of B– or better in Japan 103DQ.
Credit 5 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L05 Japan 213 Second-Level Modern Japanese I
Continued development of communication skills with special emphasis on speaking. Students develop reading/writing skills with an additional 300 kanji during the year. Prerequisite: grade of B– or better in 104DQ or placement by examination.
L05 Japan 214 Second-Level Modern Japanese II  
Continuation of Japan 213. Continued development of communication skills with special emphasis on speaking. Students develop reading/writing skills with an additional 300 kanji during the year. Prerequisite: grade of B– or better in Japan 213 or placement by examination.  
Credit 5 units. A&S: LA A&S: IQ, LCD, LS BU: HUM, IS

L05 Japan 221 Topics in Japanese Literature and Culture  
Credit 3 units. A&S: TH A&S: IQ, HUM, LCD

L05 Japan 225 Topics in Pre-Modern Japanese Literature  
Credit 3 units. A&S: TH

L05 Japan 226C Japanese Civilization  
The development of Japanese culture from antiquity to the present: an overview of Japanese cultural history, focusing on the interplay of crucial aspects of contemporary Japanese society and Japanese social psychology.  
Credit 3 units. A&S: TH, CD A&S: IQ, HUM, LCD

L05 Japan 299 Independent Study  
Prerequisite: Japan 213 and permission of the department.  
Credit -6 unit.

L05 Japan 320C Japan Since 1868  
Same as History 320C  
Credit 3 units. A&S: TH, CD A&S: IQ, HUM, LCD FA: SSP

L05 Japan 324C The Classical Voice in Japanese Literature  
This survey of Japanese literature covers antiquity to the 17th century. Emphasis on the ideological and cultural contexts for the emergence of a variety of traditions, including poetry, diaries, narrative and theater. Required of all Japanese majors and recommended for all Chinese majors. No knowledge of Japanese language is required. Sophomore standing and above recommended.  
Credit 3 units. A&S: TH, CD A&S: IQ, HUM, LCD BU: HUM FA: Lit

L05 Japan 333C The Modern Voice in Japanese Literature  
This survey explores the emerging modern voice in Japanese literature, with emphasis on prose fiction. After a brief introduction to earlier centuries, we focus on the short stories and novels of the 20th century. Among the authors considered are Natsume Soseki, Nagai Kafu, Tanizaki Jun'ichiro and Nobel laureates Kawabata Yasunari and Oe Kenzaburo. Discussions center on issues of modernity, gender and literary self-representation. Required of all Japanese majors and recommended for all Chinese majors. No knowledge of Japanese language required.  
Credit 3 units. A&S: TH, CD A&S: IQ, HUM, LCD BU: ETH FA: Lit

L05 Japan 336 The Floating World in Japanese Literature  
This survey of Japanese literature covers the 17th to the 19th century. Primary focus is on the Genroku era (1688–1703), which witnessed the growth of lively urban centers and the emergence of a robust literary voice. Emphasis on the ideological and cultural contexts for the development of a variety of new innovations in the genres of poetry (haiku), theater (kabuki and bunraku) and prose (kana zoshi). Recommended for both Japanese and Chinese majors. No knowledge of Japanese language is required. Sophomore standing and above recommended.  
Credit 3 units. A&S: TH, CD, SD A&S: IQ, HUM, LCD, SD FA: Lit

L05 Japan 346 Japanese Literature in Translation II  
Credit 3 units. A&S: TH, CD, SD A&S: IQ, HUM, LCD, SD

L05 Japan 370 Women Writers at Court: Japanese Examples in Comparative Context  
Same as Hum 370  
Credit 3 units. A&S: TH A&S: IQ, HUM

L05 Japan 412 Third-Level Modern Japanese I  
Emphasis on further development of speaking, listening, reading and writing skills. Prerequisite: grade of B– or better in Japan 214 or placement by examination. Credit 4 units for undergraduates, 3 units for graduate students.  
Credit -4 unit. A&S: LA A&S: IQ, LCD, LS BU: IS

L05 Japan 413 Third-Level Modern Japanese II  
Continuation of Japan 412. Emphasis on further development of speaking, listening, reading and writing skills. Prerequisite:
minimum grade of B– in Japan 412 or placement by examination. Credit 4 units for undergraduates, 3 units for graduate students.
Credit -4 unit. A&S : LA A&S : IQ, LCD, LS BU : IS

L05 Japan 445 Japanese Fiction: Writing-Intensive Seminar
A study of the themes, styles and genres of Japanese fiction as revealed in representative works of major authors such as Soseki, Tanizaki and Kawabata. Topics include the question of the Japanese literary canon, the varieties of Japanese literary selfhood, literature by and about women, and tradition versus modernity. All works read in English translation. Prerequisites: junior standing and 6 units of literature.
Credit 3 units. A&S : TH, CD, WI A&S : IQ, HUM, LCD, WI FA : Lit

L05 Japan 4451 Topics in Modern Japanese Literature
Prerequisites: junior standing and 6 units of literature.
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L05 Japan 446 The Japanese Theater
An investigation, using English materials, of the major developments and forms of the Japanese theater, from Noh and its antecedents to the rise of a modern drama. In this course we are less concerned with the performative aspects of theatrical arts (though these are introduced via videos) than with the ways in which dramatic texts influenced and borrowed from the literary tradition. Readings from major theatrical texts, secondary studies on Japanese theater, and literary sources. Prerequisite: junior standing or permission of instructor.
Credit 3 units. A&S : TH, CD, WI FA : Lit

L05 Japan 448 Japanese Poetry
A comprehensive survey of Japanese poetry from the 8th century to the present day. Topics include the development of the great tradition of court poetry in the Heian period (ca. 800–1200) and its full flowering during the medieval period (ca. 1200–1600), the influence of the Zen aesthetic, the emergence of linked verse and haiku, and the transformation of the classical tradition with the advent of the modern era. All works are read in English translation, although knowledge of Japanese is useful. Graduate students and Japanese majors are expected to read original materials extensively. Prerequisites: junior standing and 6 units of literature course work.
Credit 3 units. A&S : TH FA : Lit

L05 Japan 449 Modern Japanese Women Writers: Madame Butterfly’s Delinquent Daughters
Japanese women have been scripted by Western (male) imagination as gentle, self-effacing creatures. From their (re)emergence in the late 19th century to their dominance in the late 20th, Japanese women writers have presented an image of their countrywomen as anything but demure. Struggling to define their voices against ever-shifting expectations and social contexts, the women they create in their fiction are valiant, if not at times violent. This course examines the various manifestations of the female image in female-authored modern Japanese fiction. Writers considered are Higuchi Ichiyo, Hirabayashi Taiko, Uno Chiyo, Enchi Fumiko, Yamada Eimi and others. A selection of novels and shorter fiction are available in English translation, and students need not be familiar with Japanese. Prerequisites: 6 units of literature/women’s studies and junior standing, or permission of the instructor.
Credit 3 units. A&S : TH, CD, SD, WI A&S : IQ, HUM, LCD, SD, WI BU : HUM

L05 Japan 458 Fourth-Level Modern Japanese I
Mastery of more sophisticated skills in spoken and written Japanese. Newspaper articles, editorials, essays, short stories, etc., are selected for readings and discussions in accordance with the interests and needs of participating students. Prerequisite: grade of B– or better in Japan 412 or placement by examination.
Credit 4 units for undergraduates, 3 units for graduate students.
Credit -4 unit. A&S : LA A&S : IQ, LCD, LS BU : IS

L05 Japan 459 Fourth-Level Modern Japanese II
Continuation of Japan 458. Mastery of more sophisticated skills in both spoken and written Japanese. Newspaper articles, editorials, essays, short stories, etc., are selected for readings and discussions in accordance with the interests and needs of participating students. Required of all students desiring subsequent tutorial assistance from the Department. Prerequisite: grade of B– or better in Japan 458 or placement by examination. Credit 4 units for undergraduates, 3 units for graduate students.

L05 Japan 460 Pre-Modern Japanese I
Readings in classical literary texts using materials from standard modern annotated editions. Kambun introduced in second semester. Prerequisite: Japan 412-413 or concurrent registration.
Credit 3 units. A&S : LA A&S : IQ, LCD

L05 Japan 461 Pre-Modern Japanese II
A continuation of Japan 460. Readings in classical literary texts using materials from standard modern annotated editions as well as the introduction of skills necessary for reading original texts, including kambun and hentaigana. Prerequisites: Japan 413 or concurrent registration; Japan 460 or equivalent.
Credit 3 units. A&S : LA A&S : IQ, LCD

L05 Japan 462 Fifth-Level Modern Japanese I
A course intended for students with advanced proficiency in written and spoken Japanese who have had extensive study experience in Japan. The course objectives are: to achieve mastery of communication skills, to deepen understanding of Japanese structural patterns, and to expand vocabulary and control of idiomatic expressions. Emphasis on readings in contemporary texts and extensive practice with different styles of oral discourse. Class conducted exclusively in Japanese. Required of all students who wish to do subsequent independent study or guided readings in Japanese. Prerequisite: successful completion of Japan 459 (minimum grade of B–) or placement by written and oral examinations. Credit 3 units. A&S : LA A&S : IQ, LCD BU : IS

L05 Japan 463 Fifth-Level Modern Japanese II
A course intended for students with advanced proficiency in Japanese who have had extensive study experience in Japan. Emphasis on improving skills in both written and spoken Japanese acquired in Japan 462. Class conducted exclusively in Japanese. Prerequisite: grade of B– or better in Japan 462 or placement test in written and spoken Japanese. Credit 3 units. A&S : LA A&S : IQ, LCD

L05 Japan 464 Japanese Textual Analysis
This course introduces the advanced student of Japanese to a variety of prose narratives in the modern language. Readings, which include literary texts and topical essays on aspects of Japanese society and culture, reflect the needs and interests of the enrolled students. Focus is on close reading and syntactic analysis of the selected texts. Regular translation exercises gauge the mastery of grammar, syntax and idiomatic usages. All readings are in Japanese, with class discussion conducted predominantly in English. A final translation project, chosen by the student in consultation with the instructor, is required. Prerequisite: Japan 458 or instructor’s permission. Credit 3 units. A&S : LA A&S : IQ, LCD

L05 Japan 466 Legal and Business Japanese
An intensive exposure to legal and business texts in Japanese, with the aim of developing reading fluency in these areas and mastering the requisite specialized vocabulary. Of particular interest to students in the joint J.D.–M.A. and dual M.B.A.–M.A. programs, but open to all students with advanced proficiency in written and spoken Japanese. Prerequisite: Japan 459 or permission of instructor based on placement examination. Credit 3 units. A&S : LA BU : IS

L05 Japan 471 Topics in Japanese Culture
Same as East Asia 471
Credit 3 units. A&S : TH A&S : IQ, HUM FA : SSP

L05 Japan 486 Independent Work for Senior Honors
This course is taken in the fall semester. Prerequisites: senior standing, eligibility for honors, and permission of the department. Credit 3 units.

L05 Japan 487 Independent Work for Senior Honors
This course is taken in the spring semester. Prerequisites: senior standing, eligibility for honors, and permission of the department. Credit 3 units.

L05 Japan 4911 The Nativist Dimension in Modern Japanese Culture
Same as East Asia 4911
Credit 3 units. A&S : TH A&S : IQ, HUM

L05 Japan 499 Guided Readings in Japanese
Prerequisites: senior standing and permission of the instructor and the department chair. Course usually taken after successful completion of Japan 459. May be repeated once. Credit -3 unit. A&S : LA

Jewish, Islamic and Near Eastern Languages and Cultures
The Department of Jewish, Islamic and Near Eastern Languages and Cultures (JINELC) is devoted to the study of Jewish, Islamic and Near Eastern languages and literatures; the history and cultures of the Near East; and the Jewish and Islamic civilizations, both individually and comparatively. Its integrated curriculum offers a focal point for cross-cultural academic exchange that highlights the shared experiences and mutual influences of the two civilizations while paying close attention to the historical context of social change and cultural production. The members of the faculty conduct their research and teaching through a wide array of methodologies and disciplinary approaches and offer courses in language, literature, history, religion, politics and culture.

The department is cross-disciplinary in character, with an emphasis on literary, historical and religious studies. It houses nationally recognized language and literature programs in Arabic, Hebrew, Persian and Hindi/Urdu, which are available as independent undergraduate degree programs. It also features distinctively intertwined interdisciplinary undergraduate majors in Jewish, Islamic and Near Eastern Studies. In addition to undergraduate majors and minors, the department currently offers M.A. programs in Jewish Studies and in Islamic and Near Eastern Studies, and it plans to mount its own Ph.D. programs in the near future.
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Gloria M. Goldstein Professor of Jewish History and Thought
PhD, Harvard University

Professors
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PhD, University of Pennsylvania

Fatemah Keshavarz-Karamustafa
Professor of Persian Language and Comparative Literature
PhD, University of London

Associate Professors
Pamela Barmash
Associate Professor of Hebrew Bible and Biblical Hebrew
PhD, Harvard University

Martin Jacobs
Associate Professor of Rabbinic Studies
PhD and Habilitation, Free University of Berlin

Erin McGlothlin
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PhD, University of Chicago

Assistant Professor
Asad Ahmed
Assistant Professor of Arabic and Islamic Religion
PhD, Princeton University

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Senior Lecturer in Arabic
PhD candidate, Washington University

Giore Etzion
Senior Lecturer in Modern Hebrew
MA, University of Michigan

Rami Pinsberg
Senior Lecturer in Modern Hebrew
MEd, University of Missouri–St. Louis

Lecturers
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Lecturer in Persian
PhD, University of Texas at Austin

Younasse Tarbouni
Lecturer in Arabic
MA, Carson-Newman College

Mohammed J. Warsi
Lecturer in South Asian Languages and Linguistics
PhD, Aligarh Muslim University

Affiliated Faculty
Endowed Professor — Affiliated
John R. Bowen
Dunbar–Van Cleve Professor in Arts & Sciences
PhD, University of Chicago
(Anthropology)

Professors — Affiliated
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Professor of Sociocultural Anthropology
PhD, University of Chicago

Robert Canfield
Professor of Sociocultural Anthropology
PhD, University of Michigan

Timothy H. Parsons
Professor of African and African-American Studies
PhD, Johns Hopkins University

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Itai Sened
Professor of Political Science
PhD, University of Rochester

Associate Professors — Affiliated
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PhD, University of Pennsylvania

Seth Graebner
Associate Professor of French and International and Area Studies
PhD, Harvard University

Tabea Alexa Linhard
Associate Professor of Spanish and Comparative Literature
PhD, Duke University
Assistant Professor — Affiliated

Nancy Reynolds
Assistant Professor of Modern Middle East History
PhD, Stanford University

As a major in one of the Near Eastern languages and literatures (Arabic, Hebrew, Persian or Jewish, Islamic and Near Eastern Studies), students can expect to gain proficiency in one or more Near Eastern languages, study the area’s literary and cultural landmarks, and gain familiarity with Jewish, Islamic and Near Eastern history and civilizations.

The Majors

For information on the major in Arabic, see the Arabic (p. 209) page of this Bulletin.

For information on the major in Hebrew, see the Hebrew (p. 412) page of this Bulletin.

For information on the major in Jewish, Islamic and Near Eastern Studies, see the Jewish, Islamic and Near Eastern Studies (p. 505) page of this Bulletin.

For information on the major in Persian Language and Literature, see the Persian Language and Literature (p. 576) page of this Bulletin.

The Minors

For information on the minor in Arabic, see the Arabic (p. 210) page of this Bulletin.

For information on the minor in Hebrew, see the Hebrew (p. 413) page of this Bulletin.

For information on the minor in Jewish, Islamic and Near Eastern Studies, see the Jewish, Islamic and Near Eastern Studies (p. 506) page of this Bulletin.

For information on the minor in Persian Language and Literature, see the Persian Language and Literature (p. 577) page of this Bulletin.

For information on the minor in South Asian Languages and Culture (Hindi), see the Hindi (p. 415) page of this Bulletin.

For Arabic courses, see the Arabic (p. 210) page of this Bulletin.

For Hebrew courses, see the Hebrew (p. 413) page of this Bulletin.

For Jewish, Islamic and Near Eastern Studies courses, the Jewish, Islamic and Near Eastern Studies (p. 507) page of this Bulletin.

For Jewish, Islamic and Near Eastern Studies

Jewish, Islamic and Near Eastern Studies is an interdisciplinary program whose purpose is to explore the historical experience; literary, religious and cultural expression; and political and material life of the Jewish, Islamic and Near Eastern civilizations. Our program is unique in the United States because it integrates Islamic studies and Jewish studies. Whether you favor the study of language, literature, religion, history or politics, you will find in our courses a way to deepen your appreciation of these complex and diverse societies and cultures. You will also be encouraged to explore the interaction of Jews and Muslims with neighboring societies and cultures in the Middle East, Europe, North Africa and other parts of the world.

Our majors and minors have gone on to do many diverse things after graduation. Many have entered professional schools in such fields as law, journalism, education, the ministry or rabbinate, government and communal or social work. Others have gone on to do graduate work in either Jewish or Islamic studies or related disciplines. Still others have combined their interest in Jewish, Islamic and Near Eastern studies with careers in business, medicine or scientific research. All have found the major to have been an intellectually and emotionally rewarding experience and an important component of their overall development.

Phone: 314/935-5110 or 314/935-8567
E-mail: jinelc@wustl.edu
Departmental website: http://jinelc.wustl.edu

For a list of affiliated faculty, please see the Department of Jewish, Islamic and Near Eastern Languages and Cultures faculty page.

The Major in Jewish, Islamic and Near Eastern Studies

While the major emphasizes an integrated approach to the field, incorporating both Jewish and Islamic perspectives, students are required to select one of three tracks: Jewish and Near Eastern Studies, or Islamic and Near Eastern Studies, or Comparative Jewish and Islamic Studies. To complete a major in Jewish, Islamic and Near Eastern Studies, a student must fulfill the following basic requirements:

Total units required: 27 plus two years of language study.

Required courses:
• For Jewish and Near Eastern Studies: two years of Hebrew language.
• For Islamic and Near Eastern Studies: two years of Arabic language or Persian language.
• For Comparative Jewish and Islamic Studies, two years of one language in one tradition (at least one of which must be in residence) and one year of another language in the other tradition.
• For all majors: JINE 208F History, Text, and Identity: Introduction to Jewish Civilization and JINE 201C Introduction to Islamic Civilization.
• For all majors: a combined capstone course/senior seminar (normally 3 units). Required of all majors, even those writing an honors thesis.

Elective courses:
• In addition, you must complete 21 units in the major at the 300 level or above, which includes:
  • For Jewish and Near Eastern Studies: a minimum of 3 units in the Islamic experience.
  • For Islamic and Near Eastern Studies: a minimum of 3 units in the Jewish experience.
  • For Comparative Jewish and Islamic Studies: a minimum of 9 units in the Jewish experience and a minimum of 9 units in the Islamic experience.

• For majors in the non-comparative tracks: of the remaining 15 units, students are strongly encouraged to take at least one course in history, one in literature or cultural studies, and one in religious studies.

Courses taken Pass/fail may not count toward the major.

Additional Information

Study Abroad: Students majoring in Jewish, Islamic and Near Eastern Studies are encouraged to participate in the Washington University Study Abroad program. The university currently sponsors preapproved programs of study at the Hebrew University in Jerusalem, the University of Haifa and the American University of Cairo. Study abroad options (which may require approval on a case-by-case basis) also exist for Prague (CET) and American University of Beirut (AUB). A maximum of 9 units of advanced course work (300 level and above) may be applied toward the JINES major from study abroad or courses taken at another university. Credit will be awarded only to those courses that have been approved by the JINES study abroad adviser.

Senior Honors: Jewish, Islamic and Near Eastern Studies majors who have a cumulative GPA of 3.65 or higher after six semesters are eligible to apply for candidacy for departmental senior honors. Once they receive departmental approval, candidates must satisfactorily complete a senior honors thesis in order to be considered for departmental honors.

The senior honors thesis is a research project that is significantly larger than the usual term paper. It is usually about 50 to 60 pages long. In writing this thesis, the candidate is expected to make use of both primary and secondary sources and to demonstrate critical and analytic skills. The candidate also is encouraged to make use of any foreign language skills she or he may possess for the research. Proper citation of sources and a clear and consistent stylistic format will be expected.

Candidates, in consultation with their advisers, should choose their area of interest and find an appropriate faculty member to serve as their thesis supervisor in the spring semester of their junior year. They then need to apply for the honors program in writing to the director of Jewish, Islamic and Near Eastern Studies by September 1. The written application should contain a tentative description of the project, the supervisor’s endorsement of the candidacy, and the candidate’s unofficial transcript with the latest GPA clearly indicated. This early planning allows candidates to use the summer months to conduct preliminary research. Candidates must enroll in JINE 499 Study for Honors in Jewish, Islamic and Near Eastern Studies in both the fall and spring semesters of their senior year (normally for a total of 6 credit hours).

The Minor in Jewish, Islamic and Near Eastern Studies

Units required: 15 in at least five courses

Required courses:
  • JINE 208F History, Text and Identity: Introduction to Jewish Civilization
  • JINE 201C Introduction to Islamic Civilization

Elective courses:
At least 9 of the remaining 12 units must be earned in courses at the 300 level or above. A maximum of 6 credit hours from language courses (Arabic, Hebrew, Persian) can be applied toward the minor. Please note that because 9 of the 15 units need to be at the 300 level or beyond for the minor, and because we also require either Islamic Civilization or Jewish Civilization, this means that a student normally can apply 3 credits of first- or second-year language at most, and then possibly 3 more credits from higher language courses subject to the approval of his or her adviser.

A maximum of 3 units of lower-level course work and 3 units of advanced course work (300 level and above) may be applied toward the JINES minor from study abroad or another university. Credit will be awarded only to those courses that have been approved by Washington University.
No more than 3 units may be taken in JINE 500 Independent Study.

**Additional Information**
All courses considered for the minor must be taken for credit.

**Jewish, Islamic and Near Eastern Studies**

L75 JINE 105D Beginning Modern Hebrew I  
Same as MHBR 105D  
Credit 5 units.  A&S : LA   A&S : IQ, LCD, LS   BU : HUM, IS

L75 JINE 106D Beginning Modern Hebrew II  
Same as MHBR 106D  
Credit 5 units.  A&S : LA   A&S : IQ, LCD, LS   BU : HUM, IS

L75 JINE 107D Beginning Arabic I  
Same as Arab 107D  
Credit 5 units.  A&S : LA   A&S : IQ, LCD, LS   BU : HUM, IS

L75 JINE 108D Beginning Arabic II  
Same as Arab 108D  
Credit 5 units.  A&S : LA   A&S : IQ, LCD, LS   BU : HUM, IS

L75 JINE 111D Beginning Hindi I  
Same as Hindi 111D  
Credit 5 units.  A&S : LA   A&S : IQ, LCD, LS   BU : HUM, IS

L75 JINE 112D Beginning Hindi II  
Same as Hindi 112D  
Credit 5 units.  A&S : LA   A&S : IQ, LCD, LS   BU : HUM, IS

L75 JINE 116D Beginning Persian I  
Same as Pers 116D  
Credit 5 units.  A&S : LA   A&S : IQ, LCD, LS   BU : HUM, IS

L75 JINE 117D Beginning Persian II  
Same as Pers 117D  
Credit 5 units.  A&S : LA   A&S : IQ, LCD, LS   BU : HUM, IS

L75 JINE 151D Advanced Beginning Modern Hebrew I  
Same as MHBR 151D  
Credit 3 units.  A&S : LA   A&S : IQ, LCD, LS   BU : HUM, IS

L75 JINE 175 Discovering the Other and the Self: Jewish Travel Literature and Autobiographical Writing, 1200–1800  
Travel literature usually describes “other” places and peoples — otherness and the unfamiliar are its major themes. At the same time, travel writers reflect on notions of the Self and the home. Autobiography is a representation of one’s self. However, the self can only be explored in relation to others. Reading early Jewish travel accounts and autobiographies from the Middle Ages to the 18th century, this class addresses questions such as: How did premodern Jews perceive themselves in a world dominated by Christians and Muslims? Where did they locate themselves between East and West? Did Jewish travelers going from the lands of Christendom to those of Islam share certain “Western” perceptions of the Islamic world? How did a Jew from Renaissance Italy negotiate between Jewish and Italian identities? Were Egyptian Jews to him distant relatives, or ultimately foreigners, “Orientals”? How did a German Jewish businesswoman view her role within a rapidly changing, yet male-dominated society? All primary sources are read in translation. In the course of their study, attention is paid to peculiarities of literary genre and the problem of how to differentiate between fact and fiction. Throughout the semester we devote time to discussing practical questions such as how to use the library’s catalog and (electronic) reference sources, as well as techniques for structuring and writing students’ essays.  
Credit 3 units.  A&S : TH , CD   A&S : IQ , HUM , LCD   BU : ETH

L75 JINE 176 Freshman Seminar: A Nation Apart? Jewish Identity in an Age of Nationalism  
This course invites you to explore the varieties and limits of Jewish identity in a world in which nations appear to be the driving forces of history. In the “age of nationalism,” beginning in the second half of the 18th and continuing to the end of the 20th century, traditional forms of Jewish identity as well as the place of Jews within the social fabric became problematic. Who were the Jews as individuals and as a collective? A nation? A religious group? Neither exactly? And what was their relationship to the emerging, modern nations of Europe to be? Did the process of emancipation resolve the problem? To what extent was anti-Semitism a response to the dilemma of defining and situating Jews in the new European order? How has the existence of a Jewish nation state in the Middle East affected Jewish identity in other parts of the world? Finally, how has globalization altered the relationship of Jews to the state as well as toward other Jews?  
Credit 3 units.  A&S : TH , SD   A&S : IQ , HUM , LCD   BU : ETH

L75 JINE 1771 Freshman Seminar: The Exodus in the Jewish Experience  
This course investigates how the Exodus has been, and continues to be, a crucial source of identity for both Jews and Judaism. We explore how the Exodus has functioned as the primary model from which Jews have created historical self-understanding and theological meaning. We investigate how
and why this story continues to be vital to Jews throughout the unfolding of the Jewish experience. How does the Exodus remain pertinent? How has the Exodus been re-imagined multiple times throughout the history of Judaism? Why has the Passover celebration been transformed radically in different Jewish communities? We analyze many types of expression: historical sources, liturgy, art, commentaries, theology, literature, film, mysticism and music.

Credit 3 units.   A&S : TH    A&S : IQ , HUM

L75 JINE 179 Freshman Seminar: Midrash: The Imaginative Interpretation of Biblical Texts
Freshman Seminar. The aim of this course is to introduce students to Midrash, the highly fascinating literature of Rabbinic Biblical interpretation. Among the topics studied are: How did the classical Rabbis read the Bible? What is the relationship between the plain meaning of the Biblical text and the polyphone interpretations of Midrash? How can numerous, at times even contradictory, interpretations of the same verse coexist? What is the function of imaginative narratives, parables and folklore in Midrash? Initially the Midrashic logic may seem elusive from the viewpoint of a modern Western reader, in turn its creative thinking proves to be smart, playful, at times even slippery, and yet substantial. Addressing the literary, historical and cultural context in which Rabbinic Midrash developed, we get to know a variety of Midrashic collections and styles covering a time span from late antiquity to the Middle Ages. All primary sources are read in translation. Throughout the semester we devote time to discussing practical questions such as how to use the library’s catalog and (electronic) reference sources, as well as techniques for structuring and writing students’ essays.

Credit 3 units.   A&S : TH    A&S : IQ , HUM

L75 JINE 200 Internship
For students with at least one course in Jewish and Near Eastern Studies who wish to do an internship. Prerequisite: permission of the director of the program. A “learning agreement” must be submitted and approved prior to beginning internship work.

Credit 3 units.

L75 JINE 2001 Asian and Near Eastern Languages and Literatures
Same as ANELL 200

Credit 3 units.   A&S : TH , CD    BU : BA , HUM , IS

L75 JINE 2011 Intermediate Hindi I
Same as Hindi 201

Credit 5 units.   A&S : LA    A&S : IQ , LCD , LS    BU : HUM , IS

L75 JINE 2021 Intermediate Hindi II

Same as Hindi 202

Credit 5 units.   A&S : LA    A&S : IQ , LCD , LS    BU : HUM , IS

L75 JINE 2051 Literature and Film from Asia and the Near East
Same as ANELL 205

Credit 3 units.   A&S : TH , CD    BU : BA , IS

L75 JINE 207D Intermediate Arabic I
Same as Arab 207D

Credit 5 units.   A&S : LA    A&S : IQ , LCD , LS    BU : HUM , IS

L75 JINE 208D Intermediate Arabic II
Same as Arab 208D

Credit 5 units.   A&S : LA    A&S : IQ , LCD , LS    BU : HUM , IS

L75 JINE 208F History, Text and Identity: Introduction to Jewish Civilization
The anthropologist Clifford Geertz once famously invoked Max Weber in writing that “man is an animal suspended in webs of significance he himself has spun. I take culture to be those webs.” The main goal of this course — designed as an introduction to Jewish history, culture and society — is to investigate the “webs of significance” produced by Jewish societies and individuals, in a select number of historical periods, both as responses to historical circumstances and as expressions of Jewish identity. Over the course of the semester we focus on the following historical settings: 7th century BCE Judah and the Babylonian exile; pre-Islamic Palestine and Babylonia (the period of the Mishnah and the Talmud); Europe in the period of the Crusades; Islamic and Christian Spain; Europe in the 18th and 19th centuries; North America in the 20th century; and the modern State of Israel. For each period we investigate the social and political conditions of Jewish life; identify the major texts that Jews possessed, studied and produced; determine the non-Jewish influences on their attitudes and aspirations; and explore the efforts that Jews made to define what it meant to be part of a Jewish collective.

Credit 3 units.   A&S : TH    A&S : IQ , HUM    BU : ETH , IS    FA : SSP

L75 JINE 2091 Scriptures and Cultural Traditions
Same as Hum 209

Credit 3 units.   A&S : TH , CD    A&S : IQ , HUM , LCD    BU : ETH

L75 JINE 210C Introduction to Islamic Civilization
A historical survey of Islamic civilization in global perspective. Chronological coverage of social, political, economic and cultural history are balanced with focused attention to special topics,
which include: aspects of Islam as religion; science, medicine and technology in Islamic societies; art and architecture; philosophy and theology; interaction between Islamdom and Christendom; Islamic history in the Middle East, South Asia, Southeast Asia and Central Asia as well as Africa; European colonialism; globalization of Islam and contemporary Islam.

Credit 3 units. A&S : TH, CD  A&S : IQ, HUM, LCD  BU : ETH, IS  FA : SSP

L75 JINE 213D Intermediate Modern Hebrew I
Same as MHB 213D
Credit 5 units. A&S : LA  A&S : IQ, LCD, LS  BU : HUM, IS

L75 JINE 214C Introduction to Comparative Literature
Same as Comp Lit 215C
Credit 3 units. A&S : TH  A&S : IQ, HUM  BU : HUM  FA : Lit

L75 JINE 214D Intermediate Modern Hebrew II
Same as MHB 214D
Credit 5 units. A&S : LA  A&S : IQ, LCD, LS  BU : HUM, IS

L75 JINE 216 Introduction to South Asian Civilization
Same as IAS 216
Credit 3 units. A&S : TH, CD  A&S : IQ, HUM, LCD  BU : IS

L75 JINE 216D Intermediate Persian I
Same as Pers 216D
Credit 5 units. A&S : LA  A&S : IQ, LCD, LS  BU : HUM, IS

L75 JINE 217D Intermediate Persian II
Same as Pers 217D
Credit 5 units. A&S : LA  A&S : IQ, LCD, LS  BU : IS

L75 JINE 225C Introduction to Indic Culture and Civilization
Credit 3 units. A&S : TH  BU : ETH  FA : SSP

L75 JINE 240 Representations of the Holocaust in Literature and Film
As the Holocaust recedes into the historical past, our knowledge of the event becomes increasingly dominated by literary and cinematic representations of it. This course focuses on such depictions of the Holocaust in literature and film and raises a number of provocative questions: What does it mean to represent the horror of the Holocaust? Can one effectively depict the event in realistic terms, or do unrealistic representations work better? What happens to the history of the Holocaust when it becomes the subject of a fictional text? Who is authorized to speak for the victims? Are representations of perpetrators appropriate? What types of representations help us to remember the Holocaust in the 21st century? We grapple with these challenging questions by examining both literary texts by American, European and Israeli authors from a range of genres, including survivor memoirs, fictional narratives, a graphic novel, drama and poetry, and a number of films that depict the Holocaust.

Credit 3 units. A&S : TH  A&S : IQ, HUM

L75 JINE 300 Introduction to the Hebrew Bible/Old Testament
Same as Re St 300
Credit 3 units. A&S : TH  A&S : IQ, HUM  BU : ETH, HUM  FA : SSP

L75 JINE 301 Advanced Hindi I
Same as Hindi 301
Credit 3 units. A&S : LA  A&S : IQ, LCD, LS  BU : IS

L75 JINE 3012 Biblical Law and the Origins of Western Justice
This course explores how law developed from the earliest periods of human history and how religious ideas and social institutions shaped law. The course also illuminates how biblical law was influenced by earlier cultures and how the ancient Israelites reshaped the law they inherited. It further analyzes the impact of biblical law on Western culture and investigates how the law dealt with those of different social classes and ethnic groups, and we probe how women were treated by the law.

Credit 3 units. A&S : TH, CD, SD  A&S : IQ, HUM, LCD

L75 JINE 301C Kings, Priests, Prophets and Rabbis: The Jews in the Ancient World
We trace Israelite and Jewish history from its beginnings in the biblical period (ca. 1200 BCE) through the rise of rabbinic Judaism and Christianity until the birth of Islam (ca. 620 CE). We explore how Israel emerged as a distinct people and why the rise of the imperial powers transformed the political, social and religious institutions of ancient Israel. We illuminate why the religion of the Bible developed into rabbinic Judaism and Christianity and how rabbinic literature and institutions were created.

Credit 3 units. A&S : TH, CD  A&S : IQ, HUM, LCD  BU : BA, HUM  FA : SSP

L75 JINE 302 Introduction to the History and Culture of Ancient Mesopotamia
This course introduces students to the first great human civilization, Ancient Mesopotamia. Combining textual evidence and material remains we survey all major facets of Mesopotamian culture: the environment, political history and
“everyday life” including portraits of several material, social and economic aspects of society: religion, myth, art, science and medicine. The course focuses on helping the student to understand empathetically the Mesopotamian worldview, to interact with primary materials (in translation), and to evaluate the ideas of historians dedicated to investigating this culture. Because some of the practices of this ancient culture are quite different from our own (e.g. magic, divination, the gods), yet others have made important contributions to world civilization (including the West, e.g. writing and astronomy), the course also is an important experience in cross-cultural learning.

Credit 3 units.  A&S : TH  BU : ETH, HUM

L75 JINE 305B Greater Central Asia in Crisis
Same as Anthro 305B
Credit 3 units.  A&S : SS, CD  A&S : IQ, SSC, LCD  BU : BA, IS  FA : SSP

L75 JINE 306 Between Submission and Power: Women and Family in Islam
Same as WGSS 306
Credit 3 units.  A&S : SS, CD  BU : ETH  FA : SSP

L75 JINE 3061 Modern Jewish Writers
Same as Comp Lit 306
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM

L75 JINE 3062 Islam, Culture and Society in West Africa
Same as AFAS 3062
Credit 3 units.  A&S : SS, CD  A&S : IQ, SSC, LCD

L75 JINE 3073 The Global War on Terrorism
Same as History 3073
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L75 JINE 307D Advanced Arabic I
Same as Arab 307D
Credit 4 units.  A&S : LA  A&S : IQ, LCD, LS  BU : HUM, IS

L75 JINE 3082 Introduction to Rabbinic Judaism
Same as Re St 3082
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM  FA : SSP

L75 JINE 308D Advanced Arabic II
Same as Arab 308D
Credit 4 units.  A&S : LA  A&S : IQ, LCD, LS  BU : HUM, IS

L75 JINE 309 Classical Jewish Philosophy
The history of Jewish philosophy, from the ancient world through medieval thinkers such as Maimonides and Halevi, is surveyed in the context of the development of Western philosophy.
Credit 3 units.  A&S : TH  BU : ETH  FA : SSP

L75 JINE 310 Contemporary Jewish Thought
A study of the representative figures and problems of modern Jewish thought from Spinoza to the present. Other topics include: the impact of the European Enlightenment; Zionism; Buber; Rosenzweig; Kaplan; and Soloveitchik. Prerequisite: JNE 208F or the equivalent.
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : ETH  FA : Lit, SSP

L75 JINE 3101 The Problem of Evil
Same as Re St 3101
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : ETH

L75 JINE 3121 Introduction to the History and Cultures of Turkey
Since ancient times, the Anatolian Peninsula, the land surrounded by the Black Sea, the Aegean and the Mediterranean Seas, has been a home and a passageway to a multitude of diverse peoples. This course is intended to offer an overview of Turkey, its history, peoples, cultures, socioeconomic and political structures and institutions within the context of modern and contemporary global trends since the 19th century through the prism of long dure developments and processes. As an introductory and preparatory course, it aims primarily at familiarizing students with scholarly themes, questions and problems that aid those who wish to further delve into studying the deep and complex fabric of the Turkish society, culture and history.
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L75 JINE 3122 From Country to Heavy Metal: Ancient Civilizations of the Old World
This course explores the archaeology of Europe, the Near East and Central Asia from approximately 10,000 years ago to classical times (ending before Ancient Greece). This prehistoric epoch saw major developments among various civilizations of the Old World, such as the introduction of agriculture, animal domestication, the growth of cities, and technological developments such as pottery, metallurgy and horse-riding. A major focus is the trajectory of cultural innovations of regional populations through time, and the complexity of their social, political and ritual practices. We also investigate the variation in human adaptive strategies to various environmental and social contexts, from hunter/gatherers to early Neolithic farmers, to
the interactions between nomadic populations and larger scale, urban societies in the Bronze and Iron Ages.
Same as Anthro 3122
Credit 3 units. A&S : SS A&S : IQ, SSC BU : IS FA : SSP

L75 JINE 3124 9/11 in World History
Same as History 3124
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L75 JINE 313C Islamic History 622–1200
Same as History 313C
Credit 3 units. A&S : TH A&S : IQ, HUM BU : IS FA : SSP

L75 JINE 3149 The Late Ottoman Middle East
Same as History 3149
Credit 3 units. A&S : TH, CD, SD A&S : IQ, HUM, LCD BU : IS

L75 JINE 314C Islamic History: 1200–1800
Same as History 314C
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : IS FA : SSP

L75 JINE 3150 The Middle East in the 20th Century
Same as History 3150
Credit 3 units. A&S : TH, CD, SD A&S : IQ, HUM, LCD BU : IS

L75 JINE 316 Advanced Persian I
Same as Pers 316
Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L75 JINE 3200 An Introduction to Literature and Visual Culture in the Arab World
The course aims to provide a framework within which the literary and image cultures of the Arabic-speaking peoples have developed. This is done through a combination of contextual analysis and close reading of seminal texts and films. Our starting points are foundational sources such as the Qur’an and classical prose and poetry. From the later period, emphasis is on fiction and cinema.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : IS

L75 JINE 320D Advanced Modern Hebrew I
Same as MHBR 320D
Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L75 JINE 3221 Topics: The Jewish Experience in Italy, 1850–1945
Same as Ital 3221
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

L75 JINE 322D Modern Jewish Literature in Hebrew
Same as MHBR 322D
Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : IS

L75 JINE 3241 Hebrew of the Media
Same as MHBR 324
Credit 3 units. A&S : LA

L75 JINE 3273 Introduction to Israel Studies
An exploration of Israel in the Jewish experience from antiquity to modernity and in the history and culture of the Middle East. Special attention is paid to the modern state of Israel and current issues in its politics, economy and society. JINE 5273 is intended for graduate students only.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : IS

L75 JINE 3292 Topics in Politics: Modern South Asian Politics
Same as Pol Sci 3292
Credit 3 units. A&S : SS A&S : IQ, SSC BU : HUM, IS FA : SSP

L75 JINE 3293 Religion and Society
Same as Anthro 3293
Credit 3 units. A&S : SS A&S : IQ, SSC BU : ETH

L75 JINE 331 Topics in Holocaust Studies
Same as German 331
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD BU : HUM FA : Lit, SSP

L75 JINE 3313 Women and Islam
JINE 5313 is intended for graduate students only.
Same as Anthro 3313
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD BU : BA FA : SSP

L75 JINE 3331 The Holocaust
Same as History 333
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : ETH, HUM, IS FA : SSP
L75 JINE 334C Crusade, Disputation and Coexistence: Jews in Christian Europe
Same as History 334C
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : ETH, HUM, IS FA : SSP

L75 JINE 3350 Out of the Shtetl
Same as History 3350
Credit 3 units. A&S : TH A&S : IQ, HUM

L75 JINE 335C Becoming “Modern”: Emancipation, Anti-Semitism and Nationalism in Modern Jewish History
Same as History 335C
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : ETH, HUM, FA : SSP

L75 JINE 336C History of the Jews in Islamic Lands
Same as History 336C
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : SSP

L75 JINE 3371 Modern Eurasia: Afghanistan and Central Asia
Same as History 3371
Credit 3 units. A&S : TH A&S : IQ, HUM

L75 JINE 340 Israeli Women Writers
Same as MHB R 340
Credit 3 units. A&S : TH, CD, SD, WI A&S : IQ, HUM, LCD, SD, WI BU : HUM FA : Lit

L75 JINE 341 The Jewish People in America
History of the Jews in North America from the colonial era to the present. Close reading of primary sources, with an emphasis on the central issues and tensions in American Jewish life; political, social and economic transformations; and religious trends. Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM

L75 JINE 3415 Jewish-Gentile Relations in the United States, 1830–1970
Throughout their history Jews faced non-Jewish majorities, and America was no different. Yet unlike Europe, the United States has been, overall, a very hospitable place for Jews, and many of them came to see their new country as “the Promised Land.” The course focuses on the relations between Jews and their non-Jewish neighbors from the beginning of a significant Jewish immigration to the United States in the 1830s. The course ends in the 1970s in order to analyze what most historians interpret as a rightward and inward turn of American Jewry (especially after 1967) and link it to the larger wave of ethnic revival in America. As a whole, the course looks at the interethnic and interreligious dimensions of American Jewish life and relates them to the larger American context. How did American Jews view their fellow countrymen and how did these opinions, in turn, affect Jewish integration into the larger society? How did the gamut of relations with other groups, which ran from animosity to coalition building and amity, change the country’s political and cultural landscape? How did political and class differences within Jewish communities influence the character of interaction with other communities? Can we learn from the Jewish case about more general patterns of majority-minority relations in America?. Credit 3 units. A&S : TH A&S : IQ, HUM BU : BA

L75 JINE 3420 Childhood, Culture, and Religion in Medieval Europe
Same as CFH 342
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L75 JINE 344 Imagining the Holocaust in Contemporary Jewish Literature
Recent public discourse on the Holocaust has displayed an anxiety that, with the gradual dying out of the survivor generation, the Holocaust too will soon pass into oblivion and one day be forgotten. Accompanying this anxiety about the vanishing eyewitness and the crisis of forgetting is often a parallel skepticism about narratives of the Holocaust that are not rooted in the direct experience of the survivor. Despite an injunction against fictional and imaginative representations of the Holocaust by survivors such as Elie Wiesel, however, the past 20 years have seen a wave of imaginative literature about the Holocaust written by non-survivors. This course examines recent post-Holocaust literature, both fictional and autobiographical, by contemporary Jewish writers from Europe, Israel and the United States, including works by Art Spiegelman, David Grossman, Aharon Appelfeld, Nathan Englander, Anne Michaels, Nava Semal, Patrick Modiano, Jurek Becker and others. Central to our inquiry into this literature are the questions of language, narrative structure, referentiality, artistic representation, intergenerational trauma, vicarious memory and post-Holocaust Jewish identity. Credit 3 units. A&S : TH BU : HUM

L75 JINE 345 Mesopotamian Mythology: Stories from Ancient Iraq
In this course we read, explore and interpret various ancient myths originating from the fertile crescent, especially ancient Iraq, between the years 2500 and 400 BCE. The Epic of Gilgamesh, the Enuma Elish, myths of the goddess Ishtar as well as various flood and creation accounts are among those we read. Cultural background information is examined to situate each myth in its ancient context. Various theories of interpreting myth also is explored in order to appreciate the power and the many uses of these multivalent stories. Several basic questions
underlie all that we do throughout the semester: What is myth?, How should we understand the conceptualization of the category “myth” (in other words, How does myth work?), and Does myth still play a role in our own modern cultures?.

Credit 3 units.  A&S : TH , CD    BU : HUM

L75 JINE 348 Medieval Jewish Travelogues, Chronicles, and Biographies
Same as BHBR 348
Credit 3 units.  A&S : TH    A&S : IQ , HUM , LCD , LS

L75 JINE 349 Yidishkayt: Yiddish Literature in English Translation
This course traces the emergence, development, flourish and near-decline of Yiddish literature, beginning with some of the earliest writings to appear in Yiddish in the late Middle Ages and early modern period, continuing with 19th-century attempts to establish a modern Yiddish literature and the 20th-century emergence of both a classical canon and a literary avant-garde, and ending with post-Holocaust attempts to retain a Yiddish literary culture in the near absence of Yiddish-speaking communities. Focusing on the role of Yiddish as the “national” language of Ashkenaz, the course examines the ways in which Yiddish literature has responded to the social conditions of European Jewish life, exploring among others the relationship between Yiddish and the non-Jewish cultures in which it existed, the tensions between secular trends versus religious tradition, life in the shtetl and in the metropolis, immigration from the old world to the new, and Yiddish literary responses to the Holocaust.
Credit 3 units.  A&S : TH    A&S : IQ , HUM

L75 JINE 350 Israeli Culture and Society
An examination of critical issues in contemporary Israeli culture and society, such as ethnicity, speech, humor, religious identity, and the Arab population, using readings in English translation from a variety of disciplines: folklore, literary criticism, political science, sociology, psychology, anthropology. Prerequisite: sophomore standing, or permission of instructor.
Credit 3 units.  A&S : TH , CD    A&S : IQ , HUM , LCD    BU : HUM    FA : SSP

L75 JINE 351 Musica Ebraica: Jewish Identities in Western Music from 1600 to the 21st Century
The course explores Western music from the 17th century to the 21st century through the prism of musical works that were written by Jews and for Jews and of musical compositions reflecting their composers’ identifying themselves as Jews. Jewish art music from these periods are examined against the background of musical development in general, the social, political and religious context of the composers, and written reflections about Jewish music. Examples of Jewish art music are analyzed through different approaches in order to determine the cultural interrelationships between Jews and non-Jews, Jewish cultural autonomy, and the perception of Jewishness in music.
Credit 3 units.  A&S : LA , CD    A&S : IQ , LCD    BU : HUM

L75 JINE 352 Music in Jewish Culture and Society
The common term “Jewish Music” raises numerous questions that emanate from the difficulty to define “Jewish” identity of any given music. This course deals with various approaches to the definition of Jewish music, perceived as a cultural and sociological component in the Jewish communities throughout the Diaspora. We survey the functions in which music is performed in traditional Jewish communities, especially Jewish liturgy, and the substantial vicissitudes in these musics after the European Enlightenment, European colonialism in north-Africa, and in the Mediterranean. We study the background and the different characteristics of selected Jewish communities — Ashkenazic, Sephardic, Italian, Yemenite and — as well as instrumental music, questions of gender, and the relationship between music and text. A secondary goal of this course is the study of the bibliography and discography of Jewish musics.
Credit 3 units.  A&S : TH , CD    A&S : IQ , HUM , LCD

L75 JINE 353 The Soundtrack of Israeli History
This course explores connections between Israeli history, nationality and culture, and between Israeli art music. Such an encounter between reveals the reflection of, and responses to, local social developments in various historic and constitutive moments in Israeli history such as: the fifth Aliya (wave of immigration) in the 1930s, the statehood years, the waning of nationalistic sentiments in the late 1950s, the aftermath of Israeli wars, the negotiation between Israeli and Jewish identities, and even artistic expressions of postmodernity within the Israeli context. These histories are surveyed through historical studies as well as through their musics and against the background of developments in 20th-century music.
Credit 3 units.  A&S : TH , CD    A&S : IQ , HUM , LCD

L75 JINE 354 Music in the Holocaust: Portrayals in Sound from Past and Present
The course explores Germany’s road to totalitarianism through three different stages seen through its musical contexts: the embodiment of “music libels” against Jews in nineteenth century
European culture in general and German culture in particular; the association of Jewish culture with the threat of modernism until WW2; and Nazi policies in the 1930s regarding music and their repercussion on musical activities in the different ghettos (especially Terezin and Lodz). The last segment of this class will deal with the challenge of commemorating the holocaust through music.

Credit 3 units. A&S : TH A&S : IQ, HUM

L75 JINE 3585 Islam, Music, Muslim Media
Same as Music 3585
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L75 JINE 358C Modern Near Eastern Literatures
Same as Comp Lit 358C
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : Lit

L75 JINE 361 City of Peace: Baghdad in Medieval Times (ca. 762–1250)
The subject of this course is an exploration of the city of Baghdad in medieval times from its foundation in the 8th century to its sack by the Mongols in the 13th. Starting from the background history of its location in Mesopotamia, we study the reasons of its foundation in that location and examine its topography, city planning and layout, institutions, citizens, neighborhoods, markets, libraries and workshops to discuss life in the city. Since Baghdad was the seat of the Abbasid caliphate at the time, we examine its role as the hub of the empire (in politics, administration, economy and literature), and its links to and rivalries with other provincial cities.
Credit 3 units. A&S : TH A&S : IQ, HUM EN : H

L75 JINE 362 Approaches to the Qur’an
Same as Re St 366
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : ETH

L75 JINE 364 Literature and Ethics
Same as Comp Lit 364
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH

L75 JINE 365F The Bible as Literature
Same as E Lit 365F
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH FA : Lit

L75 JINE 367 Jewish American Literature “Roth and Company”
Same as E Lit 367
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH FA : Lit

L75 JINE 3670 Gurus, Saints and Scientists: Religion in Modern South Asia
Same as Re St 3670
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : ETH

L75 JINE 3751 In the Beginning: Creation Myths of the Biblical World
This course studies myths and epic literature from the Bible, ancient Egypt, the ancient Near East and ancient Greece about the birth of the gods, the creation of the world and of humanity, and the establishment of societies. These masterpieces of ancient literature recount the deeds of gods and heroes and humanity’s eternal struggle to come to terms with the world, supernatural powers, love, lust and death. This course examines how each culture borrows traditions and recasts them in a distinct idiom. The course further examines different approaches to mythology and to the study of ancient cultures and the Bible.
Credit 3 units. A&S : TH, CD, WI A&S : IQ, HUM, LCD

L75 JINE 3781 Israeli Politics
Same as Pol Sci 3781
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD BU : IS FA : SSP

L75 JINE 3782 Before “the Clinic was born”: Medicine among European Jews from the Middle Ages to Modern Period
This course offers a survey of European medical history in general and of the Jewish medical world in particular, from the middle ages to the threshold of modernity.
Credit 3 units. A&S : TH A&S : IQ, HUM

L75 JINE 380 Screening the Holocaust
Same as Film 375
Credit 3 units. A&S : TH BU : BA FA : AH

L75 JINE 3800 Topics in Religious Studies
Same as Re St 380
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH FA : SSP

L75 JINE 3841 Introduction to Biblical Hebrew
Same as BHBR 384
Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : HUM

L75 JINE 385D Topics in Biblical Hebrew Texts
Same as BHBR 385D
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, LS BU : HUM
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites/Notes</th>
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<tbody>
<tr>
<td>L75 JINE 386</td>
<td>Topics in Jewish History</td>
<td>Consult Course Listings for current topics. Prerequisite: permission of instructor. Credit 3 units. A&amp;S : TH FA : SSP</td>
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<tr>
<td>L75 JINE 387C</td>
<td>Topics in Hebrew Literature</td>
<td>Same as MHBR 387C</td>
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<tr>
<td>L75 JINE 38A8</td>
<td>Women, Men, and Gender in Africa: Writing-Intensive Seminar</td>
<td>Same as History 38A8</td>
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<td>L75 JINE 38C8</td>
<td>Religion and Politics in South Asia: Writing-Intensive Seminar</td>
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<td>L75 JINE 3901</td>
<td>Lyrics of Mystical Love, East and West</td>
<td>Same as Comp Lit 390</td>
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<td>L75 JINE 39SC</td>
<td>Imperialism and Sexuality: India, South Asia and the World: Writing-Intensive Seminar</td>
<td>Same as History 39SC</td>
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<td>L75 JINE 39T8</td>
<td>Sufism: Mystics in Islamic History: Writing-Intensive Seminar</td>
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<td>L75 JINE 400B</td>
<td>Asian and Near Eastern Languages and Literatures Senior Seminar: Translation</td>
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<td>L75 JINE 4010</td>
<td>Fourth-Level Modern Hebrew I</td>
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<tr>
<td>L75 JINE 401W</td>
<td>Seminar in Hebrew Literature (Writing Intensive)</td>
<td>Same as MHBR 401W</td>
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<td>L75 JINE 402</td>
<td>Fourth-Level Modern Hebrew II</td>
<td>Same as MHBR 402</td>
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<tr>
<td>L75 JINE 4020</td>
<td>Jerusalem, the Holy City</td>
<td>An examination of the role that Jerusalem has played in three religious traditions — Judaism, Christianity and Islam — through a study of archaeology, history, literature, politics and theology from antiquity to contemporary times. A senior seminar in Jewish, Islamic and Near Eastern Studies. During winter break, the class goes to Jerusalem as part of the course. Student portion of travel costs TBA. Students unable to make the trip receive a reduction to 4 units of course credit. Preference given to seniors majoring in Jewish, Islamic and Near Eastern Studies. Others may enroll with instructor’s permission. Credit 5 units. A&amp;S : TH, CD, SD</td>
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<tr>
<td>L75 JINE 403</td>
<td>Gender and Sexuality in Judaism</td>
<td>A critical inquiry into the Jewish sociocultural construction of gender, past and present. Topics include the nature of the Jewish convenantal community and male circumcision as a sign of membership; the matrilineal principle of ancestry; genital emissions and purity; marriage and divorce; and male and female roles, including leadership roles. Documents by and about Jewish women, their daily lives and their sacral lives, are among the materials explored. JINE 208F is recommended. Credit 3 units. A&amp;S : TH, SD FA : SSP</td>
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<tr>
<td>L75 JINE 404</td>
<td>Islam Across Cultures</td>
<td>Same as Anthro 4042</td>
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<tr>
<td>L75 JINE 4041</td>
<td>Islam and Politics</td>
<td>Same as Anthro 4041</td>
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mid-11th through 15th centuries, Christians ruled much and eventually all of Spain and Portugal. Through a process termed, from a Christian perspective, reconquista ("reconquest"), Catholic kingdoms acquired large Muslim enclaves. As borders moved, Jewish communities found themselves under varying Muslim or Christian dominion, or migrated from one realm to the other. Interactions between the three ethno-religious communities occurred throughout, some characterized by mutual respect and shared creativity and others by rivalry and strife. The course focuses on these religious and cultural contacts, placing them in various historical and geographic contexts. It raises questions concerning the ambiguities of religious change and concerning the interplay of persecution and toleration. Methodologically, the seminar emphasizes the study of primary sources, including documentary, historiographical, literary and poetic texts. In the course of their study, attention is paid to peculiarities of genre, and difficulties involved in formulating historical assessments. In this sense, we also aim at developing critical reading skills in relation to secondary literature. Seniors in Jewish, Islamic and Near Eastern Studies are given preference in admission. Advanced students in other fields are asked to contact the instructor prior to enrollment. Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L75 JINE 4070 Judaism and Islam in Comparative Perspective
The historical trajectories of Rabbinic Judaism and Islam are intimately intertwined. Moreover, a strong argument can be made that Rabbinic Judaism and Islam bear some obvious affinities with one another. Nevertheless, the two traditions generally continue to be studied in isolation from one another. The goals of this seminar are (1) to foster better understanding of areas of historical contact and intersections between Jewish and Islamic civilizations and (2) to start the work of developing a common framework for the comparative study of the two traditions. We examine examples of sustained and meaningful contact such as Muslim-Jewish symbiosis in early Islam as well as interaction on the level of philosophical and theological discourses between medieval Jews and Muslims. We also attempt to identify instances of affinity between the two traditions through comparative study of their exegetical, messianic, legal and mystical dimensions. Seniors in Jewish, Islamic and Near Eastern Studies are given preference in admission. This is the capstone course in JINES. Advanced students from other departments and programs should contact the instructor prior to enrollment. Credit 3 units. A&S : TH A&S : IQ, HUM

L75 JINE 4081 Fourth-Level Modern Arabic II

Credit 3 units. A&S : SS A&S : IQ, LCD BU : IS

L75 JINE 4042 Competing Ideologies and Nationalisms in the Arab-Israeli Arena
We trace the roots of modern ideologies and nationalisms in the Middle East and analyze how they have developed in modern times under the influence of both secular and religious ideas. We examine how international politics have exerted their influence and how Arab and Israeli nationalism have affected one another. Among the topics discussed are Shi’ism, Nasserism, Zionism and fundamentalism. Credit 3 units. A&S : SS A&S : IQ, SSC BU : IS

L75 JINE 405 Diaspora in Jewish and Islamic Experience
The polarities of diaspora and home — periphery and center, wandering and rest, exile and return — have played important roles in the historical experience and religious culture of both Jews and Muslims. For long stretches of time, Jewish culture has been marked by the historical condition of statelessness combined with a theology of redemptive return. Paradoxically, it was the significant political and military success of Islam in its first millennium that helped to create a far-flung diaspora well removed from its center in Arabia. The institution of pilgrimage to Mecca counterbalanced a sense of distance and remove. More recently, modern nationalisms, war and postcolonial politics — including the Israeli-Palestinian conflict — have done much to underscore the continuing dilemmas of diaspora and home in both Jewish and Islamic identity. The goal of the seminar is to offer a comparative, historical perspective on this theme and to encourage students to examine an aspect of the diaspora experience in depth. [Note: This course fulfills the capstone requirement for Jewish, Islamic and Near Eastern Studies. It also qualifies as a History department advanced seminar.] Credit 4 units. A&S : TH A&S : IQ, HUM

L75 JINE 4051 Colloquial Arabic
Same as Arab 405
Credit 3 units. A&S : LA A&S : IQ, LCD BU : IS

L75 JINE 4060 Convivencia or Reconquista? Muslims, Jews and Christians in Medieval Iberia
Senior Seminar. This seminar provides an opportunity to explore in some depth various facets of the convivencia (“dwelling together”; coexistence) of Muslims, Jews and Christians in medieval Iberia. While we pick up the timeline with the emergence of an Ibero-Islamic society in the 8th century CE, the seminar’s historical horizon stretches up to the turn of the 15th to the 16th century, when Spanish Jews and Muslims were equally faced with the choice between exile and conversion to Christianity. Until about the mid-11th centuries Muslims dominated most of the Iberian Peninsula. From roughly the
L75 JINE 409 Beyond Geography: The Meaning of Place in the Near East
This course considers the importance of place in the Middle East with particular reference to Jewish and Islamic traditions. Topics to cover include the creation of holy sites, the concept of sacred space, the practice of pilgrimages, and the tropes of exile and return. Texts range from analytical essays to novels, memoirs and films by authors such as Edward Said, Naguib Mahfouz, Taher Ben Jelloun, Elif Shafak, A. B. Yehoshua, Shulamit Hareven and Hanan Al-Shaykh. Requirements include participation, short assignments and a seminar paper. This course fulfills the capstone requirement for students majoring in Jewish, Islamic and Near Eastern Languages and Cultures, but is open to advanced undergraduates and graduate students. Prerequisites: course work in JINES and senior standing or permission of instructor. Credit 3 units. A&S : TH , CD A&S : IQ , HUM , LCD

L75 JINE 4100 The Ottoman Empire: 1300–1800
Credit 3 units. A&S : TH

L75 JINE 412 Islamic Theology
Same as Re St 412
Credit 3 units. A&S : TH A&S : IQ , HUM FA : SSP

L75 JINE 415 Topics in Judaism
Prerequisite: permission of instructor.
Credit 3 units. A&S : TH

L75 JINE 420 Topics in the Israeli Short Story
Same as MHBR 420
Credit 3 units. A&S : LA A&S : IQ , LCD FA : Lit

L75 JINE 4201 Islam, Immigrants and the Future of European Culture
Same as IAS 420
Credit 3 units. A&S : TH , WI A&S : IQ , HUM , WI

L75 JINE 4243 "Terrorism" and "The Clash of Civilizations"
This course is about conflicts in which violent means are deployed and moralistic terms are invoked so as to give legitimacy to such means. The code words in the title are bracketed in order to emphasize they are used in public discourses rhetorically, for political effect. When particular social situations are disputed, each side deploys moralistic claims so as to clothe their actions and viewpoint with an aura of legitimacy and to enlist popular support. But when issues are contested, similar terms can be used by opposing sides with similar but contrary intents: one person’s “terrorist” is another person’s “freedom fighter”; and note that certain radical Islamist groups specifically embrace Huntington’s notion of the “clash of civilizations” (formulated for Western audiences) as grounds for their anti-Western posture. Rhetorical formulae such as these are promoted or scorned, embraced or renounced, for essentially strategic reasons. In this course, we examine some notorious situations of conflict in order to identify the particular ways that disputing sides have deployed violence and moralistic forms in their own interest — as when popular movements arise and clash with state power (e.g., the Tiananmen Square incident in China) or when coalitions with radical social agendas take form and brutalize neighbors (as in Yugoslavia in the 1992; Rwanda in 1994) or when widely supported public movements develop seemingly without coordination (the 2006 demonstrations against the King of Nepal), or when movements animated by a shared ambition to establish a non-statal political entity (such as Al Qaeda for the re-institution of the caliphate) form across state boundaries with little coordinated leadership. Our emphasis falls on the ways that human collectivities deploy cultural forms — linguistic and rhetorical, artistic and representational — to give particular “readings” to social issues and to clothe activities (often brutal) with an appearance of legitimacy.
Same as Anthro 4243
Credit 3 units. A&S : SS , CD A&S : IQ , SSC , LCD

L75 JINE 4274 Palestine, Israel and the Arab-Israeli Conflict
This course examines the history of the Arab-Israeli conflict from the mid-19th century to the present. Topics include: Palestine in the late Ottoman period; the development of modern Zionism; British colonialism and the establishment of the Palestine Mandate; Arab-Jewish relations during the Mandate; the growth of Palestinian nationalism and resistance; the establishment of the state of Israel and the dispersion of the Palestinians in 1948; the Arab-Israeli wars; both Palestinian uprisings; and the peace process. These issues are examined through both primary documents and secondary sources, including several important scholarly/political debates. Readings are drawn from a range of viewpoints, and vigorous classroom discussion is encouraged. Prerequisite: see Overview.
Same as History 4274
Credit 3 units. A&S : TH A&S : IQ , HUM

L75 JINE 440 Topics in Rabbinic Texts
Same as BHBR 440
Credit 3 units. A&S : TH A&S : IQ , HUM, LCD
The subject of this course is an in-depth study of medieval Arabic historiography from the 8th through the 13th centuries, when the Mongols ran over the remnants of the Abbasid caliphate, established their own rule over Eurasia, and thereby sparked new questions about the past. After the initial survey of medieval Islamic history as background, we focus on the development of historiographical writing in its sociopolitical context and examine one by one the most major historiographical traditions and philosophies from the 8th through the 13th centuries: prophetic traditions, belles-lettres, annals, biographical dictionaries and genealogical literature.

Credit 3 units.  A&S : TH  A&S : IQ, HUM  EN : H

L75 JINE 4442 The Jewish Experience in Eastern Europe
Same as History 4442
Credit 3 units.  A&S : TH, CD  FA : SSP

L75 JINE 445 Topics in Islam
Saintly mediators between God and man play a central role in Islamic piety. A focus on major aspects of saintly mediation such as the emergence and spread of the cult of saints, its place within Islamic religiosity in comparison with prophecy, and the institutional framework within which such mediation occurs. Related issues such as conversion to Islam and Islamization of originally non-Islamic beliefs and practices addressed.
Prerequisite: JNE 210CQ, or permission of instructor.
Credit 3 units.  A&S : TH  BU : IS  FA : SSP

L75 JINE 4503 Captives, Slaves and Renegades in the Early Modern Mediterranean
Same as History 4503
Credit 3 units.  A&S : IQ, HUM  EN : H

L75 JINE 4519 The Moral Imagination in Social Practice
Same as Anthro 4519
Credit 3 units.  A&S : SS  A&S : IQ, SSC

L75 JINE 464 Arabic Textual Analysis
Same as Arab 464
Credit 3 units.  A&S : TH  A&S : IQ, HUM, LCD

L75 JINE 4675 Beyond the Harem: Women, Gender and Revolution in the Modern Middle East
This course examines the history and current situations of women in Middle Eastern societies. The first half of the course is devoted to studying historical changes in factors structuring women’s status and their sociopolitical roles. The second half of the course focuses on several case studies of women’s participation in broad anti-colonial social revolutions and how these revolutions affected the position of women in those societies. Evaluation of students encourages their participation, analytical engagement and improvement throughout the term.
Same as History 4675
Credit 3 units.  A&S : TH, CD, SD  A&S : IQ, HUM, LCD  BU : BA

L75 JINE 471 Topics in Modern Arabic Literature in Translation
Same as Arab 471
Credit 3 units.  A&S : TH  A&S : IQ, HUM, LCD  BU : ETH  FA : Lit

L75 JINE 479 Senior Seminar in Religious Studies
Same as Re St 479
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD

L75 JINE 485 Topics in Jewish Studies
Consult Course Listings for current topic. Prerequisite: permission of instructor.
Credit 3 units.  A&S : TH

L75 JINE 4851 Topics in American Jewish Studies
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L75 JINE 487 Topics in Jewish and Near Eastern Studies: Readings in Midrash
The aim of this course is to learn to read Midrash, the literature of classical Rabbinic Biblical interpretation. Addressing the literary, historical and cultural context in which rabbinic Midrash developed, we get to know the variety of Midrashic collections covering a time span from late antiquity to the Islamic Middle Ages. These works were composed according to a complex set of exegetical and literary rules to be illustrated by the selected readings. Certain Midrashic genres reflect their origins in academic discourses, while others were delivered as public sermons, drawing on parables, legends and folk lore. Among the topics studied are: How did the Rabbis read the Bible? What is the relationship between the plain meaning of the Biblical text and the polyphone interpretations of Midrash? Is Midrash a commentary or a literary discourse in its own right? Initially the Midrashic logic may seem elusive from the viewpoint of a modern Western reader, in turn its creative thinking proves to be smart, playful, at times even slippery, and yet substantial. All texts will be read in translation.
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L75 JINE 4872 Colonial Cities and the Making of Modernity
Same as History 4872
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD  FA : SSP
L75 JINE 4901 Topics in Islamic Thought: Proseminar in Methods and Approaches in Islamic Studies
This seminar is an introduction to the methods, research tools and theoretical assumptions that Islamicists have used to study diverse aspects of Islamic societies and civilizations, past and present. Critical reading and discussion of scholarly works are paired with bibliographical research assignments. Permission of the instructor.
Credit 3 units. A&S : TH A&S : IQ, HUM

L75 JINE 492 Adv. Sem: Europe’s "Jewish Question": Emancipation, Antisemitism, & Jewish-Christian Confrontation
Special advanced work in selected topics in Jewish or Near Eastern history or culture.
Same as History 4942
Credit 4 units. A&S : TH A&S : IQ, HUM FA : SSP

L75 JINE 497 Guided Readings in Arabic
Same as Arab 497
Credit -5 unit. A&S : LA

L75 JINE 4972 Guided Readings in Persian
Same as Pers 4972
Credit -3 unit. A&S : LA

L75 JINE 4973 Guided Readings in Hebrew
Same as MHBR 4973
Credit -5 unit. A&S : LA

L75 JINE 498 Guided Readings in Arabic
Same as Arab 498
Credit 3 units. A&S : LA

L75 JINE 4982 Guided Readings in Persian II
Same as Pers 4982
Credit -3 unit. A&S : LA

L75 JINE 4983 Guided Readings in Modern Hebrew
Same as MHBR 4983
Credit -5 unit. A&S : LA

L75 JINE 4984 Guided Readings in Aramaic
Same as BHBR 4984
Credit -6 unit. A&S : TH

L75 JINE 4985 Guided Readings in Biblical Hebrew
Same as BHBR 4985
Credit -6 unit. A&S : LA

L75 JINE 4986 Guided Readings in Talmudic Aramaic and Rabbinic Texts
Prerequisite: instructor’s permission.
Credit -6 unit. A&S : LA

L75 JINE 4987 Guided Readings in Akkadian
Same as BHBR 4983
Credit -6 unit. A&S : LA

L75 JINE 499 Study for Honors in Jewish, Islamic and Near Eastern Studies
Prerequisites: senior standing and permission of the chair of the Jewish, Islamic and Near Eastern Studies Program.
Credit 3 units. A&S : TH

L75 JINE 49JK Advanced Seminar: Blood & Sacred Bodies: Ritual Murder & Host Desecration Accusations
Same as History 49JK
Credit 4 units. A&S : TH, CD A&S : IQ, HUM, LCD

Korean
The Department of East Asian Languages and Cultures offers a minor in Korean Language and Culture.

Language Placement: Placement tests are required for all students entering our language programs, with the exception of those students who have had no previous knowledge of the language and are planning to enroll in the first semester of the first year of instruction. Students who test into second-year Korean and satisfactorily complete (with a grade of B– or better) at least one semester of language study may petition for 3 units of retroactive credit; students who test into third year or above and satisfactorily complete (with a grade of B– or better) at least one semester of language study may petition for 6 units of retroactive credit. Credit is limited to 3 units for testing into second year and 6 units for testing into third year or above. Please note that students with native language proficiency as determined by the individual language section, as well as students who enroll in a course below their placement level, are ineligible for retroactive credit units. Students who misrepresent the extent of their background so as to gain entrance to a course at the elementary or intermediate level will be dropped from that course.
The Minor in Korean Language and Culture

Units required: 18 units, no more than 12 of which may be in language.

Requirements:

- At least two years of Korean language.
- At least 9 units must be 300 level or above.
- At least two literature/culture courses such as:
  - Korean 223C Korean Civilization
  - Korean 352 Literature of Modern and Contemporary Korea

Additional Information

- Students must earn at least a B– in their language courses in order to continue to the next level. They must also maintain at least a B– average in all courses taken to fulfill the minor requirements. Students who do not meet this requirement may either repeat the course(s) in question or successfully complete an approved equivalent course or courses (either during the summer or in a study abroad program).
- Courses for the minor may not be taken Credit/No Credit.
- Normally, no more than 3 units of transfer or study abroad nonlanguage courses may be applied to the minor.

Korean

L51 Korean 117D First-Level Modern Korean I
Introduction to the modern spoken and written language of Korea. Acquisition of the fundamentals of grammar, morphology and oral communication skills. Note: students with some previous Korean language background must take the placement examination.
Credit 5 units. A&S : LA A&S : IQ, LCD, LS BU : IS

L51 Korean 118D First-Level Modern Korean II
Emphasis is placed upon the understanding, speaking, reading and writing of Korean. Continuation of the acquisition of the fundamentals of grammar and morphology. Prerequisite: grade of B– or better in Korean 117D or placement by examination.
Credit 5 units. A&S : LA A&S : IQ, LCD, LS BU : IS

L51 Korean 217 Second-Level Modern Korean I
Second-year course in standard modern Korean. Emphasis is placed upon speaking, reading and writing of modern Korean. Prerequisite: grade of B– or better in Korean 118D or placement by examination.
Credit 5 units. A&S : LA A&S : IQ, LCD, LS BU : IS

L51 Korean 218 Second-Level Modern Korean II
Continuation of second-year course in standard modern Korean. Prerequisite: grade of B– or better in Korean 217 or placement by examination.
Credit 5 units. A&S : LA A&S : IQ, LCD, LS BU : IS

L51 Korean 223C Korean Civilization
A comprehensive introduction to the study of Korea. Following a historical survey, the course examines key cultural themes and social institutions and explore aspects of Korea’s relationship with its East Asian neighbors. Attention also is paid to contemporary issues, social problems and cultural trends.
Credit 3 units. A&S : TH, CD, SD

L51 Korean 299 Independent Study
Prerequisite: permission of the instructor and the department chair.
Credit -6 unit.

L51 Korean 320 Korean Culture and Society through Language
Credit 3 units. A&S : LA, CD

L51 Korean 346 Topics in East Asian Religion
Same as Re St 346
Credit 3 units. A&S : TH A&S : IQ, HUM

L51 Korean 352 Literature of Modern and Contemporary Korea
This undergraduate course surveys the major writers and works of 20th-century Korean literature. During the 20th century, Korea went through a radical process of modernization. From its colonization by Japan, to its suffering of a civil war within the cold war order, to its growth into a cultural and economic powerhouse, Korea’s historical experience is at once unique and typical of that of a third-world nation. By immersing ourselves in the most distinctive literary voices from Korea, we examine how the Korean experience of modernization was filtered through its
cultural production. In class discussion, we pay special attention to the writers’ construction of the self and the nation. How do social categories such as ethnicity, class, gender and race figure in the varying images of the self? And how do these images relate to the literary vision of the nation? Along the way, we observe the prominent ideas, themes and genres of Korean literature. This class combines discussion with lecture with students strongly encouraged to participate. All literary texts are in English translation and no previous knowledge of Korean is required.

Credit 3 units. A&S : TH, CD, SD  A&S : IQ, HUM, LCD, SD  BU : IS

L51 Korean 355 Topics in Korean Literature and Culture
Credit 3 units. A&S : TH, CD, SD  A&S : IQ, HUM, LCD, SD

L51 Korean 417 Third-Level Modern Korean I
Third-year course in standard modern Korean. Emphasis is placed upon reading and writing of modern Korean. Prerequisite: grade of B– or better in Korean 218 or placement by examination.
Credit 3 units. A&S : LA  A&S : IQ, LCD, LS  BU : IS

L51 Korean 418 Third-Level Modern Korean II
Continuation of third-year course in standard modern Korean. Emphasis is placed upon reading and writing. Prerequisite: grade of B– or better in Korean 417 or placement by examination.
Credit 3 units. A&S : LA  A&S : IQ, LCD, LS  BU : IS

L51 Korean 4181 Gender and Sexuality in East Asian Religions
Same as Re St 418
Credit 3 units. A&S : TH, CD, SD  A&S : IQ, HUM, LCD

L51 Korean 427 Fourth-Level Modern Korean I
Fourth-year course in standard modern Korean (advanced level). Emphasis is placed on developing proficiency in all four areas of language skills (speaking, listening, reading and writing) beyond the intermediate level. Prerequisite: grade of B– or better in Korean 418 or placement by examination.
Credit 3 units. A&S : LA  A&S : IQ, LCD, LS  BU : IS

L51 Korean 428 Fourth-Level Modern Korean II
Continuation of the fourth-year course in Standard Modern Korean. Emphasis is placed upon the further development of speaking, listening, reading and writing, beyond the intermediate level. Prerequisite: grade of B– or better in Korean 427 or placement by examination.
Credit 3 units. A&S : LA  A&S : IQ, LCD, LS  BU : IS

L51 Korean 437 Contemporary Korean I: Topics in Korean Literature and Culture
Advanced- to high advanced-level Korean course in standard modern Korean. Emphasis is placed on developing an advanced level of reading proficiency in Korean and writing ability in Korean for an academic or professional purpose. Prerequisite: grade of B– or better in Korean 418 or placement by examination with instructor’s permission.
Credit 3 units. A&S : LA  A&S : IQ, LCD, LS  BU : IS

L51 Korean 438 Contemporary Korean II: Topics in Korean Literature and Culture
Continuation of Korean 437. Advanced- to high advanced-level Korean course in standard modern Korean. Emphasis is placed on developing an advanced level of reading proficiency in Korean and writing ability in Korean for an academic or professional purpose. Prerequisite: grade of B– or higher in Korean 437 or placement by examination with instructor’s permission.
Credit 3 units. A&S : LA  A&S : IQ, LCD

L51 Korean 455 Topics in Korean Literature and Culture
Varied topics in Korean Literature and Culture. Subject matter varies by semester, see current semester listings for topic.
Credit 3 units. A&S : LA, CD  A&S : IQ, LCD

L51 Korean 495 Guided Readings in Korean
This course normally is taken after successful completion of Korean 418 or by instructor’s permission. May be repeated once. Prerequisite: instructor’s permission.
Credit 2 units.

L51 Korean 497 Guided Readings in Korean
This course normally is taken after successful completion of Korean 418 or by instructor’s permission. May be repeated once. Prerequisite: instructor’s permission.
Credit -3 unit. A&S : LA

Latin
The Department of Classics offers course work in Latin language, history, literature, archaeology and culture. At Washington University, Latin is taught in the most progressive manner, using the latest innovations in textbooks and computer technology. The beginning student masters the grammar in two semesters and goes on immediately, in the third semester, to Virgil and Cicero. We maintain a strong program in Latin, from the textbook to graduate seminars, where our most advanced undergraduates are often working alongside graduate students in our vigorous and growing Master of Arts program. It is a remarkable and dynamic environment, one that the students

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find both rewarding and stimulating. The Department of Classics offers as well a variety of courses in Roman history, literature, archaeology and culture, addressed both to the general undergraduate population and to those pursuing majors and minors within the department.

Additional Information

Study Abroad: Study abroad for a semester in Rome or Athens is an option many Classics majors select. Washington University is a member of the Intercollegiate Center for Classical Studies (ICCS) consortium, and many majors attend the one-semester ICCS program in Rome. A knowledge of Latin or Greek to at least the intermediate level is required for admission to the Rome program. Students interested in studying at the Intercollegiate Center in Rome should consult Professor Tim Moore. Students interested in the College Year in Athens Program should consult Professor Robert Lamberton.

Contact Person: Cathy Marler
Phone: 314/935-5123
E-mail: classics@arts.wustl.edu
Departmental website: http://classics.artsci.wustl.edu

For a list of affiliated faculty, please see the Department of Classics faculty (p. 267) page.

There is no major in this area. Students interested in Latin should explore either the major in Classics (p. 267) or the major in Ancient Studies (p. 267) offered through the Department of Classics (p. 267).

There is no minor in this area. Students interested in Latin should explore either the minor in Classics (p. 268) or the minor in Ancient Studies (p. 268) offered through the Department of Classics. (p. 267)

Latin

L10 Latin 101D Beginning Latin I
Introduction to morphology and syntax of classical Latin.
Credit 4 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L10 Latin 102D Beginning Latin II
Continuation of program begun in Latin 101D.
Credit 4 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L10 Latin 190D Intensive Elementary Latin I
An accelerated study of Latin grammar. For students with previous knowledge of Latin, graduate students outside of Classics, and for students willing to work at an accelerated pace.
Credit 5 units. A&S : LA BU : IS

L10 Latin 210 Intensive Elementary Latin II
Completion of work begun in Latin 190D followed by readings in original Latin poetry and prose. Successful completion of Latin 210 with a grade of B+ or better allows the student to proceed directly to Latin 318C.
Credit 5 units. A&S : LA BU : IS

L10 Latin 301 Introduction to Latin Literature I
Intensive review of Latin grammar and syntax and development of reading skills and translation techniques through short readings from original texts in prose and poetry such as Caesar and Ovid. Prerequisite: Latin 102D, placement by examination or permission of instructor.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : HUM

L10 Latin 3161 Introduction to Latin Literature II: Elementary Prose and Poetry
Appreciation of literary forms through study of selected elementary literary texts in Latin prose and poetry. Prerequisite: Latin 301, placement by examination or permission of the instructor.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS

L10 Latin 3171 Survey of Latin Literature: The Republic
A broad overview of the major literary achievements of the last two centuries of the Roman Republic with emphasis on figures such as Catullus, Lucretius, Caesar and Cicero. Prerequisite: Latin 102D with a grade of B+ or better, or Latin 310C, or Latin 3161 (or 316C), or placement by examination, or permission of the instructor.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS

L10 Latin 3171 Survey of Latin Literature: The Empire
A broad overview of the major literary achievements of the first century of the Roman Empire with emphasis on figures such as Virgil and Livy. Prerequisite: Latin 102D with a grade of B+ or better, or Latin 3161 (or Latin 316C), or Latin 3171 (or Latin 317C), or placement by examination, or permission of instructor.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS

L10 Latin 350W Writing about Latin Literature
Latin courses at the 300 level with enhanced writing requirements may be taken under this designation as writing-intensive courses. Required: permission of instructor.
Credit 3 units. A&S : TH, WI A&S : IQ, HUM, LCD, WI

L10 Latin 370 Topics in Latin Literature
Study in selected problems, eras or generic sequences; specific topic for each semester in Course Listings. May be repeated for credit for study of different topics. Prerequisites: Latin 318C or permission of instructor.

L10 Latin 210 Intensive Elementary Latin II
Completion of work begun in Latin 190D followed by readings in original Latin poetry and prose. Successful completion of Latin 210 with a grade of B+ or better allows the student to proceed directly to Latin 318C.
Credit 5 units. A&S : LA BU : IS

L10 Latin 301 Introduction to Latin Literature I
Intensive review of Latin grammar and syntax and development of reading skills and translation techniques through short readings from original texts in prose and poetry such as Caesar and Ovid. Prerequisite: Latin 102D, placement by examination or permission of instructor.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : HUM

L10 Latin 3161 Introduction to Latin Literature II: Elementary Prose and Poetry
Appreciation of literary forms through study of selected elementary literary texts in Latin prose and poetry. Prerequisite: Latin 301, placement by examination or permission of the instructor.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS

L10 Latin 3171 Survey of Latin Literature: The Republic
A broad overview of the major literary achievements of the last two centuries of the Roman Republic with emphasis on figures such as Catullus, Lucretius, Caesar and Cicero. Prerequisite: Latin 102D with a grade of B+ or better, or Latin 310C, or Latin 3161 (or 316C), or placement by examination, or permission of the instructor.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS

L10 Latin 3171 Survey of Latin Literature: The Empire
A broad overview of the major literary achievements of the first century of the Roman Empire with emphasis on figures such as Virgil and Livy. Prerequisite: Latin 102D with a grade of B+ or better, or Latin 3161 (or Latin 316C), or Latin 3171 (or Latin 317C), or placement by examination, or permission of instructor.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS

L10 Latin 350W Writing about Latin Literature
Latin courses at the 300 level with enhanced writing requirements may be taken under this designation as writing-intensive courses. Required: permission of instructor.
Credit 3 units. A&S : TH, WI A&S : IQ, HUM, LCD, WI

L10 Latin 370 Topics in Latin Literature
Study in selected problems, eras or generic sequences; specific topic for each semester in Course Listings. May be repeated for credit for study of different topics. Prerequisites: Latin 318C or permission of instructor.
Credit 3 units. A&S : TH BU : HUM

L10 Latin 401 Medieval Latin
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, LS FA : Lit

L10 Latin 413 Latin Philosophical Writers
Readings among various writers of philosophy in Latin, ranging from Cicero to Seneca to Augustine. Texts vary, therefore, course may be taken more than once.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, LS FA : SSP

L10 Latin 415 Cicero
Credit 3 units. A&S : TH FA : SSP

L10 Latin 416 Seneca
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

L10 Latin 419 Julius Caesar and His Image
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, LS

L10 Latin 4215 Plautus
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, LS FA : SSP

L10 Latin 422 Lucretius
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, LS FA : SSP

L10 Latin 431 Vergil: The Aeneid
Credit 3 units. A&S : TH FA : Lit

L10 Latin 432 Horace on Poetry
Credit 3 units. A&S : TH A&S : IQ, HUM

L10 Latin 433 Ovid
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

L10 Latin 441 Roman Satire
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, LS

L10 Latin 444 Latin Prose Composition
Readings in Cicero coupled with exercises in composition of Latin prose, with attention to grammatical and idiomatic accuracy as well as elegance of style.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, LS FA : SSP

L10 Latin 451 The Roman Historians
Credit 3 units. A&S : TH FA : SSP

L10 Latin 451 The Roman Historians
Credit 3 units. A&S : TH FA : SSP

L10 Latin 453 Readings in Latin Prose
A survey of the major genres of Latin prose, history, oratory and philosophy. Authors may include Caesar, Cicero, Seneca, Tacitus. Aim is to develop reading facility and understanding.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, LS FA : Lit

L10 Latin 493 Readings in Latin Prose
A survey of the major genres of Latin prose, history, oratory and philosophy. Authors may include Caesar, Cicero, Seneca, Tacitus. Aim is to develop reading facility and understanding.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, LS FA : Lit

L10 Latin 494W Topics in Latin Literature
Advanced Latin seminars with enhanced writing requirements may be taken under this designation as writing-intensive courses. Required: permission of instructor.
Credit 3 units. A&S : TH, WI A&S : IQ, HUM, LCD, WI, LS

L10 Latin 495 Topics in Republican Latin
May be repeated for credit for study of different topics.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, LS FA : SSP

L10 Latin 496 Tacitus
Credit 3 units. A&S : TH FA : SSP

L10 Latin 4961 Topics in Empire Latin
May be repeated for credit for study of different topics.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, LS FA : SSP

L10 Latin 4962 Juvenal and Martial
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, LS

L10 Latin 497 Honors Course I
Prerequisites: junior standing, a grade of A– or better in courses in Latin numbered 300 or above, and permission of the department chair. Either Latin 497 or Greek 499 must be taken by all Honors candidates.
Credit 3 units.

L10 Latin 498 Honors Course II
Prerequisites: junior standing, a grade of A– or better in courses in Latin numbered 300 or above, and permission of the department chair. Either Latin 497 or Greek 499 must be taken by all Honors candidates.
Credit 3 units.

Latin American Studies
If you have particular interest in the cultures and societies of Latin America, but would like to study them from a comparative, interdisciplinary perspective, you may major in International and Area Studies (IAS) with a concentration in Latin American Studies. This program offers a wide range of courses, covering
different aspects of pre-Hispanic, colonial and modern cultures, and connecting the study of ancient traditions with contemporary debates. Survey courses and seminars incorporate approaches from cultural theory; historical, political and anthropological analysis; and cultural studies. Washington University, with its Latin American Studies program, was one of the 10 founding institutions funded by a Ford Foundation grant in 1964. Students in this track generally acquire a high level of competency in Spanish and/or Portuguese, depending on field of specialization. Our overseas programs in Chile, Ecuador and Mexico would be especially appropriate for students of Spanish as well as for those interested in conducting field work in these regions.

Contact Person: Toni Loomis  
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Departmental website: http://ias.wustl.edu/

Chair
Mabel Moraña  
William H. Gass Professor in Arts & Sciences  
PhD, University of Minnesota  
(Romance Languages and Literatures, IAS)

Endowed Professor
Elzbieta Sklodowska  
Randolph Family Professor in Arts & Sciences  
PhD, Washington University  
(Romance Languages and Literatures and Literatures, IAS)

Professor
David L. Browman  
PhD, Harvard University  
(Anthropology)

Associate Professors
J. Andrew Brown  
PhD, University of Virginia  
(Romance Languages and Literatures)

Brian Crisp  
PhD, University of Michigan  
(Political Science)

Bret Gustafson  
PhD, Harvard University  
(Anthropology)

Tabea Linhard  
PhD, Duke University  
(Romance Languages and Literatures)

Guillermo Rosas  
PhD, Duke University  
(Political Science)

Assistant Professors
William Acree  
PhD, University of North Carolina–Chapel Hill  
(Romance Languages and Literatures)

Yuko Miki  
PhD, New York University  
(History)

Derek Pardue  
PhD, University of Illinois–Urbana  
(Anthropology, IAS)

Ignacio Sánchez Prado  
PhD, University of Pittsburgh  
(Romance Languages and Literatures, IAS)

Paul Ramirez  
PhD, University of California–Berkeley  
(History)

Professors Emeriti
Pedro C. Cavalcanti  
PhD, University of Warsaw  
(Anthropology)

John F. Garganigo  
PhD, University of Illinois  
(Romance Languages and Literatures)

Richard J. Walter  
PhD, Stanford University  
(History)

The Major in Latin American Studies/International and Area Studies

Total units required: 33 graded credits plus four semesters of a Latin-American language.

Required courses:
- IAS 165C Survey of Latin-American Culture (3 credits).
- Latin American history course: either LatAm 321C Latin America from Colonialism to Neocolonialism or LatAm 322C Modern Latin America (3 credits).
- Latin American political science course: either LatAm 326B Latin American Politics or LatAm 4231 Contemporary Issues in Latin America (3 credits).
- Latin-American anthropology course at the 300 or 400 level (3 credits).
- Latin-American Pre-Columbian Cultures course at the 300 or 400 level (3 credits).
- Three elective courses at the 300 or 400 level (9 credits total).
• Latin-American Seminar: a 400-level course home-based in LAS (3 credits). Prime majors not pursuing honors must use this course as a capstone experience and obtain a grade of B or better.

• Advanced Latin American Studies course work (6 credits). May be fulfilled by 400-level courses cross-listed with LatAm or by a combination of one such course and thesis work.

Regulations/requirements:
• Completion of all course work with a grade of C+ or higher; all courses for the major must be taken for a letter grade.

• You must choose your upper-level course work from a minimum of three academic disciplines (for example, Anthropology, Art History, Economics, Film, History, Literature, Music, Philosophy and Political Science).

• No more than 6 credits may be from a semester of study abroad (9 credits from a year of study abroad, or a semester plus a summer of study abroad) (400-level credits must be earned on campus or in Washington University courses taught abroad).

• We strongly encourage students to study abroad. For those who do not study abroad, an additional 3 credits at the 300 or 400 level are required.

• Students must fulfill the standard IAS language requirement with a Latin-American language consistent with their study abroad location.

• No more than 3 credits may be from directed readings, research or internships excluding the honors thesis.

• The advanced credits must be unique to the LAS major.

• If your prime major is IAS, you must participate in a capstone experience. The options for the LAS major differ slightly from those of the other IAS major concentrations. See the LAS website for particulars.

Additional Information

Language Requirement for the Major in Latin American Studies/International and Area Studies: All majors in Latin American Studies are required to complete four semesters of course work in Spanish or Portuguese, regardless of their placement when arriving at the university. Native speakers of Spanish and Portuguese may claim an exemption to this requirement with the authorization of the director of Undergraduate Studies. LAS majors are encouraged to consider a minor or a double major in Spanish.

Study Abroad: You are strongly encouraged to study abroad in one of Washington University’s overseas programs during your junior year or the summer. Some credit for courses taken abroad may be applied to the major. For those who do not study abroad, an additional 3-credit course at the 300 or 400 level is required.

Senior Honors: If you have a strong academic record, you may apply to work toward honors by writing an honors thesis during your senior year.

The Minor in Latin American Studies/International and Area Studies

The minor in Latin American Studies is part of the Program in International and Area Studies.

Total units required: 18 graded credits plus four semesters of a Latin American language.

Requirements:
• IAS 165C Survey of Latin-American Culture (3 credits)
• Latin-American history survey course: either LatAm 321C Latin America from Colonialism to Neocolonialism or LatAm 322C Modern Latin America (3 credits)
• Latin-American politics survey course: either LatAm 326B Latin-American Politics or LatAm 4231 Contemporary Issues in Latin America (3 credits)
• Two upper-level elective courses at the 300 or 400 level (6 credits total)
• Latin-American Seminar: a 400-level course home-based in LAS (3 credits)

Regulations:
• All minor course work must be completed with a grade of C+ or higher.

• No more than 3 credits may be from independent study or research.

• All advanced credits must be unique to the Latin American Studies minor (i.e. not counted toward any other major or minor).

Additional Information

Language Requirement for the Minor in Latin American Studies/International and Area Studies: All minors in Latin American Studies are required to complete four semesters of course work in Spanish or Portuguese, regardless of their placement when arriving at Washington University. Native speakers of Spanish and Portuguese may claim an exemption to this requirement with the authorization of the director of Undergraduate Studies. LAS majors are encouraged to consider a minor or a double major in Spanish.

Study Abroad: You are strongly encouraged to study abroad in one of Washington University’s overseas programs during your
junior year or the summer. Some credit for courses taken abroad may be applied to the minor.

**Latin American Studies**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Notes</th>
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<tbody>
<tr>
<td>L45 LatAm 165C</td>
<td>Survey of Latin-American Culture</td>
<td>Credit 3 units. A&amp;S : TH, CD A&amp;S : IQ, LCD BU : IS FA : SSP</td>
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<tr>
<td>L45 LatAm 3092</td>
<td>Indigenous Peoples and Movements in Latin America</td>
<td>Credit 3 units. A&amp;S : SS, CD, SD A&amp;S : IQ, SSC, LCD BU : ETH FA : SSP</td>
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<tr>
<td>L45 LatAm 3093</td>
<td>Anthropology of Modern Latin America</td>
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<td>L45 LatAm 310C</td>
<td>Ancient Civilizations of the New World</td>
<td>Credit 3 units. A&amp;S : TH, CD A&amp;S : IQ, HUM, LCD BU : HUM FA : AH</td>
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<td>Hispanic Culture and Civilization II</td>
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<td>L45 LatAm 321C</td>
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<td>L45 LatAm 324</td>
<td>Vote for Pedro: a Critical Look at Youth and Popular Cultures</td>
<td>Credit 3 units. A&amp;S : SS A&amp;S : IQ, SSC BU : BA FA : SSP</td>
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<td>L45 LatAm 3260</td>
<td>Race, Class and Gender: Cultural Readings of Brazil and Its Cities</td>
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<td>L45 LatAm 331</td>
<td>Hispanic Art/Arte Hispano</td>
<td>Credit 3 units. A&amp;S : TH A&amp;S : IQ, HUM, LCD BU : IS FA : AH</td>
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<td>L45 LatAm 3351</td>
<td>The Ancient Maya: Archaeology and History</td>
<td>Credit 3 units. A&amp;S : SS, CD A&amp;S : IQ, SSC, LCD BU : IS FA : SSP</td>
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<td>L45 LatAm 3352</td>
<td>Spanish-American Literature of the Long 19th Century</td>
<td>Credit 3 units. A&amp;S : TH A&amp;S : IQ, HUM, LCD, LS</td>
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<td>Spanish-American Literature I</td>
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<td>L45 LatAm 3520</td>
<td>Conquest and Colony: Cultural Encounters in the New World</td>
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<td>L45 LatAm 356</td>
<td>Andean History: Culture and Politics</td>
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<td>L45 LatAm 3691</td>
<td>Kill Assessment: An Investigation into Death, Genocide and Other Forms of Violence</td>
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<td>L45 LatAm 3800</td>
<td>Surveys of Hispanic Cultures</td>
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<td>Latin-American DissemiNations: Migrations and Identities in the 20th and 21st Centuries</td>
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<td>Imagining the African Diaspora: Slavery, Black Radicalism and Globalization (WI)</td>
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<td>3951</td>
<td>Blacks, Latinos and Afro-Latinos: Constructing Difference and Identity: WI History Seminar</td>
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<td>416</td>
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<td>Latin-American Literature and Theory: Reading the State, Culture and Desire</td>
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<td>Narratives of Fear: Violence in Latin-American Literature</td>
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<td>457</td>
<td>Gender and Modernity in Latin America</td>
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Arts & Sciences

Credit 3 units. A&S : TH A&S : IQ, HUM

L45 LatAm 4572 Primitivism and Modernity in Latin America
Same as IAS 4572
Credit 3 units. A&S : TH A&S : IQ, HUM

L45 LatAm 4581 Bubblegum, Baseball and Boom: Latin-American Cities Go Pop
Same as IAS 4581
Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI

L45 LatAm 460 Postmodern Narratives in Latin America
Same as IAS 460
Credit 3 units. A&S : TH A&S : IQ, HUM

L45 LatAm 461 Latin-American Cultural Studies: Critical and Theoretical Approaches
Same as IAS 461
Credit 3 units. A&S : TH A&S : IQ, HUM

L45 LatAm 4611 Latin American Populism and Neo-Populism
Same as IAS 4611
Credit 3 units. A&S : CD A&S : IQ, HUM, LCD EN : H

L45 LatAm 462 Latin America and the West
Same as IAS 462
Credit 3 units. A&S : TH A&S : IQ, HUM

L45 LatAm 463 Seminar on Urban Cultures in Latin America
Same as IAS 463
Credit 3 units. A&S : TH A&S : IQ, HUM

L45 LatAm 464 Nation and Desire in Latin America
Same as IAS 464
Credit 3 units. A&S : TH A&S : IQ, HUM

L45 LatAm 4710 Development Economics
Same as Econ 471
Credit 3 units. A&S : SS A&S : IQ, SSC

L45 LatAm 474 Mexican Film in the Age of NAFTA (1990–2010)
Same as Span 474
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

L45 LatAm 483 Bodily Injuries: Violence, Fear and Representation in Latin America
Same as IAS 483
Credit 3 units. A&S : TH A&S : IQ, HUM EN : H

L45 LatAm 489 Cities of the Past Future: Literary Institutions & Peripheral Modernity in the Latin-Am. Avant-Garde
Same as Span 489
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

L45 LatAm 49PR Advanced Seminar in History: Latin-American Enlightenment: Science and Reason on the Colonial Frontier
Same as History 49PR
Credit 4 units. A&S : TH, CD A&S : IQ, HUM, LCD

L45 LatAm 49YM Advanced Seminar in History: Blacks and Indians in Latin America
Same as History 49YM
Credit 4 units. A&S : TH, CD, SD A&S : IQ, HUM, LCD

Legal Studies

The Legal Studies minor is an interdisciplinary program that allows you to study the role of law and legal institutions in society. It is an academic program about law rather than vocational training in law.

When you minor in Legal Studies, you study about law in courses from anthropology, economics, history, philosophy, political science and other liberal arts disciplines. The curriculum emphasizes the forces that shape law and the ways that peoples of different cultures and from different historical periods have used and interpreted the law.

Because Legal Studies is interdisciplinary in nature and offers a variety of courses, you can design a course of study that addresses your individual needs and interests. You may choose to take advantage of internships available in law and government.

Legal Studies is an excellent pre-law program. It also prepares you well for other graduate study, as well as for a career in academia, business, politics or social services.

Contact Person: David T. Konig
Phone: 314/935-9113
E-mail: dtkonig@artsci.wustl.edu
Departmental website: http://artsci.wustl.edu/~lglstds/
There is no major available in this area. Students interested in undergraduate, preprofessional preparation for the study of law should contact the pre-law adviser in the College of Arts & Sciences, who is available to help you plan your course of study and prepare a strategy for applying for admission to law school.

### The Minor in Legal Studies

**Units required:** 18

**Required courses:**
The minor in Legal Studies requires 18 units of credit, of which at least 12 must be taken outside the department of the student's major. Students must take three courses at the upper-division (300+) level.

**Elective courses:**
Some of the courses available for credit toward the minor are listed below:

- Focus 221 FOCUS in Law and Society
- Focus 222 Seminar in Law and Society
- History 307 Law in American Life, Colonial Foundations to 1776
- History 372C Law in American Life: 1776 to the Present
- History 3261 American Economic History
- Phil 100G Logic and Critical Analysis
- Phil 131F Present Moral Problems
- Phil 316 Mind and Morals
- E Comp 312 Argumentation
- WGSS 3561 Women and the Law
- BHBR 385D Topics in Biblical Hebrew Texts
- Econ 353 Economics of Law

### Legal Studies

- **L84 Lw St 1011 Microeconomics**
  Same as Econ 1011
  Credit 3 units. A&S : SS, QA A&S : IQ, SSC, AN

- **L84 Lw St 101B American Politics**
  Same as Pol Sci 101B
  Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

- **L84 Lw St 1021 Macroeconomics**
  Same as Econ 1021
  Credit 3 units. A&S : SS, QA A&S : IQ, SSC, AN

- **L84 Lw St 102B Comparative Politics**
  Same as Pol Sci 102B
  Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA, IS FA : SSP

- **L84 Lw St 105G Introduction to Logic and Critical Analysis**
  Same as Phil 100G
  Credit 3 units. A&S : LA, QA A&S : IQ, NSM, AN BU : HUM FA : SSP
L84 Lw St 107B Introduction to Women's Studies
Same as WGSS 100B
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : BA, HUM FA : SSP

L84 Lw St 120 Social Problems and Social Issues
Same as AMCS 120
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA

L84 Lw St 131F Present Moral Problems
Same as Phil 131F
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH FA : SSP

L84 Lw St 2020 The Immigrant Experience
Same as AMCS 202
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD BU : ETH, HUM FA : SSP

L84 Lw St 2030 Freshman Seminar: The Enigma of Thomas Jefferson
Same as History 2030
Credit 3 units. A&S : TH A&S : IQ, HUM

L84 Lw St 208B Introduction to African-American Studies
Same as AFAS 208B
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : HUM FA : SSP

L84 Lw St 2093 Freshman Seminar: Mobilizing Shame: Violence, The Media and International Intervention
Same as History 2093
Credit 3 units. A&S : CD A&S : IQ, HUM EN : H

L84 Lw St 209B Introduction to African-American Studies
Same as AFAS 209B
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : IS FA : SSP

L84 Lw St 2101 Freshman Seminar: Gender and Citizenship
Same as WGSS 210
Credit 3 units. A&S : TH, SD BU : BA FA : SSP

L84 Lw St 2152 The Theory and Practice of Justice: The American Historical Experience
Same as History 2152

Same as AFAS 2250
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : BA

L84 Lw St 2260 Sociological Approaches to American Health
Same as AMCS 226
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA

L84 Lw St 233F Biomedical Ethics
Same as Phil 233F
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH FA : SSP

L84 Lw St 2340 Popular Crime and Early American Anxieties
Same as AMCS 234
Credit 3 units. A&S : TH A&S : IQ, HUM, SD

L84 Lw St 235F Introduction to Environmental Ethics
Same as Phil 235F
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH FA : SSP

L84 Lw St 2674 Sophomore Seminar: Slavery and Memory in American Popular Culture
Same as History 2674
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L84 Lw St 2801 Ben Franklin’s America
Same as History 2801
Credit 3 units. A&S : TH A&S : IQ, HUM

L84 Lw St 3012 Biblical Law and the Origins of Western Justice
Same as JNE 3012
Credit 3 units. A&S : TH, CD, SD A&S : IQ, HUM, LCD

L84 Lw St 301U Historical Methods — United States History
Same as History 301U
Credit 3 units. A&S : TH A&S : IQ, HUM

L84 Lw St 3061 Between Submission and Power: Women and the Family in Islam

530
Same as WGSS 306
Credit 3 units. A&S : SS, CD  BU : ETH  FA : SSP

L84 Lw St 307 Politics and Policymaking in the American States
Same as Pol Sci 3070
Credit 3 units. A&S : SS  A&S : IQ, SSC  BU : BA

L84 Lw St 3073 The Global War on Terrorism
Same as History 3073
Credit 3 units. A&S : TH  A&S : IQ, HUM

L84 Lw St 307C English and Colonial Foundations of American Law to 1776
Same as History 307C
Credit 3 units. A&S : TH  BU : HUM  FA : SSP

L84 Lw St 312 Argumentation
Same as E Comp 312
Credit 3 units. A&S : LA, WI  A&S : IQ, HUM, WI

L84 Lw St 314 Islamic History: 1200–1800
Same as History 314C
Credit 3 units. A&S : TH, CD  A&S : IQ, HUM, LCD  BU : IS  FA : SSP

L84 Lw St 315 Introduction to Social Psychology
Same as Psych 315
Credit 3 units. A&S : SS  A&S : IQ, SSC  BU : BA  FA : SSP

L84 Lw St 3160 African-American Politics
Credit 3 units.

L84 Lw St 3161 African-American Politics
Same as AFAS 3161
Credit 3 units. A&S : SS  A&S : IQ, SSC

L84 Lw St 320 Poverty and Social Problems
Credit 3 units.

L84 Lw St 3255 The Development of the American Constitution
Same as Pol Sci 3255
Credit 3 units. A&S : SS  A&S : IQ, SSC  BU : BA

L84 Lw St 326 American Economic History
Same as Econ 326
Credit 3 units. A&S : SS  A&S : IQ, SSC  BU : BA  FA : SSP

L84 Lw St 3280 Political Intolerance in World Politics
Same as Pol Sci 3280
Credit 3 units. A&S : SS  A&S : IQ, SSC  BU : IS

L84 Lw St 331 Theories of Justice
Same as Pol Sci 331
Credit 3 units. A&S : SS  A&S : IQ, SSC  BU : HUM  FA : SSP

L84 Lw St 3310 Gender and American Politics
Same as Pol Sci 331B
Credit 3 units. A&S : SS, SD  BU : BA, ETH  FA : SSP

L84 Lw St 3311 Environmental and Energy Issues
Credit 3 units.

L84 Lw St 331F Classical Ethical Theories
Same as Phil 331F
Credit 3 units. A&S : TH  A&S : IQ, HUM  BU : ETH  FA : SSP

L84 Lw St 3321 Constitutionalism and Democracy
Same as Pol Sci 3321
Credit 3 units. A&S : SS  BU : BA

L84 Lw St 3325 Topics in Politics: Constitutional Politics
Same as Pol Sci 3325
Credit 3 units. A&S : SS  A&S : IQ, SSC  BU : BA  FA : SSP

L84 Lw St 3330 Topics in Politics: Social and Political Movements
Same as Pol Sci 333
Credit 3 units. A&S : SS  A&S : IQ, SSC  BU : BA  FA : SSP

L84 Lw St 3350 Money and Banking
Same as Econ 335
Credit 3 units. A&S : SS  A&S : IQ, SSC  FA : SSP

L84 Lw St 336 Topics in Politics: American Elections and Voting Behavior
Same as Pol Sci 336
Credit 3 units. A&S : SS  A&S : IQ, SSC  BU : BA  FA : SSP
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<td>Pol Sci 344</td>
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<td>The Wheels of Commerce: From the Industrial Revolution to Global Capitalism</td>
<td>History 3593</td>
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<td>Kill Assessment: An Investigation into Death, Genocide and Other Forms of Violence</td>
<td>Anthro 3691</td>
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<td>Law in American Life: 1776 to the Present</td>
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Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD  BU : ETH, IS  FA : SSP

L84 Lw St 373 History of U.S. Foreign Relations to 1914
Same as History 373
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM, IS  FA : SSP

L84 Lw St 3741 History of U.S. Foreign Relations Since 1950
Same as History 3741
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM, IS  FA : SSP

Same as History 3789
Credit 4 units.  A&S : TH, SD  A&S : IQ, HUM, SD

L84 Lw St 381 The Politics of Electoral Systems
Same as Pol Sci 381
Credit 3 units.  A&S : SS, WI  A&S : IQ, SSC, WI  BU : BA

L84 Lw St 389 Power, Justice and the City
Same as Pol Sci 389
Credit 3 units.  A&S : SS, SD, WI  A&S : IQ, SSC, SD, WI  BU : BA

L84 Lw St 390 Violence Against Women: Current Issues and Responses
Same as WGSS 393
Credit 3 units.  A&S : SS, SD  A&S : IQ, SSC, SD  BU : BA  FA : SSP

L84 Lw St 391 History of Political Thought I: Justice, Virtue and the Soul
Same as Pol Sci 391
Credit 3 units.  A&S : SS  A&S : IQ, SSC  BU : BA

L84 Lw St 3912 Social Construction of Female Sexuality
Same as WGSS 391
Credit 3 units.  A&S : SS  A&S : IQ, SSC  BU : BA  FA : SSP

L84 Lw St 392 History of Political Thought II: Legitimacy, Equality and the Social Contract
Same as Pol Sci 392
Credit 3 units.  A&S : SS  A&S : IQ, SSC  BU : BA  FA : SSP

L84 Lw St 393 History of Political Thought III: Liberty, Democracy and Revolution
Same as Pol Sci 393
Credit 3 units.  A&S : SS  A&S : IQ, SSC  BU : BA

L84 Lw St 4002 Directed Fieldwork in Legal Research
A fieldwork project in empirical and/or archival legal research under the direction of a member of the Washington University faculty. The fieldwork may be planned and undertaken individually or as part of a formal project. Permission of supervising faculty member and director of the program is required.
Credit -6 unit.  A&S : TH

L84 Lw St 4010 Pluralism, Liberalism and Education
Same as Pol Sci 4010
Credit 3 units.  A&S : SS  A&S : IQ, SSC

L84 Lw St 4013 Negotiating Major Legislation in Congress
Same as Pol Sci 4013
Credit 3 units.  A&S : SS, WI  A&S : IQ, SSC, WI

L84 Lw St 4021 Topics in Political Thought
Same as Pol Sci 402
Credit 3 units.  A&S : SS  A&S : IQ, SSC

L84 Lw St 4022 The Meaning of National Security in the 21st Century
Same as IAS 402
Credit 3 units.  A&S : SS  A&S : IQ, SSC

L84 Lw St 403 Economics of Law
Same as Econ 403
Credit 3 units.  A&S : SS  A&S : IQ, SSC

L84 Lw St 4030 Political Theory of Education
Same as Pol Sci 4030
Credit 3 units.  A&S : SS  A&S : IQ, SSC  BU : ETH

L84 Lw St 4050 Political Representation
Same as Pol Sci 4050
Credit 3 units.  A&S : SS  A&S : IQ, SSC  BU : ETH

L84 Lw St 418 Law and Individual Liberties
### Arts & Sciences

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L84 Lw St 4974 Advanced Seminar in History: Gender, Work and Property Law
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L84 Lw St 4981 Advanced Seminar: Historical Perspectives on Human Rights and Globalization
Same as History 4981
Credit 4 units. A&S : TH A&S : IQ, HUM

L84 Lw St 4984 Advanced Seminar: The Problem of New World Freedom: The Age of Democratic Revolution in the U.S.
Same as History 4984
Credit 4 units. A&S : TH SD A&S : IQ, HUM, SD

L84 Lw St 49SA Advanced Seminar: Slavery in America: The Politics of Knowledge Production
Same as History 49SA
Credit 4 units. A&S : TH SD A&S : IQ, HUM, SD

Linguistics

At Washington University, Linguistics is a special interdepartmental program that offers an undergraduate major and minor. The core of the Linguistics program is the study of the form language takes. We examine how words are built from sounds, how sentences are built from words, and how all this structure manages to communicate meaning. With a good understanding of these formal properties, we can pursue other questions about language. How does language change over time? Do diverse languages have more in common than meets the eye? What functions does language play in society? What is its relation to thought? What are its biological and psychological underpinnings? And just how do children manage to acquire language so well in the first place?

Linguistics takes a scientific approach to the study of language and develops skills in data analysis and scientific experimental methods. Linguistics students may or may not speak many languages, but they definitely will learn how to collect and analyze data about languages in an effort to answer these questions.

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E-mail: bkessler@wustl.edu
Departmental website: http://linguistics.wustl.edu

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David A. Balota
Professor
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(Psychology, Neurology)

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Assistant Professor
PhD, Rutgers University
(Linguistics, Philosophy, Philosophy–Neuroscience–Psychology)

Brett Kessler
Associate Professor
PhD, Stanford University
(Linguistics, Psychology, Philosophy–Neuroscience–Psychology)

Kristen J. Van Engen
Postdoctoral Fellow
PhD, Northwestern University
(Linguistics, Psychology)

Participating Faculty

Joe Barcroft
Associate Professor
PhD, University of Illinois at Urbana–Champaign
(Romance Languages and Literatures)

John Baugh
Margaret Bush Wilson Professor in Arts & Sciences
PhD, University of Pennsylvania
(Anthropology, Education, English, Psychology)

Stephanie B. Berk
Research Associate
PhD, University of Connecticut
(Neurology)

Cindy Brantmeier
Associate Professor
PhD, Indiana University
(Romance Languages and Literatures)

Garrett Albert Duncan
Associate Professor
PhD, The Claremont Graduate School
(Education)

Johanna G. Nicholas
Associate Professor
PhD, Washington University
(Otolaryngology)

Steven E. Petersen
James S. McDonnell Professor of Cognitive Neuroscience
PhD, California Institute of Technology
(Neurology, Psychology)

Gillian Russell
The Major in Linguistics

Total units required: 30, of which 18 must be in courses numbered 300 or higher

Required courses:

- Ling 170D Introduction to Linguistics 3
- Ling 309 Syntactic Analysis 3
- Ling 313 Phonological Analysis 3
- Ling 317 Introduction to Computational Linguistics 3

Elective courses: 18 units. At least 6 units must come from this list:

- Ling 311 Introduction to Semantics 3
- Ling 312 Phonetics 3
- Ling 320 Historical and Comparative Linguistics 3
- Ling 339 Introduction to Sociolinguistics 3
- Phil 306G Philosophy of Language 3
- Psych 358 Language Acquisition 3
- Psych 433 Psychology of Language 3

The remaining electives may be drawn from either the above list or the following:

- Ling 242 American Sign Language From a Psycholinguistic and Cultural Perspective 3
- Ling 341 Linguistic Diversity in the United States 3
- Ling 396 Linguistics Seminar 3
- Ling 396W Linguistics Seminar: Writing-Intensive 3
- Ling 466 Second-Language Acquisition 3
- Ling 495 Senior Seminar in Linguistics 3
- Ling 499 Independent Work For Senior Honors 6
- Ling 500 Independent Work in Linguistics 3
- AFAS 210 The Linguistic Legacy of the African Slave Trade in Interdisciplinary Perspective 3
- AFAS 368 Language and Society in Africa 3
- Anthro 2151 Language, Culture and Society 3
- Classics 225D Latin and Greek in Current English 3
- Educ 4315 Culture, Language and the Education of Black Students 3
- Phil 301G Symbolic Logic 3
- Phil 4061 Topics in the Philosophy of Language 3
- Psych 4081 Topics in Psycholinguistics 3
- Psych 4351 Reading and Reading Development 3
- Span 370 Introduction to Hispanic Linguistics 3
- Span 417 Spanish Phonetics, Phonology and Dialectology 3

Several courses offered through the School of Medicine’s Program in Audiology and Communication Sciences also count as electives: PACS 234, 401, 433, 434 and 436. Under certain circumstances, students may count toward their major a limited number of relevant classes not listed here. Such circumstances include study abroad and preparation for a specialized capstone. A specific plan of study must be worked out in advance with advisers in the Linguistics Program.

Language requirement: Majors should normally have foreign language competency equivalent to one year of study at the college level. Classes taken to fulfill this requirement do not normally count toward the 30 total units required for the major.

Additional Information

Capstone: A senior project is required of primary majors. This normally will be done while taking Ling 495 or 500, or by completing the Senior Honors program (Ling 499).

Senior Honors: Students with a university GPA of 3.65 and a Linguistics GPA of 3.65 at the end of their junior year may apply to enter the honors program by submitting a proposal for a senior thesis. If admitted into the program, the student registers for 3 units of Ling 499 in each semester of the senior year. The student must complete the thesis and pass an oral defense by the middle of March.

The Minor in Linguistics

Units required: 15, of which 9 must be in courses numbered 300 or higher

Required course:

- Ling 170D Introduction to Linguistics 3

Elective courses: 12 units. At least 6 units must come from this list:

- Ling 309 Syntactic Analysis 3
- Ling 311 Introduction to Semantics 3
- Ling 312 Phonetics 3
- Ling 313 Phonological Analysis 3
- Ling 317 Introduction to Computational Linguistics 3
- Anthro 2151 Language, Culture and Society 3
Linguistics

L44 Ling 170D Introduction to Linguistics
Language is one of the fundamental capacities of the human species, and there are many interesting and meaningful ways in which it can be studied. This course explores the core components of linguistic theory: speech sounds (phonetics and phonology), word formation (morphology), sentence structure (syntax) and meaning (semantics). It also provides an overview of interdisciplinary ideas and research on how language is acquired and processed, its relation to the mind-brain and to society, and the question of whether the essential properties of language can be replicated outside the human mind (specifically, in chimpanzees or computer programs).
Credit 3 units.  A&S : LA  A&S : IQ, SSC  BU : BA, HUM

L44 Ling 225D Latin and Greek in Current English
Same as Classics 225D
Credit 3 units.  A&S : LA  A&S : IQ, HUM  BU : HUM

L44 Ling 234 Introduction to Speech and Hearing Sciences and Disorders
Same as Educ 234
Credit 3 units.

L44 Ling 242 American Sign Language From a Psycholinguistic and Cultural Perspective
This course examines deaf culture and aspects of psycholinguistics of a signed language versus a spoken language. This is not an American Sign Language class, whereby you finish the course knowing how to sign. However, the focus is on two main aspects. One focus is the importance of language to culture and the effect of being in a minority group. A second focus is on language and cognition within the context of a language in the visual modality. Current and past research serves as the foundation for the examination of what makes a signed language a true, natural, human language within members of a culture, as well as on the more cognitive aspects of spatial relations and memory. The implications of understanding cross-modal similarities and differences of human language are explored through research articles, discussion of modern technology, e.g. fMRI and BlackBerry, as well as through demonstrations.
Credit 3 units.  A&S : SS, SD  A&S : IQ, SSC, SD

L44 Ling 301G Symbolic Logic
Same as Phil 301G
Credit 3 units.  A&S : LA  A&S : IQ, NSM, AN  BU : HUM  FA : SSP

L44 Ling 306G Philosophy of Language
Same as Phil 306G
Credit 3 units.  A&S : LA  A&S : IQ, HUM  BU : HUM  FA : SSP

L44 Ling 309 Syntactic Analysis
The ability to produce and understand an infinite number of sentences is perhaps the most fascinating aspect of the human language faculty. Syntax is the study of how the brain organizes sentences from smaller phrases and words. This course explores syntactic analysis from several perspectives within generative linguistics, focusing primarily on the Government and Binding framework but also introducing Minimalist and Optimality Theoretic approaches. Topics discussed include phrase structure, transformations, case theory, thematic roles and anaphora. Assignments help students learn to construct and compare analyses of syntactic problems in English and other languages. Prerequisite: Ling 170D or 440, or permission of instructor.
Credit 3 units.  A&S : LA  A&S : IQ, SSC

L44 Ling 311 Introduction to Semantics
Semantics is the branch of linguistics that studies how speakers assign meaning to words, sentences and larger units of discourse. We combine perspectives from both linguistics and philosophy to explore a variety of topics including polysemy, compositionality, quantification, anaphora, definite descriptions, attitude reports, presupposition and implicature. Prerequisite: Ling 170D or Phil 301G or permission of instructor.
Credit 3 units.  A&S : LA  A&S : IQ, SSC

L44 Ling 312 Phonetics
Phonetics is the study of the sounds of the languages of the world. The primary goal of the course is to learn how speech sounds are produced, so that the student can describe them in articulatory terms, write them out in a standard notational system, and produce them accurately. Other topics include a basic introduction to the acoustics of speech and the use of personal computers to display, analyze and synthesize human speech. The course should prove useful to students desiring a deeper understanding of one of the fundamental underpinnings of linguistics, but also has practical applications in such fields as foreign language learning and the appreciation and acquisition of new dialects and accents. Prerequisite: Ling 170D or permission of instructor.
Credit 3 units.  A&S : LA  A&S : IQ, SSC
L44 Ling 313 Phonological Analysis
There are several important abilities involved in the use of human language, one of these being the ability to organize speech sounds. The system that the brain uses to accomplish this task is the subject matter of phonology. This course explores phonology from several perspectives within generative linguistics, including both traditional rule-based and current Optimality Theoretic approaches. Topics discussed include phonological features, lexical phonology, prosodic morphology, tone and metrical stress. Assignments help students learn to analyze phonological problems in a variety of languages and to evaluate the consequences of using different analytic approaches. Prerequisite: Ling 170D or 440, or permission of instructor. Credit 3 units. A&S : LA A&S : IQ, SSC BU : BA

L44 Ling 317 Introduction to Computational Linguistics
Use of computers to analyze, understand and generate human language. Emphasis on appreciating practical applications such as text analysis; search and creation of dictionaries and corpora; information retrieval; machine translation; and speech interfaces. Survey of rule-based and statistical techniques. Students acquire programming skills appropriate for solving small- to medium-scale problems in linguistics and text processing, using a language such as Python. Students have regular programming assignments and complete a semester project. No previous knowledge of programming required. Prerequisites: Ling 170D or permission of instructor. Credit 3 units. A&S : LA A&S : IQ, SSC

L44 Ling 320 Historical and Comparative Linguistics
Historical linguistics focuses on how languages change over time. Comparative linguistics focuses on their similarities and differences. In this course we trace some of the differences and changes in sound (phonetics and phonology), word formation (morphology), sentence structure (syntax) and meaning (semantics). Topics include linguistic universals; the structural and genetic classification of languages; the techniques of reconstructing proto-languages; and the causes of language change. Examples from Indo-European languages (for example, Greek, English and Spanish) and from Native American languages (for example, Quechua and Mayan) are emphasized. Prerequisite: Ling 170D. Credit 3 units. A&S : LA A&S : IQ, SSC FA : Lit

L44 Ling 339 Introduction to Sociolinguistics
Studies of language in social context are presented, including research related to diglossia, bilingualism, pidginization, creolization and dialectology. Discourse analyses and conversational analyses of face-to-face conversation are examined in methodological and analytical terms. Beyond assigned readings, critical discourse analyses, the ethnography of speaking, the sociology of language, and accommodation theory are also considered. Students are required to develop a course project related to one or more studies of language in use. Experimental studies of sociophonetics and sociohistorical linguistics are presented during lectures to demonstrate advanced interdisciplinary research with potential educational and legal relevance. Prerequisite: Ling 170D. Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD

L44 Ling 341 Linguistic Diversity in the United States
Linguistic diversity has always existed within the United States, and this course begins with a survey of many of the indigenous Native American languages that existed prior to European colonization. The emphasis of this course is linguistic research, as we examine diverse studies of language across the nation with respect to regional differences, racial and ethnic differences, historical differences, and differences in education and economic status. American bilingualism is explored, as are many of the dialects that have evolved in different parts of the nation. Students study a range of sophisticated linguistic analyses of language diversity in different parts of the United States at different points in the nation's history. The culmination of the course explores practical linguistic applications in legal and educational contexts. Prerequisites: Ling 170D and some familiarity with elementary statistics. Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD

L44 Ling 358 Language Acquisition
Same as Psych 358 Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L44 Ling 3701 Introduction to Hispanic Linguistics
Same as Span 370 Credit 3 units. A&S : LA A&S : IQ, LCD

L44 Ling 396 Linguistics Seminar
Readings on a selected topic in theoretical linguistics with an emphasis on discussion, presentation and writing. Prerequisite: varies with topic. Credit 3 units. A&S : TH A&S : IQ, SSC

L44 Ling 396W Linguistics Seminar: Writing-Intensive
Readings on a selected topic in theoretical linguistics with an emphasis on discussion, presentation and writing. Prerequisite: varies with topic. Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI

L44 Ling 408 Psychology of Language
Same as Psych 433 Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP
L44 Ling 4315 Culture, Language and the Education of Black Students
Same as Educ 4315
Credit 3 units.   A&S : SS, CD   A&S : IQ, SSC, LCD    FA : SSP

L44 Ling 466 Second-Language Acquisition
There are many ways in which a second language can be learned: from infancy as the child of bilingual parents, or later through formal instruction, immersion in a new culture, or in a particular work or social situation. This class is an inquiry into the processes by which acquisition occurs. Topics include the nature of language learning within the scope of other types of human learning; the relationship between first- and second-language acquisition; the role of linguistic, cognitive and sociocultural factors; insights gained from analyzing learners’ errors; key concepts such as interlanguage and communicative competence; bilingualism; the optimal age for second-language acquisition; and a critical appraisal of different theories of second-language acquisition. Both theoretical and instructional implications of second-language acquisition research are considered. This course can be used toward certification in TESOL and is a required course for the Graduate Certificate in Language Instruction. Prerequisite: Ling 170D or equivalent is recommended, especially for undergraduates, but is not required.
Credit 3 units.   A&S : LA   A&S : IQ, HUM

L44 Ling 478 Topics in Linguistics
Meets with designated linguistics course, but with additional writing and research required for graduate credit and certification.
Credit 3 units.   A&S : LA   A&S : IQ, SSC

L44 Ling 495 Senior Seminar in Linguistics
The Senior Seminar affords students an opportunity to integrate the various fields of linguistics. Readings, discussions and presentations let students address issues that combine the content and the research methods of areas such as phonetics, phonology, morphology, syntax, diachrony and semantics. Students have individual projects within the scope of the semester's particular topic, but the class as a whole helps in choosing, developing and refining the treatment. This course fulfills the requirement for a senior capstone for primary majors in Linguistics. It is the normal option for students who wish to take the capstone as a regular class rather than as sponsored independent study.
Credit 3 units.   A&S : SS   A&S : IQ, SSC

L44 Ling 499 Independent Work For Senior Honors
Prerequisites: senior standing and permission of the Linguistics program.
Credit -6 unit.

Literature and History

Literature and History offers the opportunity to explore an integrated program of literary, political and historical studies under the auspices of the Interdisciplinary Project in the Humanities (p. 450) (IPH). Students interested in Literature and History can pursue it as a fully developed track within the IPH. (A full description of the requirements for completing the Literature and History program may be found in the general listing for the IPH.) This rigorous major emphasizes the interconnectedness of these disciplines and draws on the disciplinary methods of literary analysis and historical investigation.

Studying literature and history can bring a greater coherence, substantively and methodologically, to work in the humanities and social sciences. Because the program is small, it affords the opportunity to work closely with the faculty adviser. You also can take advantage of courses from other interdisciplinary programs, such as American Culture Studies (p. 156) and European Studies (p. 364).

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Steering Committee

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Professor
PhD, Yale University
(English, Interdisciplinary Project in the Humanities)

Steven Zwicker
Stanley Elkin Professor in the Humanities
PhD, Brown University
(English)

Students interested in Literature and History can pursue it as a fully developed track within the Interdisciplinary Project in the Humanities. A full description of the requirements for completing the Literature and History program may be found in the general listing for the Interdisciplinary Project in the Humanities (p. 451).

There is no minor in this area. Interested students are encouraged to please explore the minor in Text and Tradition offered by the Interdisciplinary Project in the Humanities (p. 452).
There are no courses associated with this program. See Interdisciplinary Project in the Humanities.

Mathematics

Mathematics has always held a central position in the liberal arts, and over time it has come also to play an important role in more and more aspects of our lives. Mathematical analysis and modeling are involved in many areas, far beyond the traditional association of mathematics with just the physical sciences and engineering. This fact is reflected in the diversity of the students who study at least some mathematics during their time at Washington University — students who recognize the importance of quantitative skills in a world that becomes more and more technological.

Students major in mathematics for many reasons. Some are planning academic careers in mathematics that involve teaching or research. Others plan to work as actuaries or at other jobs in industry or government. Some plan careers in secondary education. Many majors do not intend to become "mathematicians" at all, but simply realize that quantitative training is a valuable asset in many kinds of work. Still others just view mathematics as an interesting concentration in their liberal arts education, even though they plan to enter such professional fields as medicine or law.

The mathematics program gives majors and minors a broad introduction to the subject. Mathematics majors also are able to choose among several tracks that add different emphases to their programs and reflect their individual interests or professional goals. Majors are encouraged to complete additional work (perhaps even a minor or second major) in other related areas.

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Mohan Kumar Neithalath
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John Shareshian
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Assistant Professors
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PhD, Massachusetts Institute of Technology
Jimin Ding
PhD, University of California–Davis
Matthew Kerr
PhD, Princeton University
Alvaro Pelayo
PhD, University of Michigan
Ari Stern
PhD, California Institute of Technology

Instructors
Ivan Horozov
The Major in Mathematics

Total units required: 31–34

All mathematics majors are required to complete Math 131 Calculus I, Math 132 Calculus II and Math 233 Calculus III (Total: 10 units).

In addition, each major is required to complete the courses in one of the following five tracks and to complete a departmental exit interview shortly before graduation.

Traditional
- Math 3200 or Math 493
- Math 310
- Math 4111 and Math 4121
- Math 429 and Math 430
- Two additional upper-level mathematics elective (possibly Math 308, Math 309 or Math 318)

Total 24 upper-level units

Probability/Statistics
- CSE 131 or CSE 200
- Math 309
- Math 3200
- Math 310
- Math 318 or Math 308
- Math 493 and Math 494
- One additional upper-level probability or statistics elective

Total 21 upper-level units

Applied
- Physics 117A and Physics 118A
- or Physics 197 and Physics 198
- or two computer science courses chosen from CSE 131, CSE 132, CSE 200, CSE 241
- Math 217
- Math 309
- Math 3200 or Math 493
- Math 310
- Math 318 or Math 308
- Math 449 and Math 450
- One additional upper-level mathematics elective

Total 21 upper-level units

Mathematics for Secondary Education
(also requires a major in Secondary Education)
- CSE 131 or CSE 200
- Math 309
- Math 3200 or Math 493
- Math 310
- Math 318 or Math 308
- Math 302
- Math 331
- One additional upper-level mathematics elective

Total 21 upper-level units

Mathematics (Economics Emphasis)
- Four economics courses:
  - Econ 1011
  - Econ 1021
  - Econ 413 and either Econ 4011 or Econ 4021
- Math 309
- Math 3200 or Math 493
- Math 310
- Math 4111 and Math 4121
- Two additional upper-level mathematics from among Math 318
- Math 429
- Math 456
- or any 400-level statistics courses

Total 21 upper-level units
Notes
1. Upper-level mathematics courses are those numbered 300 or higher. A course with a lower number does not count toward upper-level mathematics requirements even if it is cross-listed as an upper-level course in another department or program: for example, if Math 2200 were cross-listed by another department as 3**, then registering for that course would not satisfy an upper-level mathematics requirement.
2. Required courses must be completed with a grade of C– or better.
3. Math 318 Introduction to Calculus of Several Variables and Math 308 Mathematics for the Physical Sciences cannot both be used to fulfill major requirements.
4. Courses transferred from other accredited colleges and universities with department approval can be counted. However,
   • courses transferred from a two-year college (such as a community college) cannot be used to satisfy upper-level requirements
   • at least half the upper-level units required in a major must be earned at Washington University or in a Washington University-approved Overseas Study Program.
5. Courses from University College cannot be used to fulfill major requirements.
6. At most 3 units for independent study or research work can count toward the major requirements.
7. At least 18 of the required upper-level units in a major must be satisfied using courses not double-counted toward the requirements of any other major or minor program.
8. Certain approved substitutions are found at the Undergraduate link on the department’s web page at http://wumath.wustl.edu. However, in all cases, at most one substitution can be approved that involves a course not home-based in the Department of Mathematics.

Additional Information

Independent Study: Majors with a plan for independent work or a research project may apply for independent study with a faculty member. Majors are encouraged (but not required) to consider a senior project or an honors project.

Graduation with Honors: Latin Honors are awarded by the student’s undergraduate school, not the major department. In Arts & Sciences, the major department makes a recommendation to the College and the College finalizes the decision. In Mathematics, all of the following requirements must be met:
1. An overall GPA (including the final semester) of 3.65
2. Completion of the following courses, all with a grade of B or better (not B–):
   • one of the four sequences: Math 4111 and Math 4121, Math 429 and Math 430, Math 449 and Math 450, or Math 493 and Math 494
   • three additional 400-level mathematics courses (not independent study or research courses). These courses must be home-based in the Department of Mathematics. In the case of applied track majors, at least two of these courses must be approved as “applications oriented.” In the case of probability and statistics track majors, at least two of these courses must be approved probability or statistics courses.
3. Successful completion of an honors project in mathematics (additional details are available in the undergraduate section of the Department web page).

The level of Latin Honors (summa cum laude, magna cum laude or cum laude) is determined by the College. See the Arts & Sciences Academic Honors and Awards (p. 136) section of this Bulletin for further details.

Note: students who entered Washington University before Fall 2011 should click the menu item Prior Bulletins on the left to review the requirements that were in place for the appropriate year of matriculation, requirements 2 and 3 are the same, but an older set of GPA requirements governs Latin Honors eligibility and the level of honors awarded, as follows:
   • 3.50–3.64 cum laude
   • 3.65–3.79 magna cum laude
   • 3.80–4.00 summa cum laude

Distinction in Mathematics Award: Majors who do not want to do an honors project can earn the award “Distinction in Mathematics” on graduation. This award is entered on the student’s permanent record. Second majors (including those whose home division is not Arts & Sciences) are eligible for the Distinction in Mathematics Award. Graduating majors must meet all of the following requirements:
1. A 3.65 GPA for all upper-level mathematics courses (L24 courses); overall college GPA is not considered
2. Fulfill the same course requirements described in 2) for Latin Honors, and
3. Instead of an honors thesis, either complete an additional 400-level mathematics course with a grade of B or better (not B–) or successfully pass the first actuarial exam (Exam P) administered by the Society of Actuaries.

Note: for students who entered Washington University before Fall 2011, Requirements 2 and 3 are the same, but an older
GPA requirement applies: an overall college GPA of at least 3.50.

Study Abroad: Students interested in an intensive semester or year abroad studying mathematics should consider the Budapest Semesters in Mathematics Program.

The Minor in Mathematics

Units required: 25

Required courses:
- CSE 131 Computer Science I or CSE 200 Engineering and Scientific Computing
- Math 131 Calculus I
- Math 132 Calculus II
- Math 233 Calculus III
- Math 309 Matrix Algebra
- Math 318 Introduction to Calculus of Several Variables or Math 308 Mathematics for the Physical Sciences
- Math 3200 Elementary to Intermediate Statistics and Data Analysis
- One additional elective Mathematics course numbered 300 or above

Additional Information
1. Required courses must be completed with a letter grade of C– or better.
2. Math 318 (p. 540) and Math 308 (p. 540) cannot both be used to fulfill minor requirements.
3. Courses transferred from a two-year college (such as a community college) cannot count as upper-level courses toward the minor.
4. University College courses cannot count to fulfill minor requirements.
5. At least 6 of the upper-level units required in a minor must be earned at Washington University or in a Washington University-approved Overseas Study Program.
6. At least 6 of the required upper-level units required must be satisfied using courses not double-counted toward the requirements of any other major or minor program.
7. At least three of the four upper-level courses required in the minor must be courses “home-based” in the Math Department; one approved course from another department may be substituted. Approved substitutions can be found on the department web page.

Mathematics

L24 Math 100 Foundations for Calculus
A limited enrollment class for students planning to take calculus but who need additional precalculus preparation.

The course aims to build both the technical skills and the conceptual understanding needed to succeed in calculus. Course emphasizes links between the graphical, numeric and algebraic viewpoints. A variety of approaches are used to present the material. Prerequisites: two years of high school algebra and a course in geometry (or the equivalent).
Credit 3 units.   A&S : NS   A&S : IQ, NSM   FA : NSM

L24 Math 1011 Introduction to Statistics
Basic concepts of statistics. Data collection (sampling, designing experiments), data organization (tables, graphs, frequency distributions, numerical summarization of data), statistical inference (elementary probability and hypothesis testing). Prerequisite: two years of high school algebra.
Credit 3 units.   A&S : NS, QA   A&S : IQ, NSM, AN   FA : NSM

L24 Math 109 Mathematics and Music
Credit 3 units.   A&S : NS, QA   A&S : IQ, NSM, AN   FA : NSM

L24 Math 131 Calculus I
Derivatives of algebraic, trigonometric and transcendental functions, techniques of differentiation, Mean Value Theorem, applications of the derivative. The definite integral and Fundamental Theorem of Calculus. Areas. Simpler integration techniques. Prerequisites: high-school algebra and precalculus, including trigonometry.
Credit 3 units.   A&S : NS, QA   A&S : IQ, NSM, AN   FA : NSM

L24 Math 132 Calculus II
Continuation of Math 131. A brief review of the definite integral and Fundamental Theorem of Calculus. Techniques of integration, applications of the integral, sequences and series, Taylor polynomials and series, and some material on differential equations. Prerequisite: Math 131 or a B or better in a one-year high school calculus course, or permission of the department.
Credit 3 units.   A&S : NS, QA   A&S : IQ, NSM, AN   FA : NSM

L24 Math 201 Freshman Seminar: How Mathematics Thinks: Multivariable Calculus
### L24 Math 217 Differential Equations

### L24 Math 220 Finite Mathematics
Topics selected from number theory, combinatorics and graph theory. Methods of proof and practical applications: for example, calendars, scheduling, communications, encryption. Prerequisite: high school algebra. Credit 3 units. A&S : NS, QA A&S : IQ, NSM, AN FA : NSM

### L24 Math 2200 Elementary Probability and Statistics
An introduction to probability and statistics. Discrete and continuous random variables, mean and variance, hypothesis testing and confidence limits, nonparametric methods, Student’s t, analysis of variance, regression and contingency tables. Graphing calculator with statistical distribution functions (such as the TI-83) may be required. Prerequisite: Math 131. Credit 3 units. A&S : NS, QA A&S : IQ, NSM, AN

### L24 Math 233 Calculus III
Multivariable calculus. Topics include differential and integral calculus of functions of two or three variables: vectors and curves in space, partial derivatives, multiple integrals, line integrals, vector calculus at least through Green’s Theorem. Prerequisite: Math 132 or a score of 4-5 on the Advanced Placement Calculus Exam (BC version). Credit 3 units. A&S : NS, QA A&S : IQ, NSM, AN

### L24 Math 266 Math for Elementary School Teachers
A review of the elementary school mathematics at a level beyond its usual presentation in the schools. Applications of all concepts are given in abundance. Restricted to majors in Elementary Education. Prerequisite: two years of high school mathematics. Credit 3 units. A&S : NS, QA A&S : IQ, NSM, AN

### L24 Math 302 Elementary Geometry From an Advanced Point of View
A rigorous modern treatment of Euclidean geometry and an introduction to non-Euclidean geometry. Prerequisite: Math 310 or permission of instructor. Credit 3 units. A&S : NS A&S : IQ, NSM FA : NSM

### L24 Math 308 Mathematics for the Physical Sciences
Continuation of Math 233 emphasizing topics of interest in the physical sciences. Topics in multivariable and vector calculus (div, grad, curl); line, surface integrals and connections to electromagnetism; Fourier series and integrals; boundary value problems (diffusion and wave equations); additional topics if time permits. Students may not receive credit toward a math major or minor for both Math 308 and Math 318. Prerequisite: Math 233 or permission of instructor. Credit 3 units. A&S : NS A&S : IQ, NSM FA : NSM

### L24 Math 309 Matrix Algebra
An introductory course in linear algebra that focuses on Euclidean n-space, matrices and related computations. Topics include: systems of linear equations, row reduction, matrix operations, determinants, linear independence, dimension, rank, change of basis, diagonalization, eigenvalues, eigenvectors, orthogonality, symmetric matrices, least square approximation, quadratic forms. Introduction to abstract vector spaces. Prerequisite: Math 132. Credit 3 units. A&S : NS, QA A&S : IQ, NSM, AN

### L24 Math 310 Foundations for Higher Mathematics
An introduction to the rigorous techniques used in more advanced mathematics. Topics include postpositional logic, use of quantifiers, set theory, methods of proof and disproof (counterexamples), foundations of mathematics. Use of these tools in the construction of number systems and in other areas such as elementary number theory, combinatorial arguments and elementary proofs in analysis. Prerequisite: Math 233. Credit 3 units. A&S : NS A&S : IQ, NSM

### L24 Math 310W Foundations For Higher Mathematics With Writing
See the description for Math 310. Math 310W is a writing-intensive version of Math 310. Students participate in the regular Math 310 lectures and are responsible for all the exams and assignments associated with Math 310. Students in Math 310W have one additional meeting each week to deal with writing issues. At least three papers (four to five pages in length) are required, each with at least one revision. Prerequisite: Math 233 or permission of instructor. Credit 4 units. A&S : NS, WI A&S : IQ, NSM, WI

### L24 Math 312 Differential Equations and Dynamical Systems
Qualitative theory of ordinary differential equations. Picard’s existence and uniqueness theorem, the phase plane, Poincare-
Bendixon theory, stationary points, attractors and repellors, graphical methods. Physical applications, including chaos, are indicated. Prerequisite: Math 217.
Credit 3 units.  A&S : NS  FA : NSM

L24 Math 318 Introduction to Calculus of Several Variables
Selected topics for functions of several variables involving some matrix algebra and presented at a level of rigor intermediate between that of Calculus II and higher-level analysis courses. Students may not receive credit toward a mathematics major or minor for both Math 308 and 318. Prerequisites: Math 233 and Math 309.
Credit 3 units.  A&S : NS  A&S : IQ, NSM  FA : NSM

L24 Math 3200 Elementary to Intermediate Statistics and Data Analysis
An introduction to probability and statistics. Discrete and continuous random variables, mean and variance, hypothesis testing and confidence limits, Bayesian inference, nonparametric methods, Student’s t, contingency tables, multifactor analysis of variance, fixed effects, random effects, mixed models, multiple regression, maximum likelihood and logistic regression. Graphing calculator with Z, t, chi-square and F distribution functions (such as the TI-83 series) may be required. Calculus and the SAS software package are both used in an essential way. Prerequisite: Math 233 or permission of the instructor.
Credit 3 units.  A&S : NS  A&S : IQ, NSM  FA : NSM

L24 Math 322 Biostatistics
A second course in elementary statistics with applications to life sciences and medicine. Review of basic statistics using biological and medical examples. New topics include incidence and prevalence, medical diagnosis, sensitivity and specificity, Bayes’ rule, decision making, maximum likelihood, logistic regression, ROC curves and survival analysis. Prerequisites: Math 3200, or a strong performance in Math 2200 and permission of the instructor.
Credit 3 units.  A&S : NS  A&S : IQ, NSM  FA : NSM

L24 Math 331 Algebraic Systems
Polynomials, binomial expansions, factoring, rings (integers and polynomials), unique factorization and other topics relevant to the high school curriculum. Designed for future secondary school teachers and other students looking for a course in algebra at a less abstract level than Math 430. Prerequisite: Math 310 or permission of instructor.
Credit 3 units.  A&S : NS  A&S : IQ, NSM  FA : NSM

L24 Math 3351 Elementary Theory of Numbers
Divisibility properties of integers, congruences, quadratic reciprocity, Diophantine equations. Introduction to continued fractions and a brief discussion of public key cryptography. Prerequisite: Math 310 or permission of instructor.
Credit 3 units.  A&S : NS  A&S : IQ, NSM  FA : NSM

L24 Math 350 Topics in Applied Mathematics
Topics change with each offering of the course. Past topics have included “Mathematics and Multimedia,” “The Mathematics and Chemistry of Reaction-Diffusion Systems,” “Mathematical Biology,” “Simulation Analysis of Random Processes” and “Introduction to Monte Carlo Methods.” Prerequisites vary, but always include at least Math 233 and usually Math 309.
Credit 3 units.  A&S : NS  A&S : IQ, NSM  FA : NSM

L24 Math 370 Introduction to Combinatorics
Basics of enumeration (combinations, permutations and enumeration of functions between finite sets), generating functions; the inclusion-exclusion principle, partition theory and introductory graph theory. As time permits, additional topics may include Ramsey’s Theorem, probabilistic methods in combinatorics and algebraic methods in combinatorics. Prerequisites: Math 132, 309 and 310, or permission of the instructor.
Credit 3 units.  A&S : NS  A&S : IQ, NSM  FA : NSM

L24 Math 371 Graph Theory
Introduction to graph theory including the basic definitions and theorems and some more advanced topics that drive much current research in graph theory: Ramsey’s Theorem, random graph theory and, if time permits, Szemeredi’s regularity lemma. Graphs are studied as abstract objects; however, graph theory is also of interest to applied mathematicians because graphs are natural models for networks (social, electric). Prerequisite: Math 310 or a roughly equivalent course, or permission of instructor. Students should know what a proof is and how to produce one. Some informal understanding of probability is helpful, but students need not have taken a probability course.
Credit 3 units.  A&S : NS  A&S : IQ, NSM

L24 Math 400 Undergraduate Independent Study
Approval of instructor required.
Credit -3 unit.

L24 Math 403C Mathematical Logic I
A first course in mathematical logic, an introduction to both proof theory and model theory. The structure and properties of first-order logic are studied in detail, with attention to such notions as axiomatic theory, proof, model, completeness, compactness and decidability. Prerequisite: Phil 301G or equivalent, or a background in mathematics.
Same as Phil 403
L24 Math 404C Mathematical Logic II
Gödel's Incompleteness Theorem: its proof, its consequences, its reverberations. Prerequisite: Philosophy 403 or a strong background in mathematics.
Same as Phil 404
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : SSP

L24 Math 407 An Introduction to Differential Geometry
A study of properties of curves and surfaces in 3-dimensional Euclidean space. The course is essentially a modern recounting of a seminal paper of Gauss. Prerequisites: Math 233 and Math 309.
Credit 3 units. A&S : NS

L24 Math 408 Nonparametric Statistics
Statistical methods that make few or no assumptions about the data distribution. Permutation tests of different types; nonparametric confidence intervals and correlation coefficients; jackknife and bootstrap resampling; nonparametric regressions. If there is time, topics chosen from density estimation and kernel regression. Short computer programs are written in a language such as R or C. Prerequisites: Math 3200 and Math 493, or permission of instructor.
Credit 3 units. A&S : NS A&S : IQ, NSM FA : NSM

L24 Math 410 Introduction to Fourier Series and Integrals
The basic theory of Fourier series and Fourier integrals including different types of convergence. Applications to certain differential equations. Prerequisites: Math 233 and 309.
Credit 3 units. A&S : NS A&S : IQ, NSM

L24 Math 411 Introduction to Analysis
The real number system and the least upper-bound property; metric spaces (completeness, compactness and connectedness); continuous functions (in R^n; on compact spaces; on connected spaces); C(X) (pointwise and uniform convergence; Weierstrass approximation theorem); differentiation (mean value theorem; Taylor’s theorem); the contraction mapping theorem; the inverse and implicit function theorems. Prerequisite: Math 310 or permission or instructor.
Credit 3 units. A&S : NS A&S : IQ, NSM

L24 Math 412 Introduction to Lebesgue Integration
Riemann integration; measurable functions; measures; Lebesgue measure; the Lebesgue integral; integrable functions; L^p spaces; modes of convergence; decomposition of measures; product measures. Prerequisite: Math 411 or permission of the instructor.
Credit 3 units. A&S : NS A&S : IQ, NSM
reduction and Gaussian elimination. Material on these topics in early chapters of the text are covered very quickly.
Credit 3 units.  A&S : NS, QA  A&S : IQ, NSM  FA : NSM

L24 Math 430 Modern Algebra
Introduction to groups, rings and fields. Includes permutation groups, group and ring homomorphisms, field extensions, connections with linear algebra. Prerequisite: Math 429 or permission of the instructor.
Credit 3 units.  A&S : NS  A&S : IQ, NSM  FA : NSM

L24 Math 434 Survival Analysis
Life table analysis and testing; mortality and failure rates; Kaplan-Meier or product-limit estimators, hypothesis testing and estimation in the presence of random arrivals and departures; and the Cox proportional hazards model. Techniques of survival analysis are used in medical research, industrial planning and the insurance industry. Prerequisites: Math 309 and 3200, or permission of the instructor.
Credit 3 units.  A&S : NS  A&S : IQ, NSM  FA : NSM

L24 Math 436 Algebraic Geometry
Introduction to affine and projective algebraic varieties; the Zariski topology; regular and rational mappings; simple and singular points; divisors and differential forms; genus; the Riemann-Roch theorem. Prerequisites: Math 318, 429 and 430, or permission of the instructor.
Credit 3 units.  A&S : NS  FA : NSM

L24 Math 439 Linear Statistical Models
Review of matrix theory relevant for the course; multivariate data; multivariate normal distributions; (univariate) multiple linear regressions; multivariate two-sample and multiple-sample tests (Hotelling’s T2 test and MANOVAs); principal component analysis; linear discriminant models; multivariate linear regressions; canonical correlations; other topics as time permits. The computer package SAS is used for examples and homework problems. Prerequisite: Math 3200 or equivalent.
Credit 3 units.  A&S : NS  A&S : IQ, NSM  FA : NSM

L24 Math 449 Numerical Applied Mathematics
Computer arithmetic, error propagation, condition number and stability; mathematical modeling, approximation and convergence; roots of functions; calculus of finite differences; implicit and explicit methods for initial value and boundary value problems; numerical integration; numerical solution of linear systems; matrix equations and eigensystems; Fourier transforms; optimization. Various software packages may be introduced and used. Prerequisites: CSE 200 or 131 (or other computer background with permission of the instructor); Math 217 and 309.
Credit 3 units.  A&S : NS  A&S : IQ, NSM

L24 Math 450 Topics in Applied Mathematics
Topic may vary with each offering of the course. Prerequisite: Math 449 or permission of the instructor.
Credit 3 units.  A&S : NS  A&S : IQ, NSM  FA : NSM

L24 Math 456 Topics in Financial Mathematics
Topic and prerequisites may vary with each offering.
Credit 3 units.  A&S : NS  A&S : IQ, NSM

L24 Math 459 Bayesian Statistics
Introduces the Bayesian approach to statistical inference for data analysis in a variety of applications. Topics include: comparison of Bayesian and frequentist methods, Bayesian model specification, choice of priors, computational methods such as rejection sampling, and stochastic simulation (Markov chain Monte Carlo), empirical Bayes method, hands-on Bayesian data analysis using appropriate software. Prerequisite: Math 493 and either Math 3200 or 494; or permission of the instructor. Some programming experience may also be helpful (consult with the instructor).
Credit 3 units.  A&S : NS  A&S : IQ, NSM

L24 Math 470 Graph Theory
Graph theory entails aspects of counting theory, combinatorics, algebra, geometry and even some analysis. This course presents many of the most basic concepts and then develops several modern applications. Topics include fundamental results and uses of graphs, Euler’s theorem, the adjacency matrix, eigenvalues and the Laplacian, isoperimetric problems, paths and flows, randomness in graphs, symmetric graphs, subgraphs, Harnack inequalities, Sobolev inequalities. Prerequisites Math 310 and 318 (or equivalent background with permission of the instructor).
Credit 3 units.  A&S : NS  A&S : IQ, NSM

L24 Math 475 Statistical Computation
An introduction to programming in SAS (Statistical Analysis System) and applied statistics using SAS: contingency tables and Mantel-Haenszel tests; general linear models and matrix operations; simple, multilinear and stepwise regressions; ANOVAs with nested and crossed interactions; ANOVAs and regressions with vector-valued data (MANOVAs). Topics chosen from discriminant analysis, principal components analysis, logistic regression, survival analysis and generalized linear models. Prior acquaintance with SAS at the level introduced in Math 3200 is assumed. Prerequisites: Math 3200 and 493 (or 493 concurrently), or permission of instructor.
Credit 3 units.  A&S : NS  A&S : IQ, NSM  FA : NSM

L24 Math 481 Group Representations
Ideas and techniques in representation theory of finite groups and Lie groups.  
Credit 3 units.  A&S : NS

L24 Math 493 Probability  
Mathematical theory and application of probability at the advanced undergraduate level; a calculus-based introduction to probability theory. Topics include the computational basics of probability theory, combinatorial methods, conditional probability including Bayes' theorem, random variables and distributions, expectations and moments, the classical distributions, and the central limit theorem. Prerequisites: Math 318 or 308 and permission of the instructor.  
Credit 3 units.  A&S : NS  A&S : IQ, NSM  FA : NSM

L24 Math 494 Mathematical Statistics  
Theory of estimation, minimum variance and unbiased estimators, maximum likelihood theory, Bayesian estimation, prior and posterior distributions, confidence intervals for general estimators, standard estimators and distributions such as the Student-t and F-distribution from a more advanced viewpoint, hypothesis testing, the Neymann-Pearson Lemma (about best possible tests), linear models, and other topics as time permits. Prerequisites: Math 3200 and 493, or permission of the instructor.  
Credit 3 units.  A&S : NS  A&S : IQ, NSM  FA : NSM

L24 Math 495 Stochastic Processes  
Content varies with each offering of the course. Past offerings have included such topics as random walks, Markov chains, Gaussian processes, empirical processes, Markov jump processes and a short introduction to martingales, Brownian motion and stochastic integrals. Prerequisites: Math 318 and 493, or permission of instructor.  
Credit 3 units.  A&S : NS  A&S : IQ, NSM  FA : NSM

L24 Math 496 Topics in Statistics  
Topic varies with each offering.  
Credit 3 units.  A&S : NS  FA : NSM

L24 Math 496A Topics in Algebra  
Topic varies with each offering.  
Credit 3 units.  A&S : NS  A&S : IQ, NSM

L24 Math 499 Study for Honors  
Prerequisites: junior or senior standing, eligibility for honors work in mathematics and permission of the department’s Director of Undergraduate Studies.  
Credit 3 units.  FA : NSM

Medicine and Society  
The Medicine and Society Program is an exciting opportunity for undergraduate students in Arts & Sciences who are interested in exploring the interface of culture, behavior and health from a social science perspective. The program addresses the important social and cultural foundations of health and illness in human societies, with a specific emphasis upon service and research opportunities. The program is supported by a grant from the Danforth Foundation and administered through the Department of Anthropology.  

Eligibility:  
The Medicine and Society Program is a four-year program designed for students entering their freshman year. Upon acceptance to Washington University in the spring, students may apply online for admission to the program by indicating their interest in Medicine and Society. A description of the program and how to apply online is in Getting Started, a brochure sent to students in mid-May.  

Admission to this program is highly competitive. Academic credentials, aptitude and interest in a health-related career, and personal statements all will be considered in selecting 20 participants to join the freshman cohort. The program will particularly appeal to students with a long-term commitment to careers in the health professions and related areas.  

Curriculum:  
Medicine and Society has its intellectual and programmatic roots in the field of medical anthropology, which is broadly defined as the study of human health and illness across culture, time and space. Medical anthropologists examine the role of culture and society in shaping illness experiences. Foci of inquiry may include such issues as traditional health beliefs and practices; cultural clashes between traditional medicine and biomedicine; political and economic foundations of health disparities; alternative and complementary medicine; social and behavioral factors affecting disease rates; and public health responses to emerging health problems. These topics all share a focus on community as a primary area of inquiry and population as a primary unit of analysis.

The Program  
Requirements for the Medicine and Society Program:  
Once admitted to the program, students must complete the following:  
• Freshman Medicine and Society Seminar  
• Community Health Internship  
• Anthro 260 Topics in Health and Community
• A Major in Anthropology or a Minor in Anthropology or Public Health
• Senior Capstone or Honors Thesis

Students who are accepted into the Medicine and Society Program are enrolled in a year-long Freshman Seminar on culture, health and society in the Department of Anthropology. This seminar provides the academic foundation for future community health work in St. Louis. Beginning in the sophomore year, students identify and select a community health site for internship placement. The internship opportunity provides students with a location for focusing their interest and involvement in community health and allows students to participate in the work of the host organization. During the junior and senior years, academic and service activities intensify at the internship site, culminating in a Senior Honors thesis or Capstone project based upon original research and investigation. All students in the Medicine and Society Program are encouraged to graduate with honors, based upon their independent research and academic achievement.

This course of study provides an excellent foundation for future graduate work in medicine, public health or any of the allied health professions such as nursing or physical and occupational therapy. Students who complete the program will also be highly competitive for admission to other professional schools such as law, business or social work.

Personnel:

Medicine and Society is directed by Bradley Stoner, a medical anthropologist and infectious disease physician at Washington University. Dr. Stoner has extensive experience as a physician and public health researcher and holds a joint appointment in the Department of Internal Medicine at Washington University School of Medicine. He oversees student training in medical anthropology and placement in the community internship sites. Dr. Stoner is assisted in these efforts by Rebecca Lester, who serves as assistant director of the program. Students also have full access to other faculty in anthropology and related disciplines who offer courses of relevance and interest.

Contact Person: Dr. Bradley Stoner
Phone: 314/935-5673
E-mail: bstoner@artsci.wustl.edu
Departmental website: http://publichealth.artsci.wustl.edu

Associate Professor
PhD, University of California–San Diego
(Anthropology)

Professors
Kenneth H. Ludmerer
MD, Johns Hopkins University
(History)
Carolyn Sargent
PhD, Michigan State University
(Women, Gender and Sexuality Studies)
Glenn D. Stone
PhD, University of Arizona
(Anthropology)
L. Lewis Wall
DPhil, University of Oxford
(Anthropology)

Associate Professors
Geoff Childs
PhD, Indiana University
(Anthropology)
Shanti A. Parikh
PhD, Yale University
(African and African-American Studies; Anthropology)

Lecturer
Barbara A. Baumgartner
PhD, Northwestern University
(Women, Gender and Sexuality Studies)

The Medicine and Society Program is not a major/minor program; it is a four-year program that is available by application only.

Current students who are interested in the Medicine and Society curriculum are advised to investigate the Public Health Minor (p. 651) or a Major (p. 180) or Minor in Anthropology (p. 182) with a focus on medical anthropology. The Public Health Minor is administered through the Department of Anthropology and shares many thematic similarities with Medicine and Society.

The Medicine and Society Program is not a major/minor program; it is a four-year program that is available by application only.

Current students who are interested in the Medicine and Society curriculum are advised to investigate the Public Health Minor (p. 651) or a Major (p. 180) or Minor in Anthropology (p. 182) with a focus on medical anthropology. The Public Health Minor is administered through the Department of Anthropology and shares many thematic similarities with Medicine and Society.
Please see the requirements in the Medicine and Society Overview page where required courses are listed. See the Public Health (p. 652) and Anthropology (p. 183) sections for specific course information.

Medieval and Renaissance Studies

The faculty engaged in work in Medieval and Renaissance Studies supervises a number of interdisciplinary clusters within the Arts & Sciences curriculum. Interested students may pursue a major in Renaissance Studies under the auspices of the Interdisciplinary Project in the Humanities. The major offers you the opportunity to gain a broad understanding of the early modern world, the seedbed of modern Western civilization, through the integrated study of Renaissance literature, history, philosophy, art history and music. (A full description of the requirements for completing the Renaissance Studies track in the Interdisciplinary Project in the Humanities may be found in the general listing for the IPH (p. 450).)

Courses in the major are drawn from a wide range of departments. This allows you to develop your own course of study, to select areas of concentration that are of particular interest to you, and to work closely with faculty from different areas. You study the themes and social issues of the period through art, history, literature and popular culture. Topics examined include the rise of urban life, the flowering of vernacular languages and new literary genres, the growing emphasis on education, the reconception of pictorial representation and architectural space, the expression and subversion of power in politics and culture, and the transformation of religious doctrines and institutions.

Contact Person: Interdisciplinary Project in the Humanities
Departmental website: http://iph.wustl.edu/

Steering Committee

Derek M. Hirst
William Eliot Smith Professor
PhD, Cambridge University
(History)

Joseph Loewenstein
Professor
PhD, Yale University
(English)

William E. Wallace
Barbara Murphy Bryant Distinguished Professor of Art History
PhD, Columbia University
(Art History and Archaeology)

Gerhild Scholz Williams
Barbara Schaps Thomas and David M. Thomas Professor in the Humanities
PhD, University of Washington
(German)

Steven Zwicker
Stanley Elkin Professor in the Humanities
PhD, Brown University
(English)

Professors

Daniel E. Bornstein
PhD, University of Chicago
(History and Religious Studies)

Robert Henke
Professor of Drama and Comparative Literature
PhD, University of California–Berkeley
(Performing Arts)

Ahmet Karamustafa
Professor of History and Religious Studies
PhD, McGill University
(Social and intellectual history of classical and medieval Islam; Sufism; everyday piety; theory and method in the study of religion)

Fatemeh Keshavarz-Karamustafa
Professor of Persian Language and Comparative Literature
PhD, University of London

David Lawton
PhD, University of York
(English)

Craig Monson
PhD, University of California–Berkeley
(Music)

Mark Pegg
Professor of History
PhD, Princeton University

Dolores Pesce
PhD, University of Maryland
(Music)

Colette H. Winn
PhD, University of Missouri–Columbia
(Romance Languages)

Associate Professors

Nina Cox Davis
PhD, Johns Hopkins University
(Romance Languages)

Martin Jacobs
Associate Professor of Rabbinic Studies
Students seeking a major concentration in Medieval or Renaissance Studies are advised to pursue it under the aegis of either the Interdisciplinary Project in the Humanities or in one of the other departments or programs in the Humanities. They should achieve foreign language competency in French, Spanish, German, Italian, Latin, Arabic or Greek, and are strongly urged to pursue their studies across several departments and programs.

The Minor in Medieval and Renaissance Studies

The Minor in Western Medieval Studies and the Minor in Renaissance Studies have the same structure. Students must complete two years of college-level language study in Spanish, French, Italian, Latin, German, Arabic or Greek and are encouraged to continue their foreign language study further.

They are expected to take six additional courses; three should come from the following list:

- Art-Arch 113 History of Western Art, Architecture and Design
- History 101C Western Civilization
- Hum 201C Classical to Renaissance Literature: Text and Tradition
- Hum 203C Early Political Thought: Text and Tradition
- Hum 209 Scriptures and Cultural Traditions

Units required: 18

Students interested in pursuing the minor in Medieval and Renaissance Studies should contact the offices of the Interdisciplinary Project in the Humanities (p. 450).

Additional Information

In addition, students must take three courses in either Medieval or Renaissance Studies (depending on the concentration chosen) from at least two different departments or programs. Students will select these three courses in consultation with their minor adviser: Michael Sherberg for Western Medieval Studies and Joseph Loewenstein for Renaissance Studies.

See the Interdisciplinary Project in the Humanities (p. 450).

Mind, Brain and Behavior

How do we think? What is human consciousness? What is the relationship between the mind, the brain and behavior? During the past few decades, an explosive growth of knowledge in the cognitive sciences has begun to yield answers to fundamental mysteries about the nature of human thought. Students in this two-year program investigate new theories and problems emerging from this interdisciplinary area of study.

The Mind, Brain and Behavior (MBB) program, which is open to incoming freshmen in the College of Arts & Sciences, is a two-year program that engages students with the research culture of the university. The program builds upon areas of research strength and increasing faculty collaboration within the university. It brings together faculty from several departments and students who share an interest in an area of study to create a lively intellectual and social community; to foster a culture of inquiry; and to enable students, early in their undergraduate career, to participate in research. For more information on the application process: college.artsci.wustl.edu/firstyearprograms.

During the first year, freshmen take two core courses that provide an introduction to the interdisciplinary study of the mind-brain (MBB 120A Introduction to Study of the Mind-Brain: Psychological, Biological and Philosophical Perspectives and MBB 122 Introduction to the Study of the Mind Brain II). These courses are taught collaboratively by faculty members from different disciplines. In the sophomore year, students are
able to undertake research under the supervision of a faculty member who serves as a research mentor for the MBB program (MBB 300 Research in Mind, Brain and Behavior). Sophomores may choose among several research options, each combining independent work with opportunities to work collaboratively.

Participation in Mind, Brain and Behavior is fully compatible with all majors and preprofessional programs. Enrollment in Mind, Brain and Behavior is limited to 45 students each year.

**Contact Person:** Janet Duchek  
**Phone:** 314/935-7445  
**E-mail:** jduchek@wustl.edu

### Participating Faculty, 2012-13

**David A. Balota**  
Professor  
PhD, University of South Carolina  
(Psychology and Neurology)

**John Doris**  
Professor  
PhD, University of Michigan—Ann Arbor  
(Philosophy and Philosophy–Neuroscience–Psychology)

**Janet M. Duchek**  
Associate Professor  
PhD, University of South Carolina  
(Psychology)

**Steven E. Petersen**  
James S. McDonnell Professor of Cognitive Neuroscience  
PhD, California Institute of Technology  
(Neurology and Neurological Surgery; Radiology; and Psychology)

The Mind, Brain and Behavior (MBB) program, which is open to incoming freshmen in the College of Arts & Sciences, is a two-year program that engages students with the research culture of the university. There is no major in this area.

The Mind, Brain and Behavior (MBB) program, which is open to incoming freshmen in the College of Arts & Sciences, is a two-year program that engages students with the research culture of the university. There is no minor in this area.

### Mind, Brain and Behavior

**L96 MBB 120A Introduction to Study of the Mind-Brain:** Psychological, Biological and Philosophical Perspectives  
A consideration of three primary areas of research in cognitive science: attention, memory and language. These topics are used to illustrate the techniques by which mental abilities are investigated and explained in psychology and neuroscience: the focus, in particular, is on the use of reaction time studies, brain imaging and cell recordings to isolate the basic components that make up complex functions. In addition to the central concepts and theories in each area, the course addresses philosophical implications of this research concerning how the mind and brain are related, how the mind-brain encodes or represents information, and the nature of consciousness. And there is an emphasis on applying these findings to important problems, such as Alzheimer’s disease and deficits due to brain damage. The class is taught by three members of the faculty from different disciplines and combines a whole-group lecture with small discussion classes. The goal is to give students a good understanding of the interdisciplinary nature of cognitive science and to help them develop the ability to think and write critically about scientific research into the mind-brain. Prerequisite: admission to the Mind, Brain and Behavior program. Credit 3 units.  
A&S : NS  A&S : IQ, NSM  BU : SCI

**L96 MBB 122 Introduction to the Study of the Mind Brain II**  
In this course, participants in the Mind, Brain and Behavior Program continue their exploration of cognitive science. We explore different frameworks for thinking about how the different branches of cognitive science relate to each other. The course contains an introduction to relevant topics in the philosophy of science and the philosophy of mind. Prerequisite: MBB/PNP 120. Credit 3 units.  
A&S : SS  A&S : IQ, SSC

**L96 MBB 300 Research in Mind, Brain and Behavior**  
An introduction to research for students in the Mind, Brain and Behavior program. Students work under the supervision of a mentor. Prerequisite: admission to the Mind, Brain and Behavior program, completion of MBB/PNP 122, and permission of the mentor. Credit -3 unit.  
A&S : NS  A&S : IQ, NSM

### Music

The Department of Music offers a music program of exceptional quality and diversity. In this varied course of study, where music is approached as a liberal and fine art, rather than as an isolated, separate subject, you may pursue practical and creative music making or study musical traditions and individual works. Music courses are open to all students in the university.

We offer you the opportunity to develop performance skills in voice or instruments through private instruction or through participation in small or large ensembles. Private music lessons with our prominent faculty, including members of the St. Louis Symphony Orchestra, are available in voice, piano, organ, harpsichord, guitar, lute and all orchestral and jazz instruments.

As a music major, you can explore critical issues of tradition, individual composers, compositional craft, aesthetic
interpretation and music's social and cultural significance through a wide range of courses from introductory classes to highly specialized seminars. Instruction is available in jazz, popular music, world musics, the history and literature of Western music, ethnomusicology, music theory and analysis, musical composition, and electronic music. All performance, creative and academic endeavors in music are supported by a thorough grounding in musicianship and keyboard skills.

Music majors may take advantage of study abroad programs in music in Italy, England and France. Summer research projects under faculty direction also are available.

Several options are available for students interested in music: the Bachelor of Arts degree with a major in music, the Bachelor of Music degree, a minor in music and a minor in jazz studies. You may take the A.B. degree in combination with a major in another field or as your primary major in a broad liberal arts education. Majoring in music can prepare you well for graduate work and for a variety of musical careers and other professions.

Performance Opportunities

Ensembles: The department sponsors numerous performing ensembles that draw members from the university and the surrounding community. You must audition for admission to the ensembles. All ensembles are available for graded credit, for credit/no credit or off roster. Ensembles give one or more public performances each semester. If you are enrolled for credit in one of the department’s ensembles, you may be entitled to a scholarship that covers a portion of the fee for applied music lessons.

Vocal Ensembles: Concert Choir, Chamber Choir, Opera Production.

Instrumental Ensembles: Flute Choir, Jazz Band, Chamber String Ensembles, Symphony Orchestra, Wind Ensemble, Jazz Combos.

Applied Music: You may take lessons in voice, piano, organ, harpsichord, guitar, lute and all orchestral and jazz instruments in the appropriate course sequences. A separate fee is charged for private instruction. Music majors and minors receive an applied music scholarship to cover all or a portion of the fee, respectively. If you enroll for credit in one of the department’s ensembles, you are entitled to a scholarship for a portion of the applied music fee each semester you are enrolled. In addition, the department has a limited number of partial scholarships based on need and merit.

Phone: 314/935-5581
E-mail: music@arts.wustl.edu
Departmental website: http://music.wustl.edu/

Chair
Dolores Pesce

Professors
Seth Carlin
MS, Juilliard School of Music
Jeffrey Kurtzman
PhD, University of Illinois
Craig Monson
PhD, University of California–Berkeley

Associate Professors
Patrick Burke
PhD, University of Wisconsin
Peter Schmelz
PhD, University of California–Berkeley
Robert Snarrenberg
PhD, University of Michigan

Assistant Professors
Todd Decker
PhD, University of Michigan
Denise Gill-Gürtan
PhD, University of California–Santa Barbara
Martin Kennedy
DMA, Juilliard School of Music
Alexander Stefaniak
PhD, Eastman School of Music
Paul Steinbeck
PhD, Columbia University
John Turci-Escobar
PhD, Yale University

Senior Lecturers
Christine Armistead
MM, Washington University
William Lenihan
BMus, University of Missouri–St. Louis

Director of Choral Activities
Nicole Aldrich
DMA, University of Maryland

Director of Strings
Elizabeth Macdonald
MM, Indiana University

Director of Symphony Orchestra
Steven Jarvi
MM, Peabody Institute of the Johns Hopkins University
Director of Vocal Activities
Christine Armistead
MM, Washington University

Director of Winds
Vu Nguyen
MM, University of Oregon

Professors Emeriti
Harold Blumenfeld
MM, Yale University

Kathleen Bolduan
PhD, Washington University

Roland Jordan
PhD, Washington University

Hugh Macdonald
PhD, Cambridge University

William Schatzkamer
Diploma, Juilliard School of Music

Robert Wykes
DMA, University of Illinois

Becoming a Music Major: If you plan to declare a major in music, you should consult with the department as early as possible. Students interested in pursuing a music major should begin the appropriate course sequences in music theory, music history, keyboard skills and musicianship.

The Major in Music

The Bachelor of Arts in Music Major

Total units required: 45

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 103E</td>
<td>Theory I: Introduction to Music Theory &amp; Music Theory II</td>
<td>6</td>
</tr>
<tr>
<td>or Music 1091</td>
<td>Jazz Theory I &amp; Jazz Theory II</td>
<td></td>
</tr>
<tr>
<td>Music 221</td>
<td>Music Theory III &amp; Music Theory IV</td>
<td>6</td>
</tr>
<tr>
<td>Music 2231</td>
<td>Musicianship I (should be taken concurrently with Music 221)</td>
<td>1</td>
</tr>
<tr>
<td>Music 2241</td>
<td>Musicianship III (should be taken concurrently with Music 222)</td>
<td>1</td>
</tr>
<tr>
<td>Music 1232</td>
<td>Keyboard Skills I &amp; Keyboard Skills II</td>
<td>2</td>
</tr>
<tr>
<td>Music 3011</td>
<td>Music History I</td>
<td>3</td>
</tr>
<tr>
<td>Music 3012</td>
<td>Music History II</td>
<td>3</td>
</tr>
<tr>
<td>Music 3013</td>
<td>Music History III</td>
<td>3</td>
</tr>
<tr>
<td>Upper-level music history elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Lower-level elective units (courses, applied music or ensembles)</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>Upper-level elective units (courses, applied music or ensembles)</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

The Bachelor of Music Major

Total units required: 74–78

Declaration of this major must be approved by the department before the end of your sophomore year. You are required to complete a minimum of 27 to 39 units in advanced courses, depending on your area of concentration. You may earn the B.Mus. degree with concentration in performance, composition, music theory or music history and literature, or you may pursue a general program combining two or more areas.

Each concentration requires a major senior project, such as a thesis, recital, lecture-demonstration or composition portfolio. You also must pass a keyboard proficiency examination.

Required courses:

<table>
<thead>
<tr>
<th>Course Code</th>
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<tr>
<td>Music 103E</td>
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<td>or Music 1091</td>
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<td>Music 221</td>
<td>Music Theory III &amp; Music Theory IV</td>
<td>6</td>
</tr>
<tr>
<td>Music 3011</td>
<td>Music History I</td>
<td>3</td>
</tr>
<tr>
<td>Music 3012</td>
<td>Music History II</td>
<td>3</td>
</tr>
<tr>
<td>Music 3013</td>
<td>Music History III</td>
<td>3</td>
</tr>
<tr>
<td>Music 2231</td>
<td>Musicianship I (should be taken concurrently with Music 221)</td>
<td>1</td>
</tr>
<tr>
<td>Music 2241</td>
<td>Musicianship III (should be taken concurrently with Music 222)</td>
<td>1</td>
</tr>
<tr>
<td>Music 3231</td>
<td>Advanced Musicianship</td>
<td>3</td>
</tr>
<tr>
<td>1 unit of keyboard skills per semester as necessary to complete Music 3242</td>
<td></td>
<td>1-6</td>
</tr>
<tr>
<td>Music 4991</td>
<td>Senior Project: Musicology or Analysis</td>
<td>3</td>
</tr>
<tr>
<td>or Music 4993</td>
<td>Honors Project: Musicology or Analysis</td>
<td></td>
</tr>
</tbody>
</table>

Applied Music and Ensemble Requirements: In addition to the courses listed above, B.Mus. students also must register for applied music lessons and at least one ensemble every semester once the major has been declared. Students with a performance emphasis must take at least 3 units of applied music lessons per semester; all others must take at least 1.5 units per semester.

Elective courses: Each of the five B.Mus. concentrations includes additional requirements, as follows:

Performance Emphasis:
Upper-level music history elective (other than 3011-3013) 3
Music 4221 Introduction to the Analysis of 20th-Century Music 3
400- or 500-level music theory elective 3
Music 439 Diction I 3
Junior half-recital 0

**Theory Emphasis:**
Music 4221 Introduction to the Analysis of 20th-Century Music 3
400- or 500-level electives 12
Upper-level music history elective (other than 3011-3013) 3
Music 401 Elementary Technique of Electronic Music and Advanced Techniques of Electronic Music 6
or Music 429 Composition II and Composition IV 6

**Composition Emphasis:**
Music 429 Composition II 3
Music 430 Composition IV 3
Upper-level music history elective (other than 3011-3013) 3
Music 4221 Introduction to the Analysis of 20th-Century Music 3
400- or 500-level music theory electives 6
Music 401 Elementary Technique of Electronic Music and Advanced Techniques of Electronic Music 6

**History and Literature Emphasis:**
Upper-level music history electives (other than 3011-3013) 15
Music 4221 Introduction to the Analysis of 20th-Century Music 3
400- or 500-level music theory electives 6

**General Emphasis:**
Upper-level music history electives (other than 3011-3013) 6
Music 4221 Introduction to the Analysis of 20th-Century Music 3
400- or 500-level music theory electives 6
Elective units 9

**Senior Honors:** Music majors are encouraged to work toward Latin Honors. To qualify, students must have an outstanding academic record and satisfactorily complete a senior honors project (in Music 493), including an oral examination with a faculty committee. Project proposals are due at the end of the junior year.

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**The Minor in Music — General Studies**

**Units required:** 18

**Required courses:**
Music 103E Theory I: Introduction to Music Theory 6
& Music 104E and Music Theory II 6
or Music 1091 Jazz Theory I 3
& Music 1092 and Jazz Theory II 3
One of the following three courses:
Music 3011 Music History I 3
Music 3012 Music History II 3
Music 3013 Music History III 3
Lower-level electives 3
Upper-level electives 6

For the elective units, a maximum of 6 units of ensemble participation may be included.

**Additional Information**
Special scholarships are available for the study of applied music.
Students whose interests are not served by these requirements may apply to the department chair with an alternative proposal.

**The Minor in Jazz Studies**

**Units required:** 20

**Required courses:**
Music 103E Theory I: Introduction to Music Theory and Music Theory II 6
& Music 104E and Music Theory II 6
or Music 1091 Jazz Theory I 3
& Music 1092 and Jazz Theory II 3
Music 105 History of Jazz 3
Music 3091 Jazz Improvisation I 3
Music 3023 Jazz in American Culture 3
Performance in one of the following two ensembles:
Music 233 Jazz Band 1
Music 236J Jazz Combo 1
One of the following five courses:
Music 3021 Music of the African Diaspora 3
Music 3013 Music History III 3
Music 416 Contemporary Music 3
Music 401 Elementary Technique of Electronic Music and Advanced Techniques of Electronic Music 6
Upper-level applied music in jazz 3
Additional Information

The minor requires 20 units of credit in courses offered by the Department of Music of which at least 9 must be at 300 level or above. Upper-level credits may be obtained in Ensemble Performance or Applied Music if the requisite standard is attained. Other upper-level credits in Music or kindred studies (such as African and African-American Studies) may be approved at the discretion of the department chair.

Music

L27 Music 100B Preregistration: Brass Applied Music
Credit -3 unit.

L27 Music 100D Preregistration: Percussion Applied Music
Credit -3 unit.

L27 Music 100G Preregistration: Guitar Applied Music
Credit -3 unit.

L27 Music 100P Preregistration: Piano Applied Music
Credit -3 unit.

L27 Music 100S Preregistration: Strings Applied Music
Credit -3 unit.

L27 Music 100V Preregistration: Voice Applied Music
Credit -3 unit.

L27 Music 100W Preregistration: Woodwinds Applied Music
Credit -3 unit.

L27 Music 101E Introductory Survey of Western Music I
A survey of “art” music in Western culture from the Middle Ages to the mid-18th century. Emphasis in the first term is on sacred and secular music of the church, court and middle-class society in its historical and cultural context. Regular listening and writing assignments are designed to develop the capacity to hear perceptively and write critically about the music studied. No prior knowledge of musical notation required. This course is not recommended for music minors or majors. For a one-semester course covering Western classical and popular music and music from other cultures, see Music 114E.
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : HUM FA : AH

L27 Music 1022 Popular Music in American Culture
American popular music from 1920 to the present, with emphasis on technology, social and political contexts, and popular music as a realm of interracial encounter. Musics covered include early jazz, classic blues, swing, classic pop, rock ‘n’ roll, soul, disco, hip-hop and the changing relationship between popular music, film and television.
Credit 3 units. A&S : LA, SD A&S : IQ, HUM, SD BU : HUM FA : AH

L27 Music 102E Introductory Survey of Western Music II
A survey of “art” music in Western culture from the middle of the 18th century to the present. Music of composers from Haydn and Mozart to George Crumb and John Cage are studied in its historical and cultural context. Regular listening and writing assignments are designed to develop the capacity to hear perceptively and write critically about the music studied. No prior knowledge of musical notation required. This course is not recommended for music minors or majors.
Credit 3 units. A&S : LA, SD A&S : IQ, HUM, SD BU : HUM FA : AH

L27 Music 103E Theory I: Introduction to Music Theory
Vocabularies and skills basic to music theory introduced through concentrated work in notation, the development of specific compositional skills, and musical analysis. Concepts of musical structure and aesthetic experience are explored through the study of music from three periods of the western tradition: medieval liturgical chant, music of the Classical period, and music of the early 20th century. Ability to read musical notation required. Keyboard skills desirable. Music 103E is the entry-level course for all music minors and majors.
Credit 3 units. A&S : LA A&S : IQ, HUM BU : HUM FA : AH

L27 Music 104E Theory II: Introduction to Music Theory
A systematic introduction to the basic principles of tonality as manifested in western European music of the 18th and early 19th centuries. Topics include pitch, time, line and linear elaboration, counterpoint, harmony, phrase, form and chromaticism. The principles are explored through both musical composition and interpretation of musical art works. Prerequisite: Music 103E.
Credit 3 units. A&S : LA A&S : IQ, HUM BU : HUM

L27 Music 1021 Musics of the World
This course provides an introduction to the field of ethnomusicology as well as a survey of selected musics from around the world. We investigate not only musical sound itself but how music interacts with other cultural domains, such as religion/cosmology, politics, economics and social structure. The course uses case studies from regions around the world (such as Indonesia, India, the Middle East, sub-Saharan Africa and Latin America) to illustrate the conceptual problems and methodologies raised by the cross-cultural study of music, as well as to acquaint you with the rich variety of music around the globe.
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : HUM FA : AH
L27 Music 105 History of Jazz
History of jazz to the present, including its African elements.
Credit 3 units.  A&S : LA  A&S : IQ, HUM  BU : HUM  FA : AH

L27 Music 107 Listening Laboratory
Optional analytical listening sessions to supplement Music 101E and 102E respectively. Taped listening assignments. Required of music majors and of students in the first-year seminar section. Concurrent registration in Music 101E or 102E is required.
Credit 1 unit.  A&S : LA  A&S : IQ, HUM

L27 Music 109 Ragtime
A history of ragtime music: survey of composers and performers. Emphasis on St. Louis and the music of Scott Joplin. University College students should register for U24 109 Section 02.
Credit 2 units.  A&S : LA  A&S : IQ, HUM  BU : HUM  FA : AH

L27 Music 1091 Jazz Theory I
Jazz Theory I introduces the jazz music language as a preparation for the study of improvisation. The course study consists of basic music theory including music-reading skills and notation, scales, intervals and triads. An introduction to extended tertian chords as derived from the 21 modes of the major, melodic and harmonic minor scales forms the basis of the jazz harmonic language. The study of chord progression and chord substitution, song form and the blues prepares the student for a detailed study of the modern jazz language.
Credit 3 units.  A&S : LA  A&S : IQ, HUM  BU : HUM

L27 Music 1092 Jazz Theory II
Jazz Theory II outlines the harmonic, rhythmic and improvisational practices from the Bebop period of the late 1940s to the jazz music of the present day. Discussions include intermediate to advanced chord substitution, quartal and bittoral harmony, modal improvisation, pentatonic scales and polyrhythmic drumming, concentrating on the work the major improvisers of the 1950s to 1970s. Prerequisite: Music 1091.
Credit 3 units.  A&S : LA  A&S : IQ, HUM  BU : HUM

L27 Music 109M Mathematics and Music
Same as Math 109
Credit 3 units.  A&S : NS, QA  A&S : IQ, NSM, AN  FA : NSM

L27 Music 113 Fundamentals of Music
This course provides a broad overview of music fundamentals designed to enhance the student's experience of music as well as provide a foundation for further study in music theory. Students become acquainted with the basic vocabulary and building blocks of music: intervals, rhythms, scales, triads, chords and harmony.
Credit 2 units.  A&S : LA  A&S : IQ, HUM  BU : HUM

L27 Music 114E Exploring Music
A wide-ranging introduction to music in its many forms. Western classical and popular music are studied along with music from other cultures to highlight the varied conceptions, functions and practices of music in different times and places. Discussion of specific pieces facilitates growth in basic musical skills and provide insights into music's multifaceted historical/cultural resonances. No previous musical background required. Includes regular reading and listening assignments.
Credit 3 units.  A&S : LA  A&S : IQ, HUM  BU : HUM

L27 Music 115 Reading Music
Elements of music notation for those with little or no music-reading skill. Designed to develop a basic acquaintance with the principles of notation for students enrolled in introductory courses, applied music and ensembles as well as those with a general interest in learning to read music.
Credit 1 unit.  A&S : LA

L27 Music 1161 Freshman Seminar: Writing About Music
This course explores the various ways in which writers from the 18th century to the present discuss music. Issues include respect for a tried and true musical "canon," music as an imitative vs. absolute art form, and a focus on performing virtuosity/spectacle vs. musical content. In addition to reading what previous authors have written, students write on a regular basis about examples from classical, popular and non-Western music and critique each others' work. Ability to read music is not required.
Credit 3 units.  A&S : LA  A&S : IQ, HUM  BU : HUM

L27 Music 119 Jazz Guitar Class I
Jazz Guitar Class I introduces the fundamentals of music as a preparation for the study of jazz proper, guiding the student to the development of an operational musical language on the instrument. This performance practice class consists of basic music theory realized on the guitar including major and minor diatonic and pentatonic scales, triads in all positions and inversions, seventh chords and an introduction to extended tertian chords. As well, music reading, rhythmic skills and basic performance techniques are emphasized. The course culminates in the reading of jazz lead-sheets where students play the melody in all positions of the key and also play the harmony from chord symbols.
Credit 1 unit.

L27 Music 120 Jazz Guitar Class II
Jazz Guitar Class II reinforces the materials of Music 119 including scales and triads in all positions, while introducing new materials including 9th, 11th, 13th and altered chords. An
introduction to improvisation, this course stresses making music in real time through the embellishment of melody, the study of arpeggio, the modes of the major scale and idiomatic devices of the jazz language. The course stresses the development of strong rhythmic skills while furthering a proper technique. Jazz Guitar II culminates in the reading of jazz lead-sheets where the student improvises in fundamental ways.

Credit 1 unit.

L27 Music 1232 Keyboard Skills I
An introduction to basic techniques of keyboard harmony using intervals, scales and root position chords. Transposition and sight-reading skills developed. Prerequisite: permission of instructor for nonmajors. One and one-half class hours a week. Credit 1 unit.

L27 Music 1241 Musicianship II
Basic ear training, sight singing and dictation skills. Prerequisite: permission of instructor for nonmajors. Three and one-half hours a week. Credit 1 unit.

L27 Music 1242 Keyboard Skills II
An introduction to basic techniques of keyboard harmony using intervals, scales and root position chords. Transposition and sight-reading skills developed. Prerequisite: permission of instructor for nonmajors. One and one-half class hours a week. Credit 1 unit.

L27 Music 128 Selected Area for Special Study
In-depth study in areas of special interest. Credit 3 units. A&S : TH BU : HUM

L27 Music 129 Composition Workshop
Introduction to certain compositional techniques of the 20th century in a workshop combining writing and performance. Prerequisite: permission of instructor. Two and one-half class hours a week. Credit -3 unit.

L27 Music 130 Composition Workshop
Concentrated work in free composition for undergraduates. Conducted as independent study under the weekly supervision of instructor. May be repeated for credit. Class hours variable, one to three hours per week. Prerequisite: Music 103E or permission of instructor. Credit -3 unit.

L27 Music 133 Symphony Orchestra
Performance and reading of works for orchestra. May be repeated for credit. For students with freshman or sophomore standing. Prerequisite: admission by audition. Two and one-half class hours a week including sectionals. Credit 1 unit.

L27 Music 134 Symphony Orchestra
Performance and reading of works for orchestra. For students with freshman or sophomore standing. Prerequisite: admission by audition. Two and one-half class hours a week including sectionals. May be repeated for credit. Credit 1 unit.

L27 Music 135 University Chorus
A mixed choir drawn from the university and St. Louis communities. Repertoire covers music from the Baroque to the present. Concerts at least once a semester. May be repeated for credit. For students with freshman or sophomore standing. Prerequisite: admission by audition. Two and one-half class hours a week. Credit 1 unit.

L27 Music 136 University Chorus
A mixed choir drawn from the University and St. Louis communities. Repertoire covers music from the Renaissance to the present. Concerts at least once a semester. May be repeated for credit. For students with freshman or sophomore standing. Prerequisite: admission by audition. Two and one-half rehearsal hours a week. Credit 1 unit.

L27 Music 137 Small Chamber Ensembles
Students interested in performance of chamber music are organized into various ensembles and assigned a coach. A public chamber music concert is given once each semester. May be repeated for credit. For students with freshman or sophomore standing. Prerequisite: admission by audition. Two and one-half rehearsal hours a week. Special fee, $100, and special registration procedures. See heading at “Applied Music.”. Credit -2 unit.

L27 Music 1371 Chamber Winds
A group of select woodwind and brass players who form brass and woodwind choirs and smaller ensembles such as quintets and quartets. The weekly rehearsals are coached. The ensembles perform on student recitals and at various campus functions. Credit 1 unit.

L27 Music 1372 Flute Choir
Weekly two-hour rehearsals of flute ensemble literature of many styles, Bach to bop. Developing skills of tone production, technique, intonation, sight reading and musicianship. One performance per semester required. For students with freshman
or sophomore standing. Prerequisite: admission by audition. Special fee applicable. Credit -1 unit.

**L27 Music 138 Small Chamber Ensembles**
Students interested in performance of chamber music are organized into various ensembles. A public chamber music concert is given once each semester. May be repeated for credit. Prerequisite: permission of the instructor. Special $100 fee and special registration procedures. See heading at "Applied Music.". Credit -2 unit.

**L27 Music 1381 Chamber Winds**
A group of select woodwind and brass players who form brass and woodwind choirs and smaller ensembles such as quintets and quartets. The weekly rehearsals are coached. The ensembles perform on student recitals and at various campus functions. Credit 1 unit.

**L27 Music 1382 Flute Choir**
Weekly two-hour rehearsals of flute ensemble literature of many styles, Bach to bop. Developing skills of tone production, technique, intonation, sight reading and musicianship. One performance per semester required. Prerequisite: admission by audition. Special fee applicable. Credit -1 unit.

**L27 Music 1386 Jazz Combo**
Students are placed in small combos for regular, weekly coaching. May be repeated for credit. For students with freshman or sophomore standing. Prerequisite: permission of department. Credit 1 unit.

**L27 Music 1501 Rattle and Hum: Reading Music in Literature**
Same as CFH 150
Credit 3 units. A&S : LA  A&S : IQ, HUM

**L27 Music 1511 Introductory Guitar**
Credit units.

**L27 Music 159 Piano Class**
Intended for students with little to no formal musical training. An introduction to keyboard fundamentals through the study of note reading, intervals, technique and repertoire. Students may self-enroll or be placed by audition. Credit 1 unit. A&S : LA

**L27 Music 160 Piano Class**
Continuation of Music 159. Prerequisite: Music 159 or permission of instructor. Credit 1 unit. A&S : LA

**L27 Music 161 Piano**
Credit -3 unit.

**L27 Music 1611 Introductory Piano**
Credit -3 unit.

**L27 Music 1612 Jazz Piano**
Credit -3 unit.

**L27 Music 162 Piano**
Credit -3 unit.

**L27 Music 1622 Jazz Piano**
Credit -3 unit.

**L27 Music 163 Harpsichord**
Credit -3 unit.

**L27 Music 164 Harpsichord**
Credit -3 unit.

**L27 Music 165 Organ**
Credit -3 unit.

**L27 Music 166 Organ**
Credit -3 unit.

**L27 Music 167 Woodwind**
Credit -3 unit.

**L27 Music 167J Jazz Woodwinds**
Credit -3 unit.

**L27 Music 168 Woodwinds**
Credit -3 unit.

**L27 Music 168J Jazz Woodwinds**
Credit -3 unit.

**L27 Music 169 Brass**
Credit -3 unit.

**L27 Music 169J Jazz Brass**
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<td>L27 Music 176</td>
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<tr>
<td>L27 Music 177</td>
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<td>L27 Music 221</td>
<td>Music Theory III</td>
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<td>L27 Music 2211</td>
<td>Opera Projects</td>
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<td>L27 Music 2232</td>
<td>Keyboard Skills III</td>
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<tr>
<td>L27 Music 2241</td>
<td>Musicianship III</td>
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</table>
Continuation of Music 2231. Intermediate-level ear training, sight singing and dictation skills. Prerequisite: Music 2231. Two and one-half class hours a week. Credit 1 unit.

L27 Music 2242 Keyboard Skills IV
Intermediate skills in score reading as well as the introduction of inversions, figured bass and improvising melodies. Prerequisite: permission of instructor for nonmajors. Concurrent registration in Music 2231 and 2241 required of all music majors. One and one-half class hours a week. Credit 1 unit.

L27 Music 227 Selected Area for Special Study
In-depth study in areas of special interest. Prerequisite: permission of instructor. Credit 3 units.

L27 Music 228 Selected Area for Special Study
In-depth study in areas of special interest. Prerequisite: permission of instructor. Credit 3 units. A&S : LA A&S : IQ, HUM

L27 Music 229 Composition I
Beginning work in free composition for undergraduates. Conducted as independent study. May be repeated for credit. Prerequisite: permission of instructor. Credit 3 units.

L27 Music 230 Composition II
Concentrated work in free composition for undergraduates. Conducted as independent study under the weekly supervision of instructor. May be repeated for credit. Class hours variable, one to three hours a week. Prerequisite: 103E or permission of instructor. Credit 3 units.

L27 Music 231C Small Chamber Ensembles
Students interested in performance of chamber music are organized into various ensembles and assigned a coach. A public chamber music concert is given once each semester. May be repeated for credit. Prerequisite: permission of the instructor. Special fee, $135, and special registration procedures. See Overview (p. 552) at “Applied Music.”. Credit 1 unit.

L27 Music 232W Chamber Winds
A group of select woodwind and brass players who form brass and woodwind choirs and smaller ensembles such as quintets and quartets. The weekly rehearsals are coached. The ensembles perform on student recitals and at various campus functions. Credit 1 unit.

L27 Music 233 Jazz Band
Study of the literature of big band jazz. Concerts presented each semester. May be repeated for credit. Prerequisite: admission by audition. Two and one-half rehearsal hours a week. Credit 1 unit.

L27 Music 234 Jazz Band
Study of the literature of big band jazz. Concerts presented each semester. May be repeated for credit. Prerequisite: admission by audition. Two and one-half rehearsal hours a week. Credit 1 unit.

L27 Music 234S Symphony Orchestra
Performance and reading of works for orchestra. May be repeated for credit. Prerequisite: admission by audition. Two and one-half class hours a week including sectionals. Credit 1 unit.

L27 Music 235F Flute Choir
Weekly two-hour rehearsals of flute ensemble literature of many styles, Bach to bop. Developing skills of tone production, technique, intonation, sight reading and musicianship. One performance per semester required. Prerequisite: admission by audition. Special fee applicable. Credit 1 unit.

L27 Music 236J Jazz Combo
Students are placed in small combos for regular, weekly coaching. May be repeated for credit. Prerequisite: permission of department. Credit 1 unit.

L27 Music 237 Concert Choir
A study of the repertory of the vocal ensemble from the Renaissance to the 20th century, with performance in public concerts. May be repeated for credit. Prerequisite: audition and consent of instructor. Four class hours a week. Credit 2 unit.

L27 Music 238 Chamber Choir
Study and performance of advanced repertoire for small vocal ensemble from Renaissance to the present. May be repeated for credit. Prerequisites: audition and consent of instructor. Credit 1 unit.

L27 Music 261 Piano
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<th>Course Title</th>
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<td>L27 Music 262</td>
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<td>L27 Music 2622</td>
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<td>L27 Music 273J</td>
<td>Jazz Strings</td>
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<tr>
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</table>
L27 Music 295 Independent Study: Language and Arts
Supervised independent study in areas in which there are no current course offerings. Student must submit to the department chair an outline of the work to be covered, the number of credit hours requested for the work, and the name of the instructor who will be asked to supervise the work. Class hours variable, depending on credit.
Credit -3 unit.

L27 Music 296 Independent Study: Textual and Historical Studies
Supervised independent study in areas in which there are no current course offerings. Student must submit to the department chair an outline of the work to be covered, the number of credit hours requested for the work, and the name of the instructor who will be asked to supervise the work. Class hours variable, depending on credit.
Credit -3 unit.

L27 Music 298 Directed Internship
Students receive credit for a faculty-directed and approved internship, usually with a music professional or musical organization. The primary objective of the internship is to obtain professional experience outside the classroom. Students obtain a Learning Agreement from the Career Center and have it signed by the Career Center, the faculty sponsor and the site supervisor, if appropriate. A final written project is agreed upon before work begins and is evaluated by the faculty sponsor at the end of the internship. Students may not receive credit for work done for pay but are encouraged to obtain written evaluations of such work for the student’s academic adviser and career placement file. Credit should correspond to actual time spent in work activities; e.g., eight to 10 hours per week for 13 or 14 weeks to receive 3 units of credit; 1 or 2 credits for fewer hours. Consult department for faculty selections in this course.
Credit -3 unit.

L27 Music 299 Performance Project
Students may contract with a faculty supervisor for credit for work on musical performance projects or research on musical performance. Contracts must be signed by the student, the faculty supervisor and the department chair before the student’s work on the project commences. Consult department for faculty selections in this course.
Credit -3 unit.

L27 Music 3011 Music History I
A study of music history and literature from the Middle Ages to 1750. Composers treated include Machaut, Dufay, Josquin, Palestrina, Monteverdi, Vivaldi, Handel and Bach. Prerequisite: Music 103.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : AH

L27 Music 3012 Music History II
A study of music history and literature from 1750 to 1850. Composers treated include Haydn, Mozart, Beethoven, Schumann and his contemporaries. Prerequisite: Music 3011 or Music 104E.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : AH

L27 Music 3013 Music History III
A study of music history and literature from 1850 to the present. Composers include Liszt, Wagner, Brahms, Tchaikovsky, Mahler, Debussy, Stravinsky, Schoenberg, Boulez, Stockhausen, Cage, Glass, Reich and Adams. Prerequisite: Music 3012 or Music 104.
Credit 3 units. A&S : TH, WI A&S : IQ, HUM, WI BU : HUM FA : AH

L27 Music 3021 Music of the African Diaspora
This course explores musical cross-fertilization between the African continent and South America, the Caribbean and Europe. Beginning with traditional musics from selected regions of the African continent, the course examines the cultural and musical implications of transnational musical flows on peoples of the African diaspora and their multicultural audiences.
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : IS FA : SSP

L27 Music 3022 Native-American Musical Traditions of the Western United States
Exploration of music and its historical and contemporary contexts among Native American cultures of the Southwest and the Northern Plains, chiefly Navajo and Lakota, but with some considerations of Pueblo, Shoshone and other nations. Examinations of intertribal pow-wow movements, crossover musics, European appropriation and refashioning of Native American culture in Hollywood and elsewhere.
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : IS FA : SSP

L27 Music 3023 Jazz in American Culture
This course addresses the role of jazz within the context of 20th-century African-American and American cultural history, with particular emphasis on the ways in which jazz has shaped, and has been shaped by, ideas about race, gender, economics and politics. We make use of recordings and primary sources from the 1910s to the present in order to address the relationship between jazz performances and critical and historical thinking about jazz. This course in not a survey, and students already should be familiar with basic jazz history. Prerequisite: Music 105 or permission of instructor.
L27 Music 3024 From Cage to Glass and Beyond
Explores the various directions composers took in the second half of the 20th century, including “chance” music of John Cage, minimalism of Philip Glass and postmodernism. Includes concert attendance. Prerequisite: ability to read music is advisable but not required.
Credit 3 units. A&S : TH, SD
FA : AH

L27 Music 3025 Women of Music
Popular music and art music around the world, from the perspective of women. The roles of women as creators, performers, sponsors and consumers. The representation of women in music and how it relates to cultures of the past and present.
Credit 3 units. A&S : TH, SD
A&S : IQ, HUM, SD

L27 Music 3027 Close Harmony: A Cappella Musical Traditions
An examination of ensemble music for unaccompanied voices. Although it focuses on the western art tradition (e.g., Renaissance sacred and secular polyphony), it also addresses genres of “world music” (Yankton Sioux choral peyote songs, Makwayera singing of Zimbabwe) and less “high style,” more popular unaccompanied vocal textures (e.g., shape-note, barbershop, spirituals, the Comedian Harmonists, male gospel quartets, doowop). Study of the historical and cultural contexts of the various musical types balances examination of representative musical works. Prerequisite: the ability to read music, permission of instructor; Music 103 is highly recommended, but not required.
Credit 3 units. A&S : TH
A&S : IQ, HUM

L27 Music 3028 Music of the 1960s
The music of the 1960s played a significant and widely noted role in an era of global political and social upheaval. This course surveys a broad range of music produced during the decade, spanning the world but with emphasis on Anglo-American popular music. While a music course traditionally deals with a single genre such as “world music,” classical or jazz, this course analyzes several genres together to show how each influenced the others and how all were informed by broader social and cultural concerns. The course thus both familiarizes students with diverse musical traditions and introduces them to a new way of thinking about music and culture. Topics discussed include the transnational music industry; the contested concept of “folk” and “traditional” music; music and political protest; music and migration; and music’s relation to ethnic and class identity.
Credit 3 units. A&S : TH
A&S : IQ, HUM

L27 Music 305 Selected Area for Special Study
Credit 3 units. A&S : LA
A&S : IQ, HUM
BU : HUM

L27 Music 3051 Text and Music
How do composers respond to the structure and meaning of text? Can spoken language become musical sound? Can musical sounds become textual signifiers? The course explores these questions by examining a broad range of texted music: Gregorian chant, Japanese Noh drama, English madrigals, Bach cantatas, 19th-century German lieder, operas by Mozart and Wagner, American musical theater, high modernist works by Schoenberg, Stockhausen, Berio and Lansky, as well as popular music. Some knowledge of music theory is required, and familiarity with German is helpful, though all texts are provided with English translations. A lot of listening and reading, several short and analytical assignments, three essays. Prerequisite: one year of music theory or permission of instructor.
Credit 3 units. A&S : TH

L27 Music 3091 Jazz Improvisation I
An introduction to improvising music in the jazz tradition, including diatonic and chromatic harmony, extended chords, modes and jazz scales. Exercises in basic aspects of the blues and the styles of be-bop and modern jazz. Prerequisite: Music 1091.
Credit 3 units.

L27 Music 3132 Romantic Revolutions in European Music and Culture
The early 19th century in Europe witnessed sweeping changes in social, political and cultural life, but some of the most fascinating happened in music. This course considers intersections between Romantic thinking about music — which inspired an idealistic vision of the art form as a source of quasi-spiritual experience — and other contemporary “revolutions.” To what extent was Romantic music a “holy art” that offered a refuge from the world? In what ways was it a worldly participant in larger currents in society and culture? By exploring these questions and more, students develop the skills and framework needed to incorporate works of music into their investigation of enduring issues in history and the humanities. Although this course requires listening and viewing of musical works, it is designed for students with intellectual curiosity but without prior musical background. We also require weekly readings, occasional presentations, three short papers and spirited class discussion.
Credit 3 units. A&S : TH

L27 Music 315 Selected Areas for Special Study I
Credit 3 units. A&S : TH
A&S : IQ, HUM

L27 Music 317 Selected Area for Special Study
In depth study in areas of special interest.
Credit 3 units. A&S : TH

L27 Music 319 Reading the Scores: Understanding Brazilian Music through Social Categories
Same as IAS 383
Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI BU : IS

L27 Music 320 The American Musical Film
Same as Film 359
Credit 3 units. A&S : LA A&S : IQ, HUM BU : HUM

L27 Music 321 Music Theory V
Problems in writing and analysis defined through the study of 19th-century works. Prerequisite: Music 222.
Credit 3 units. A&S : TH A&S : IQ, HUM

L27 Music 323 Advanced Musicianship
Individualized instruction in advanced ear training, sight singing and dictation skills. Prerequisite: Music 2241.
Credit 3 units.

L27 Music 3232 Keyboard Skills V
Advanced skills in score reading, figured bass and improvisation, as well as drills, including seventh chords and modulation. Prerequisite: Music 2242. One and one-half class hours a week. Credit 1 unit.

L27 Music 3241 Musicianship VI
Continuation of Music 3231. Advanced ear training, sight singing and dictation skills. Prerequisite: Music 3231. Two and one-half class hours a week.
Credit 1 unit.

L27 Music 3242 Keyboard Skills VI
Advanced skills in score reading, figured bass and improvisation, as well as drills, including seventh chords and modulation. Prerequisite: Music 2242. One and one-half class hours a week. Credit 1 unit.

L27 Music 325 Instrumentation and Orchestration
A study of the principles of instrumentation and orchestration. In-class assignments aid in the understanding of the capabilities and limitations of the orchestral instruments. Analysis of orchestral scores provides insight into efficient and creative use of the orchestra. In addition, scoring for both vocal and chamber ensembles are covered. Final orchestration projects are read and recorded by the Washington University Symphony Orchestra. Prerequisite: Music 103E or permission of the instructor.
Credit 3 units.

L27 Music 326 Orchestration
A practicum in writing for orchestra and groups of orchestral instruments. Prerequisite: Music 325.
Credit 3 units.

L27 Music 328 History of the Film Score
Same as Film 360
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : AH

L27 Music 329 Advanced Composition Workshop I
Continuation of Music 129-130. Prerequisite: permission of instructor.
Credit -3 unit.

L27 Music 330 Advanced Composition Workshop II
Concentrated independent work in composition for experienced undergraduate composers. May be repeated for credit. Class hours variable, one to three hours a week. Prerequisite: permission of instructor.
Credit -3 unit.

L27 Music 333 Symphony Orchestra
Performance and reading of works for orchestra. May be repeated for credit. For students with junior or senior standing only. Prerequisite: admission by audition. Two and one-half class hours a week including sectionals.
Credit 1 unit. A&S : IQ, HUM

L27 Music 3331 Jazz Band
Study of the literature of big band jazz. Concerts are presented each semester. May be repeated for credit. For students with junior or senior standing only. Prerequisite: admission by audition. Two and one-half class hours per week.
Credit 1 unit.

L27 Music 334 Symphony Orchestra
A select ensemble of about 75 players that performs a repertoire from the baroque to the modern periods in four public concerts a year. Collegiate member, American Symphony Orchestra League. May be repeated for credit. Prerequisite: admission by audition. Four rehearsal hours a week.
Credit 1 unit.

L27 Music 3341 Jazz Band
Study of the literature of big band jazz. Concerts are presented each semester. May be repeated for credit. Prerequisite: admission by audition. Two and one-half class hours per week.
Credit 1 unit.
L27 Music 335 University Chorus
A mixed choir drawn from the University and St. Louis communities. Repertoire covers music from the Baroque to the present. Concerts at least once a semester. May be repeated for credit. For students with junior or senior standing only.
Prerequisite: admission by audition. Two and one-half rehearsal hours a week.
Credit 1 unit.

L27 Music 336 University Chorus
A mixed choir drawn from the University and St. Louis communities. Repertoire covers music from the Renaissance to the present. Concerts at least once a semester. May be repeated for credit. Prerequisite: admission by audition. Two and one-half rehearsal hours a week.
Credit 1 unit.

L27 Music 337 Small Chamber Ensembles
Students interested in performance of chamber music are organized into various ensembles and assigned a coach to help rehearse the works under study. A public chamber music concert is given once each semester. May be repeated for credit. For students with junior or senior standing only.
Prerequisite: permission of the department. Special fee applicable.
Credit -2 unit.

L27 Music 3371 Chamber Winds
A group of select woodwind and brass players who form brass and woodwind choirs and smaller ensembles such as quintets and quartets. The weekly rehearsals are coached. The ensembles perform on student recitals and at various campus functions.
Credit 1 unit.

L27 Music 3372 Flute Choir
Weekly one-hour or two-hour rehearsals of flute ensemble literature of many styles, Bach to bop. Developing skills of tone production, technique, intonation, sight reading and musicianship. One performance per semester required.
Prerequisite: admission by audition. Special fee applicable.
Credit -1 unit.

L27 Music 3376 Jazz Combo
Students are placed in small combos for regular, weekly coaching. May be repeated for credit. For students with junior or senior standing.
Prerequisite: permission of department.
Credit 1 unit.

L27 Music 338 Small Chamber Ensembles
Students interested in performance of chamber music are organized into various ensembles. A public chamber music concert is given once each semester. May be repeated for credit. Prerequisite: permission of the instructor. Special fee applicable.
Credit 1 unit.

L27 Music 3381 Chamber Winds
A group of select woodwind and brass players who form brass and woodwind choirs and smaller ensembles such as quintets and quartets. The weekly rehearsals are coached. The ensembles perform on student recitals and at various campus functions.
Credit 1 unit.

L27 Music 3382 Flute Choir
Weekly one-hour or two-hour rehearsals of flute ensemble literature of many styles, Bach to bop. Developing skills of tone production, technique, intonation, sight reading and musicianship. One performance per semester required.
Prerequisite: admission by audition. Special fee applicable.
Credit -1 unit.

L27 Music 3386 Jazz Combo
Students are placed in small combos for regular, weekly coaching. May be repeated for credit. For students with junior or senior standing. Prerequisite: permission of department.
Credit 1 unit.

L27 Music 339 Introduction to Conducting I
Fundamentals of conducting, including the study of transposing instruments and practice in score reading. 
Prerequisite: permission of instructor.
Credit 2 units.

L27 Music 340 Introduction to Conducting II
Fundamentals of conducting, including the study of transposing instruments and practice in score reading. 
Prerequisite: permission of instructor.
Credit 2 units.

L27 Music 3431 West African Music and Dance in Context
Same as Dance 343
Credit 2 units. A&S : LA A&S : IQ, HUM

L27 Music 3503 Billie Holiday: American Icon
Same as AMCS 3503
Credit 3 units. A&S : TH A&S : IQ, HUM

L27 Music 3581 Musica Ebraica: Jewish Identities in Western Music From 1600 to the 21st Century
L27 Music 3582 Music in Jewish Culture and Society
Same as JNE 3582
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L27 Music 3583 The Soundtrack of Israeli History
Same as JNE 3583
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L27 Music 3584 Music in the Holocaust: Sonic Portrayals from Past to Present
Same as JNE 3584
Credit 3 units. A&S : TH A&S : IQ, HUM

L27 Music 3585 Islam, Music, Muslim Media
How do Muslim individuals and communities understand and negotiate the relationship between sound and spirituality? How does Islamic philosophy challenge Western definitions of music? How do music and cultural practices reflect and shape diverse Muslim identities and political struggles? To what extent can we speak of an “Islamic world,” musical or otherwise? In this course, we investigate Islamic musics and musical practices in the lives and experiences of Muslims throughout the world. We approach our study of Muslim musical practices with the understanding that the social, cultural and political contexts where music is created, disseminated and consumed inform the sounds of the music and its various — and often conflicting — interpretations and meanings. We engage with a variety of academic, musical and media texts to develop interdisciplinary analyses about Islam, music, sound experience and Muslim subjectivities. Issues of nationalism and transnationalism, class, race and ethnicity, gender and sexualities, colonialism and postcolonialism, history and memory remain central to our exploration of spirituality and religion in Muslim musical and cultural practices.
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L27 Music 361 Piano
Credit -3 unit.

L27 Music 3612 Jazz Piano
Credit -3 unit.

L27 Music 3613 Fortepiano
Credit -3 unit.

L27 Music 362 Piano
Credit -3 unit.

L27 Music 3622 Jazz Piano
Credit -3 unit.

L27 Music 3623 Fortepiano
Credit -3 unit.

L27 Music 363 Harpsichord
Credit -3 unit.

L27 Music 3631 Russian Literature and Opera
Same as IAS 363
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L27 Music 364 Harpsichord
Credit -3 unit.

L27 Music 365 Organ
Credit -3 unit.

L27 Music 366 Organ
Credit -3 unit.

L27 Music 367 Woodwinds
Credit -3 unit.

L27 Music 367J Jazz Woodwinds
Credit -3 unit.

L27 Music 368 Woodwinds
Credit -3 unit.

L27 Music 368J Jazz Woodwinds
Credit -3 unit.

L27 Music 369 Brass
Credit -3 unit.

L27 Music 369J Jazz Brass
Credit -3 unit.

L27 Music 370 Brass
Credit -3 unit.

L27 Music 370J Jazz Brass
Credit -3 unit.
L27 Music 371 Percussion  
Credit -3 unit.

L27 Music 371J Jazz Percussion  
Credit -3 unit.

L27 Music 372 Percussion  
Credit -3 unit.

L27 Music 372J Jazz Percussion  
Credit -3 unit.

L27 Music 373 Strings  
Credit -3 unit.

L27 Music 3731 Lute  
Credit 3 units.

L27 Music 373J Jazz Strings  
Credit -3 unit.

L27 Music 374 Strings  
Credit -3 unit.

L27 Music 3741 Lute  
Credit 3 units.

L27 Music 374J Jazz Strings  
Credit -3 unit.

L27 Music 375 Guitar  
Credit -3 unit.

L27 Music 3754 Jazz Guitar  
Credit -3 unit.

L27 Music 376 Guitar  
Credit -3 unit.

L27 Music 3764 Jazz Guitar  
Credit -3 unit.

L27 Music 377 Voice  
Credit -3 unit.

L27 Music 378 Voice  
Credit -3 unit.

L27 Music 3951 Independent Study: Language and Arts  
Supervised independent study in areas in which there are no current course offerings. Student must submit to the department chair an outline of the work to be covered, the number of credit hours requested for the work, and the name of the instructor who will be asked to supervise the work. Class hours variable, depending on credit. Consult department for faculty selections in this course.  
Credit -3 unit.

L27 Music 3961 Independent Study: Textual and Historical Studies  
Supervised independent study in areas in which there are no current course offerings. Student must submit to the department chair an outline of the work to be covered, the number of credit hours requested for the work, and the name of the instructor who will be asked to supervise the work. Class hours variable, depending on credit. Consult department for faculty selection.  
Credit -3 unit.

L27 Music 400 Independent Study  
Credit 3 units.

L27 Music 401 Elementary Technique of Electronic Music  
Individual and small group instruction in “classical” procedures and relevant electronic technology. Prerequisite: open to music majors; to others by permission of instructor. Credit contingent upon completion of Music 402.  
Credit 3 units.

L27 Music 402 Advanced Techniques of Electronic Music  
Practical composition studies to build technique in electronic music. Prerequisite: Music 401.  
Credit 3 units.

L27 Music 411 Music of Medieval Period  
An intensive survey of Western monophonic and polyphonic music from the beginnings of Christian chant to ca. 1450. Prerequisites: Music 3011 or permission of instructor.  
Credit 3 units.  
A&S : TH  A&S : IQ, HUM  FA : AH

L27 Music 412 Music of the Renaissance Period  
A survey of music literature from ca. 1450 to ca. 1600. Prerequisite: Music 3011 or permission of instructor.  
Credit 3 units.  
A&S : TH  A&S : IQ, HUM  FA : AH

L27 Music 413 Music in the Baroque Era  
An intensive survey of the primary musical forms and styles in 17th-century Italy, France, Germany and England. Prerequisite: Music 3012 or permission of instructor.
L27 Music 4131 Music in the 18th Century
Musical activity in Europe during the 18th century is the subject of this course, which brings the high baroque, galant and classical eras into a single narrative. Patronage, publishing, star performers and highly specific musical publics were central to the music-making across the century. How these forces shaped the professional and creative lives of major 18th-century composers is a principal theme of the course. A broad range of 18th-century instrumental and vocal music is surveyed, including works by Corelli, F. Couperin, Vivaldi, Rameau, Telemann, Handel, Hasse, Haydn, Mozart, D. Scarlatti and several members of the Bach family. Extensive listening assignments and score analysis are supplemented by readings drawn from recent scholarship and examination of 18th-century music publishing and other period sources in facsimile. Credit 3 units. A&S : TH A&S : IQ, HUM FA : AH

L27 Music 414 Music of the Classic Period
An intensive survey of music literature from ca. 1750 to ca. 1830 with attention to the music of Haydn, Mozart, Beethoven and some of their predecessors. Prerequisite: Music 3012 or permission of instructor. Credit 3 units. A&S : TH FA : AH

L27 Music 415 Music of the Romantic Period
Credit 3 units. A&S : TH

L27 Music 416 Contemporary Music
Survey of musical styles from the end of the 19th century to the Postmodernism of the 1980s. Developments in music considered in context of intellectual history of the century with specific attention to parallels with literature and visual arts. Readings from a variety of sources and extensive listening assignments. Prerequisite: Music 3013 or permission of instructor. Credit 3 units. A&S : TH A&S : IQ, HUM FA : AH

L27 Music 421 Introduction to the Analysis of 20th-Century Music
An introduction to theory and analysis of music from the 20th-century repertoire. In-class analysis and individual assignments emphasize aural understanding and tools for modeling pitch structures in post-tonal and 12-tone works. In the latter portion of the course focus turns toward works in which pitch structures play a smaller role. Prerequisite: Music 222 (for undergraduates) or Music 423 (for graduates). Credit 3 units. A&S : TH A&S : IQ, HUM

L27 Music 4221 The Italian Madrigal
The most important musical genre of the late Renaissance, the madrigal, intersects with poetry, theater and the visual arts, and thus, constitutes an ideal point of entry to early modern Italy. This course explores the stylistic development of the madrigal from its origins in the early 16th century to its demise some hundred years later. The course is structured around close readings of madrigals by Verdelot, Arcadelt, Willaert, Rore, Wert, Marenzio, Luzzaschi, Fontanelli, Gesualdo and Monteverdi. Secondary readings focus on the relation between words and music; the construction of subjectivity; concepts of mode; theories of chromaticism; and performance practice, framed in the context of 16th-century society and culture. Prerequisite: Music 3011, graduate standing or permission of instructor. Credit 3 units. A&S : TH A&S : IQ, HUM

L27 Music 423 Analysis I
A study of structural principles underlying music of all periods: motivic usage, melodic shape, varieties of texture and structure with an emphasis on fugue, variation forms and proportional forms such as rondo and sonata-allegro. Prerequisite: graduate standing or permission of instructor. Credit 3 units. A&S : TH A&S : IQ, HUM

L27 Music 424 Analysis II
Continuation of Music 423, concentrating on approaches to larger and more complex works of classically tonal music, including 18th-century symphonies and string quartets, late works by Beethoven, chamber music and symphonies of Brahms and symphonies of Mahler. Prerequisite: Music 423 or permission of instructor. Credit 3 units. A&S : TH

L27 Music 425 Counterpoint I
Concentrated independent study in 16th-century contrapuntal composition. Prerequisite: Music 222. Credit 3 units.

L27 Music 426 Counterpoint II
Concentrated independent study in 18th-century contrapuntal composition. Prerequisite: Music 222. Credit 3 units.

L27 Music 427 Selected Areas for Special Study
In-depth study in areas of special interest. Prerequisite: senior standing, graduate standing or permission of instructor. Credit 3 units. A&S : TH A&S : IQ, HUM

L27 Music 428 Selected Areas for Special Study II
In-depth study in areas of special interest. Prerequisite: senior standing, graduate standing or permission of instructor. Credit 3 units. A&S : TH A&S : IQ, HUM

L27 Music 4281 The Italian Madrigal
L27 Music 4282 The “Crossover” Tradition in Anglo-American Music Theater
The musical stage in the United States and Britain has remained a vital artistic and commercial arena over the past 100 years despite the emergence of mass media formats such as film and television. Audiences continue to clamor for stage stories where actors sing or singers act, and composers, writers, producers and directors have created a stunning variety of musical theater styles to meet the demand. This course surveys important English-language operas, operettas and singer-centered musicals from the turn of the 20th century to the start of the 21st with an emphasis on “crossover” works that blur the lines between opera and the commercial musical stage. All the works included in the course continue to be performed today, forming a core repertory of music theater works in English that emphasize singers and singing. The overlapping, ever-changing spheres of the opera house and Broadway and West End theaters provide the geography of the course, which is peopled by performers, creators and audiences. In-class analysis of 14 works focuses on how the singing voice has been used as an expressive vehicle and how theater singers have adapted to an age of amplification and recording. Works studied include *Carousel*, *Sweeney Todd*, *The Phantom of the Opera*, *Show Boat*, *Candide*, *Street Scene*, *The Pirates of Penzance*, *The Light in the Piazza*, *My Fair Lady*, *Albert Herring*, *Porgy and Bess*, *The Most Happy Fella*, *Margaret Garner* and *The Student Prince*. In-class singing is encouraged as a means to get inside the musical and dramatic values of these works. Prerequisites: ability to read music, and graduate or upper-division standing. Credit: 3 units.

L27 Music 429 Composition II
Concentrated independent work in composition for experienced undergraduate composers. May be repeated for credit. Prerequisite: permission of instructor. Credit: 3 units.

L27 Music 430 Composition IV
Concentrated independent work in free composition for experienced undergraduates. May be repeated for credit. Class hours variable, one to three hours a week. Prerequisite: permission of instructor. Credit: 3 units.

L27 Music 435 Chamber Choir
Repertoire of the small vocal ensemble from the Renaissance to the 20th century. May be repeated for credit. For students with junior, senior or graduate standing only. Prerequisite: admission by audition and consent of instructor. Four class hours a week. Credit: 2 units.

L27 Music 436 Chamber Choir
Repertoire of the small vocal ensemble from the Renaissance to the 20th century. May be repeated for credit. Prerequisite: admission by audition. Four rehearsal hours a week. Credit: 2 units.

L27 Music 437 Piano Pedagogy I
The study of the fundamentals of teaching from beginning to advanced levels. A syllabus is developed through discussion of lesson plans for each level. The class participates actively in demonstrations. Credit: 3 units.

L27 Music 4371 Opera Production
Intensive training in the principles and techniques of the opera stage. Prerequisites: two years of vocal training and audition or Drama 343. Credit: 3 units.

L27 Music 4372 Voice Pedagogy
Preparation of participants to train the singing voice through examinations of physical, phonological, neurological and psychological aspects of vocal function, followed by observation and practice teaching. Prerequisite: permission of instructor. Credit: 3 units.

L27 Music 4375 Vocal Literature
A survey of song literature through listening and performing. Prerequisite: permission of instructor. Credit: 3 units. A&S: TH A&S: IQ, HUM

L27 Music 4376 Opera Literature: Various Composers Each Semester
A study of a composer’s principal stage masterpieces, with an emphasis on the different genres and theatrical conventions to which they belong, and on the writings for voices. Credit: 3 units. A&S: TH

L27 Music 438 Piano Pedagogy II
The study of the fundamentals of teaching from beginning to advanced levels. A syllabus is developed through discussion of lesson plans for each level. The class participates actively in demonstrations. Credit: 3 units.

L27 Music 4381 Literature of the Piano
An analytical survey of piano literature from Bach to Boulez. Prerequisite: graduate or senior standing or permission of the instructor. Credit: 3 units. A&S: TH A&S: IQ, HUM

L27 Music 4382 Chamber Winds
A group of select woodwind and brass players who form brass and woodwind choirs and smaller ensembles such as quintets and quartets. The weekly rehearsals are coached. The ensembles perform on student recitals and at various campus functions.
Credit 1 unit.

L27 Music 439 Diction I
Principles of Italian, French and German pronunciation covered in an interrelated approach; application of these principles to songs. Prerequisite: permission of instructor.
Credit 3 units. A&S : LA A&S : IQ, HUM

L27 Music 440 Diction II
Principles of Italian, French and German pronunciation covered in an interrelated approach; application of these principles to songs. Prerequisite: permission of instructor.
Credit 3 units. A&S : LA A&S : IQ, HUM

L27 Music 4533 Symphony Orchestra
Performance and reading of works for orchestra. May be repeated for credit. For students with senior or graduate standing only. Prerequisite: admission by audition. Two and one-half class hours a week including sectionals.
Credit 1 unit.

L27 Music 4534 Symphony Orchestra
A select ensemble of about 75 players that performs a repertoire from the baroque to the modern periods in four public concerts a year. Collegiate member, American Symphony Orchestra League. May be repeated for credit. Prerequisite: admission by audition. Four rehearsal hours a week.
Credit 1 unit.

L27 Music 4535 University Chorus
A mixed choir drawn from the University and St. Louis communities. Repertoire covers music from the Baroque to the present. Concerts at least once a semester. May be repeated for credit. For students with senior or graduate standing only. Prerequisite: admission by audition. Two and one-half rehearsal hours a week.
Credit 1 unit.

L27 Music 4536 University Chorus
A mixed choir drawn from the University and St. Louis communities. Repertoire covers music from the Renaissance to the present. Concerts at least once a semester. May be repeated for credit. Prerequisite: admission by audition. Two and one-half rehearsal hours a week.
Credit 1 unit.

L27 Music 4537 Small Chamber Ensembles
Students interested in performance of chamber music are organized into various ensembles and assigned a coach to help rehearse the works under study. A public chamber music concert is given once each semester. May be repeated for credit. For students with senior or graduate standing only. Prerequisite: permission of the instructor. Special fee applicable.
Credit -2 unit.

L27 Music 4538 Small Chamber Ensembles
Students interested in performance of chamber music are organized into various ensembles. A public chamber music concert is given once each semester. May be repeated for credit. Prerequisite: permission of the instructor. Special fee applicable.
Credit -2 unit.

L27 Music 4539 Advanced Conducting I
Advanced training in conducting skills, including opportunities to conduct ensembles on campus. Prerequisite: graduate standing or permission of instructor.
Credit 2 units.

L27 Music 4540 Advanced Conducting II
Advanced training in conducting skills, including opportunities to conduct ensembles on campus. Prerequisite: graduate standing or permission of instructor.
Credit 3 units.

L27 Music 461 Piano
Credit -3 unit.

L27 Music 4612 Jazz Piano
Credit -3 unit.

L27 Music 4613 Fortepiano
Credit -3 unit.

L27 Music 462 Piano
Credit -3 unit.

L27 Music 4622 Jazz Piano
Credit -3 unit.

L27 Music 4623 Fortepiano
Credit -3 unit.

L27 Music 463 Harpsichord
Credit -3 unit.
L27 Music 464 Harpsichord
Credit -3 unit.

L27 Music 465 Organ
Credit -3 unit.

L27 Music 466 Organ
Credit -3 unit.

L27 Music 467 Woodwind
Credit -3 unit.

L27 Music 467J Jazz Woodwinds
Credit -3 unit.

L27 Music 468 Woodwind
Credit -3 unit.

L27 Music 468J Jazz Woodwinds
Credit -3 unit.

L27 Music 469 Brass
Credit -3 unit.

L27 Music 469J Jazz Brass
Credit -3 unit.

L27 Music 470 Brass
Credit -3 unit.

L27 Music 470J Jazz Brass
Credit -3 unit.

L27 Music 471 Percussion
Credit -3 unit.

L27 Music 471J Jazz Percussion
Credit -3 unit.

L27 Music 472 Percussion
Credit -3 unit.

L27 Music 472J Jazz Percussion
Credit -3 unit.

L27 Music 473 Strings
Credit -3 unit.

L27 Music 4731 Lute
Credit -3 unit.

L27 Music 473J Jazz Strings
Credit -3 unit.

L27 Music 474 Strings
Credit -3 unit.

L27 Music 4741 Lute
Credit -3 unit.

L27 Music 474J Jazz Strings
Credit -3 unit.

L27 Music 475 Guitar
Credit -3 unit.

L27 Music 4754 Jazz Guitar
Credit -3 unit.

L27 Music 476 Guitar
Credit -3 unit.

L27 Music 4764 Jazz Guitar
Credit -3 unit.

L27 Music 477 Voice
Credit -3 unit.

L27 Music 478 Voice
Credit -3 unit.

L27 Music 4991 Senior Project: Musicology or Analysis
Supervised research in music history or analysis culminating in a major paper. Required of Bachelor of Music students whose program focuses on music history or analysis. Prerequisite: senior standing. Credit 3 units. A&S : TH

L27 Music 4992 Senior Project: Performance, Composition or Theory
Supervised work in performance, composition or theory culminating in some combination of a paper, composition and/or performance. Required of Bachelor of Music students whose program focuses on performance, composition or theory. Prerequisite: senior standing. Credit 3 units. A&S : LA
L27 Music 4993 Honors Project: Musicology or Analysis
Prerequisites: senior standing, a grade point average of 3.0 or higher and permission of the faculty supervisor, director of undergraduate studies and the chair of the department.
Credit 3 units. A&S : TH

L27 Music 4994 Honors Project: Performance, Composition or Theory
Prerequisite: senior standing, a grade point average of 3.0 or higher and permission of the faculty supervisor, the director of undergraduate studies and the chair of the department.
Credit 3 units. A&S : LA

Pathfinder Program in Environmental Sustainability
The Pathfinder Program in Environmental Sustainability focuses on an interdisciplinary study of the environment with a small group of motivated undergraduates and a senior faculty member and is meant to meet selected College of Arts & Sciences breadth course requirements. Through case studies, field trips and carefully selected ancillary courses, students examine the issues surrounding environmental sustainability and the preservation of the environment for future generations. The Pathfinder Program supports the concept that taking interrelated courses and learning both analytical and technical skills as a freshman and sophomore helps prepare students for in-depth study in their academic majors.

Contact Person: Raymond E. Arvidson
Phone: 314/935-5609
E-mail: arvidson@wunder.wustl.edu
Departmental website: http://wufs.wustl.edu/pathfinder/

Professor
Raymond E. Arvidson
James S. McDonnell Distinguished University Professor
PhD, Brown University
(Earth and Planetary Sciences)

There is no major available in this area. The Pathfinder Program in Environmental Sustainability is available to entering freshmen. The program is consistent with any major within the College of Arts & Sciences.

There is no minor available in this area. The Pathfinder Program in Environmental Sustainability is a program available to entering freshmen.

Pathfinder Program in Environmental Sustainability
L54 Path 201 Land Dynamics and the Environment
Use of case studies such as anthropogenic changes to the Lower Missouri River, effects of mining in the Ozarks, and excessive uses of water in arid terrains in the Southwestern United States to explore key issues associated with environmental sustainability. Scientific concepts related to the dynamics of the environment and development of policies needed to maintain land and resource sustainability. Lectures, discussion sessions, student presentations, appropriate field trips and interactive computer exercises using simulation models. Prerequisite: admission to the Pathfinder Program in Environmental Sustainability.
Credit 3 units. A&S : NS A&S : IQ, NSM BU : SCI FA : NSM

L54 Path 202 Case Study: Southwestern United States
Issues associated with the Mojave Desert’s environmental sustainability. Investigation of the fragile desert environment and its degradation from anthropogenic uses. Politics associated with the Mojave National Preserve. Fieldwork conducted during spring break. Prerequisite: admission to Pathfinder Program in Environmental Sustainability.
Credit 2 units. A&S : SS A&S : IQ, SSC BU : SCI FA : NSM

L54 Path 301B Case Study: Hawaii
Credit 1 unit. A&S : SS A&S : IQ, SSC BU : SCI FA : NSM

Performing Arts
Performing arts at Washington University comprise theater and dance.

Dance
You may select Dance (p. 280) as a major through the Performing Arts Department. This course of study combines intensive studio work in technique and theory of modern dance, ballet and composition with seminars examining dance as a global phenomenon with forms reflecting culturally specific historical, aesthetic and anthropological features. The program also includes a broad range of courses such as stagecraft, music resources, improvisation, anatomy for dancers, pedagogy, dance therapy, musical theater dance, world dance forms, jazz and tap. You also may choose to minor in modern dance,
ballet or world music, dance and theater. The interdisciplinary minor in world music, dance and theater encourages students already interested in the performing arts to explore those outside Euroamerican traditions. A certificate program in somatic studies is offered through the University College division of Arts & Sciences.

When you study dance at Washington University, you learn from faculty members who have professional experience in addition to their academic degrees. You also have the opportunity to study with guest artists in residence who teach master classes and set choreography.

You may audition for the Washington University Dance Theatre, which holds annual auditions for students. If selected, you will appear in faculty- and guest artist-choreographed concerts in Edison Theatre. You also may participate in student choreography productions and drama productions. Each year, students have the opportunity to study at the American College Dance Conference to adjudicate work, perform and take master classes.

Dance students have the opportunity to apply to MADE (Movement and Design in Europe) in France, a five-week summer program based in Paris and Melisey, Burgundy. Participants see dance companies, visit museums and take classes in Paris as a foundation for their subsequent collaborative work with European artists and fellow students in the Melisey studios. Dance students have the opportunity to study abroad during the year at University of Auckland, New Zealand; University of Ghana, Legon; and Roehampton University, London.

**Drama**

The Drama (p. 289) major combines the historical, cultural and literary study of theater and performance with a full array of courses regarding theatrical production, including acting, directing, performance art, design (set, costume, lighting, sound) and playwriting.

The theater and performance studies faculty offer courses in theater history, performance studies, and dramatic and performance theory. Majors also may take, for credit, drama-centered courses in such departments as African and African-American Studies, Classics, English, and Asian and Near Eastern Languages and Literatures; several courses in the Film and Media Studies program are cross-listed with Drama. Our courses analyze theater and performance as resonant and significant cultural practices, both historically and currently. Courses combine rigorous critical analysis with attention to the corporeal and material embodiment of actual performance.

In small, individualized classes (capped by a maximum of 16 students) characterized by a high number of weekly contact hours (generally six), professionally and academically experienced faculty teach a rigorous system of production courses. A carefully graduated four-semester sequence in acting culminates in a capstone class for seniors (Acting IV) focused on individual projects. A two-tiered directing sequence issues into a public showing of student-directed work, and some students have chosen to direct a fully designed production as their Senior Honors thesis. Recent graduates of the acting and directing sequence have been placed in prestigious M.F.A. programs, internships and jobs in regional American theaters, as well as in various professional schools and graduate programs. A nationally recognized program in design and technical theater works students through a structure of costume, scene, lighting and sound design courses, with several electives on such topics as mask making and baroque costume that are informed by historical and cultural study. A highly successful playwriting program, enriched by the annual A.E. Hotchner Playwriting Competition and annual workshops run by leading American dramaturges, has produced playwrights whose work is now being performed in nationally recognized venues such as Chicago’s Steppenwolf Theater.

The culture of performance is abundantly rich at Washington University. The Ovations series of Edison Theatre brings professional theater, dance and music productions to campus, frequently enhanced by workshops especially designed for students. A wide array of student theater groups, with a particular focus on improvisation, provide many opportunities for student-generated performance on campus.

Since 1991, the Performing Arts Department and Globe Education (London) have been running a national summer program held at Shakespeare’s Globe, in London. This four-week program includes a 3-unit course on the textual, historical and cultural study of Shakespeare; a 3-unit course on acting Shakespeare (with particular attention to acting on the Globe stage); master classes taught by Globe personnel; play going in London and Stratford; and more.

**Phone:** 314/935-5858  
**E-mail:** pad@artsci.wustl.edu  
**Departmental website:** http://pad.artsci.wustl.edu/

**Chair**  
Mark Rollins  
Professor  
PhD, Columbia University

**Professors**  
Robert K. Henke  
Professor  
PhD, University of California-Berkeley  
(Drama)

William J. Paul  
PhD, Columbia University  
Henry I. Schvey
## Arts & Sciences

**PhD, Indiana University**  
(Drama)

**Associate Professors**

- **Mary-Jean Cowell**  
  PhD, Columbia University  
  (Dance)

- **Julia Walker**  
  PhD, Duke University  
  (Drama)

**Assistant Professors**

- **Pannill Camp**  
  PhD, Brown University  
  (Drama)

- **Phillip Sewell**  
  PhD, University of Wisconsin–Madison

**Professors of the Practice**

- **Christine Knoblauch-O'Neal**  
  MALS, Wesleyan University  
  (Dance)

- **Bonnie J. Kruger**  
  MFA, University of Illinois  
  (Drama)

- **David W. Marchant**  
  MFA, University of Iowa  
  (Dance)

- **Jeffery S. Matthews**  
  MFA, Virginia Commonwealth University  
  (Drama)

**Artist in Residence**

- **Ron Himes**  
  Henry E. Hampton, Jr. Artist in Residence  
  (Drama)

**Senior Lecturers**

- **Robert Mark Morgan**  
  MFA, San Diego State University  
  (Drama)

- **Annamaria Pileggi**  
  MFA, Brandeis University  
  (Drama)

- **Cecil Slaughter**  
  MFA, University of Iowa  
  (Dance)

- **Andrea Urice**  
  MFA, University of Virginia  
  (Drama)

## William Whitaker

MFA, Florida Atlantic University  
(Drama)

## Lecturers

- **Julie Jordan**  
  PhD, City University of New York  
  (Drama)

- **Sean Savoie**  
  MFA, University of Cincinnati, College Conservatory of Music  
  (Drama)

## Playwright in Residence/Lecturer

- **Carter W. Lewis**  
  MA, University of Oklahoma  
  (Drama)

The Performing Arts Department offers majors in Dance and in Drama. For the major in Dance, see the Dance (p. 280) page. For the major in Drama, see the Drama (p. 289) page.

## The Minor in World Music, Dance and Theater

**Required units:** 17

### Required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 1021</td>
<td>3</td>
</tr>
<tr>
<td>Dance 315</td>
<td>3</td>
</tr>
</tbody>
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### And one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>Chinese 467</td>
<td>3</td>
</tr>
<tr>
<td>Japan 446</td>
<td>3</td>
</tr>
<tr>
<td>Drama 223</td>
<td>3</td>
</tr>
<tr>
<td>AFAS 301</td>
<td>3</td>
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</table>

### Electives courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>Drama 368</td>
<td>3</td>
</tr>
<tr>
<td>Music 3021</td>
<td>3</td>
</tr>
<tr>
<td>Music 3022</td>
<td>3</td>
</tr>
<tr>
<td>Dance 305Z</td>
<td>2</td>
</tr>
<tr>
<td>Dance 328</td>
<td>2</td>
</tr>
<tr>
<td>Dance 340</td>
<td>3</td>
</tr>
</tbody>
</table>

### Course  
Units  
**U College Dance**  
227  
Introduction to  
Dance of West Africa  
2
Additional Information

This is a proposed interdisciplinary minor, drawing on the distinctive methodologies and training inherent in several disciplines. This minor encourages the student already interested in the performing arts to explore those outside Euroamerican traditions. However, students majoring in fields such as anthropology, political science, psychology, education, comparative literature, history and foreign languages may find this minor a useful complement to their primary discipline.

The Minor in Ballet

For the Minor in Ballet, see the Dance (p. 282) page of this Bulletin.

The Minor in Modern Dance

For the Minor in Modern Dance, see the Dance (p. 282) page of this Bulletin.

The Minor in Drama

For the Minor in Drama, see the Drama (p. 290) page of this Bulletin.

Dance

For Dance courses, see the Dance (p. 282) page of this Bulletin.

Drama

For Drama courses, see the Drama (p. 290) page of this Bulletin.

Persian Language and Literature

The Department of Jewish, Islamic and Near Eastern Languages and Cultures offers a major and a minor in Persian. As a major in Persian, students can expect to gain proficiency in the language, study the area’s literary and cultural landmarks, and gain familiarity with Near Eastern history and civilizations. As majors, students are expected to maintain a B average in all departmental courses.

The prerequisites for a major include successful completion of the first two levels of language study (Pers 116D Beginning Persian I, Pers 117D Beginning Persian II, Pers 216D Intermediate Persian I, Pers 217D Intermediate Persian II) or its equivalent and one lower-level foundational course: JINE 210C Introduction to Islamic Civilization.

Language Placement: Placement tests are required for all students entering our language programs. Students who test into Intermediate Persian and satisfactorily complete (with a grade of B– or better) at least one semester of language study may petition for 3 units of retroactive credit; students who test into third year or above and satisfactorily complete (with a grade of B– or better) at least one semester of language study may petition for 6 units of retroactive credit. Credit is limited to 3 units for testing into intermediate and 6 units for testing into third year or above. Please note that students with native language proficiency as determined by the individual language section, as well as students who enroll in a course below their placement level, are ineligible for retroactive credit units. Students who misrepresent the extent of their background to gain entrance to a course at the elementary or intermediate level will be dropped from that course.

Phone: 314/935-5110 or 314/935-8567
E-mail: jinelc@artsci.wustl.edu
Departmental website: http://jinelc.wustl.edu

For a list of affiliated faculty, please see the Department of Jewish, Islamic and Near Eastern Languages and Cultures faculty (p. 504) page.

The Major in Persian Language and Literature

Total units required: 47. First- and second-level language study, 20 units, plus 27 upper-level units, no more than 12 of which may be language courses.

Required courses:

The prerequisites for a major in Persian include successful completion of the first two levels of language study (Pers 116D Beginning Persian I, Pers 117D Beginning Persian II, Pers 216D Intermediate Persian I, Pers 217D Intermediate Persian II) or its equivalent and one lower-level foundational course: JINE 210C Introduction to Islamic Civilization.

Required upper-level courses for the major include language courses at the third year or higher levels. Students normally complete four years of Persian, or three years of study in Persian and one year in a second language. All students are expected to maintain a minimum grade of B– in language classes.

In addition, Persian majors must complete 15 units of relevant upper-level literature, culture and civilization courses, chosen in consultation with their adviser. (Please note that many courses in Near Eastern literatures and cultures can be found under Religious Studies, Comparative Literature, Anthropology, or Jewish, Islamic and Near Eastern Studies.) Unless a student is
writing an honors thesis or fulfilling a capstone requirement for a second major, he or she also is required to take the department’s capstone course during the senior year.

**Additional Information**

**Study Abroad:** Students are strongly encouraged to participate in Washington University-approved study abroad programs in Israel, Egypt and other countries of the Middle East. Study abroad is usually during the junior year and after a minimum of one year of language study at Washington University. Students who participate in Washington University-sponsored and/or approved overseas programs are normally able to apply most or all of these units to their undergraduate degree, although no more than 9 upper-level units may be applied to the major. However, all transfer of credit is subject to review and approval by the department and the Study Abroad office.

**Transfer Credit:** Normally no more than 6 units of credit earned at an institution other than Washington University (this does not include Washington University-approved study-abroad programs) may be applied to the major and no more than 3 units toward the minor.

**Senior Honors:** Qualified majors are encouraged to apply for Senior Honors before the end of the junior year. Students wishing to pursue this option need to meet the minimum honors requirements stated in this bulletin; have outstanding performance in language work; and satisfactorily complete, during the senior year, Pers 488 Independent Work for Senior Honors (fall) and, if possible, Pers 489 Independent Work for Senior Honors (spring), to be taken in addition to all other departmental requirements. Honors work will be supervised by a three-member departmental Honors Committee composed of a primary adviser and two additional faculty, which plans with each student special language work as needed and an independent honors research paper in the student’s area of academic interest.

**The Minor in Persian Language and Literature**

**Units required:** 18–29

**Required courses:** The minor in Persian Language and Literature requires the completion of 18 credits, no more than 12 of which may be in language and a minimum of 9 units at the 300 level or above. Minimum requirements for the minor include two years of Persian language (Pers 116D Beginning Persian I, Pers 117D Beginning Persian II, Pers 216D Intermediate Persian I, Pers 217D Intermediate Persian II) and the successful completion of at least 9 units of literature/culture courses chosen in consultation with the minor adviser.

**Additional Information**

Please note that students must earn a minimum of B– in language courses in order to proceed to the next level. Students who place out of language courses because of previous language training or because they are native speakers of the language must complete 15 units with literature and culture courses as approved by their minor adviser. No more than three units of credit earned at an institution other than Washington University may be applied to the minor. The pass/fail grade option is not allowed for any minor courses. Please also note that no more than 3 units of the required 18 units for the minor may be courses that also are used to satisfy the requirements of a major.

**Persian Language and Literature**

**L47 Pers 116D Beginning Persian I**
Introduction to modern Persian; concentrates on rapidly developing basic skills in speaking, reading, writing and understanding modern Persian. Five class hours a week and additional drill or laboratory hours as assigned by instructor. Credit 5 units.  
A&S : LA  
A&S : IQ, LCD, LS  
BU : HUM, IS

**L47 Pers 117D Beginning Persian II**
Introduction to modern Persian; concentrates on rapidly developing basic skills in speaking, reading, writing and understanding modern Persian. Five class hours a week and additional drill or laboratory hours as assigned by instructor. Credit 5 units.  
A&S : LA  
A&S : IQ, LCD, LS  
BU : HUM, IS

**L47 Pers 200 Topics in Asian & Near Eastern Languages & Literatures**
Same as ANELL 200  
Credit 3 units.  
A&S : TH, CD  
BU : BA, HUM, IS

**L47 Pers 216D Intermediate Persian I**
Rapid development of skills in speaking, reading, writing and understanding modern Persian. Reading of annotated, classical and modern texts; elementary composition. Prerequisite: Pers 117D or equivalent.  
Credit 5 units.  
A&S : LA  
A&S : IQ, LCD, LS  
BU : HUM, IS

**L47 Pers 217D Intermediate Persian II**
A continuation of Persian 216D. Emphasis on enhancing skills in speaking, reading, writing and understanding modern Persian. Reading of annotated classical and modern texts; elementary composition. Prerequisite: Pers 216D or equivalent. Five class hours a week with additional drill or laboratory hours as assigned.  
Credit 5 units.  
A&S : LA  
A&S : IQ, LCD, LS  
BU : IS
L47 Pers 316 Advanced Persian I
Selected readings from classical Persian prose and poetry. Prose readings from historical, mystical and ethical literature by such authors as Bayhaghi, 'Attar and Sa‘di. Poetry from significant lyrical genres, such as qasida and ghazal, as well as examples from heroic and romantic epics. Continued emphasis on developing skills in writing, speaking and understanding Persian. Frequent use of traditional music, slides and videos to enhance cultural awareness. Prerequisite: Pers 217D or equivalent.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L47 Pers 317 Advanced Persian II: Readings from Modern Literature
Selected readings from modern Persian prose and poetry. The section on prose includes readings from key 19th- and 20th-century texts carrying the debate on social and literary reform. Examples from novels, short stories and plays by such authors as Hedayat and Sa‘di studied. Poetry selections include works of traditional figures, such as Iraj Mirza. Focus on reformists such as Nima, Shamlu and Forough. Class discussion emphasized and the use of music, slides and videos continued. Emphasis on developing skills in writing, speaking and understanding Persian. Prerequisite: Pers 316 or equivalent.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L47 Pers 361 City of Peace: Baghdad in Medieval Times (ca. 762–1250)
Same as JNE 361
Credit 3 units. A&S : TH A&S : IQ, HUM EN : H

L47 Pers 390 Lyrics of Mystical Love, East and West
Same as Comp Lit 390
Credit 3 units. A&S : TH, CD, WI A&S : IQ, HUM, LCD FA : Lit

L47 Pers 400 Asian & Near Eastern Languages & Literatures Senior Seminar
Same as ANELL 400
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L47 Pers 425 Topics in Persian Literature
The richness and vigor of classical Persian literature continue into the 20th century. Economic growth, political change and modernization of education characterize the modern period. The literature produced in these circumstances provides a fascinating example of stimulation, struggle and change in an age-old literary tradition. The present course investigates the lively moments of this engagement with modernity in the novels, short stories and poems of such writers as Hedayat, Daneshvar, Sepehri and Farrukhzad. (All readings in translation.)
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, LS BU : HUM FA : Lit

L47 Pers 456 Topics in Classical Persian Literature and Culture
An in-depth study of literary/cultural concepts, generic patterns or intellectual currents in Persian literature from the 10th to 18th centuries. Persian primary sources compose the bulk of the reading. Each semester, a certain genre, time period, literary/intellectual figure or text forms the main focus. Advanced reading knowledge of Persian required. Prerequisite: senior standing.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD FA : Lit

L47 Pers 457 Topics in Modern Persian Literature and Culture
An in-depth study of the modern developments in literary/cultural concepts, generic patterns or intellectual currents in Persian literature from 18th century to present. Persian primary sources compose the bulk of the reading. Each semester, a certain genre, time period, literary/intellectual figure or text forms the main focus. Advance reading knowledge of Persian required.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD FA : Lit

L47 Pers 488 Independent Work for Senior Honors
Prerequisite: senior standing.
Credit 3 units.

L47 Pers 489 Independent Work for Senior Honors
This course is taken in the spring semester. Prerequisite: senior standing, eligibility for honors and permission of the department.
Credit 3 units.

L47 Pers 4972 Guided Readings in Persian
Prerequisites: senior standing and permission of the instructor and the department chair.
Credit -3 unit. A&S : LA

L47 Pers 4982 Guided Readings in Persian
Prerequisites: senior standing and permission of the instructor and the department chair.
Credit -3 unit. A&S : LA

Philosophy
Philosophy tackles central questions in human life, such as:
What counts as human knowledge? How should I live? What is truth? How is the mind related to the body? What is a just
These difficult but fundamental questions are rigorously explored in philosophy and worked through by drawing on the historical tradition and utilizing careful reasoning. Because philosophers have shaped many of the central ideas on which Western civilization is based, the study of philosophy plays a vital role in a well-rounded liberal arts education.

Philosophy courses at Washington University provide opportunities to gain deeper knowledge of the history of philosophy, from the work of the ancient philosophers Plato and Aristotle through key thinkers such as Descartes and Kant to the present. Students can study the interface between philosophy and other disciplines (such as psychology, environmental studies, women’s studies, law and political science); they also can examine the methods of inquiry and underlying conceptual frameworks of scientific work itself. Courses in logic equip students to think and argue clearly and rigorously, while courses in analytic philosophy allow for the exploration of fundamental questions about knowledge and metaphysics. The department offers a variety of courses in ethics, where students can consider different theoretical approaches to current political, social, medical and environmental problems.

**Chair**
Christopher Wellman
PhD, University of Arizona

**Professors**
Dennis DesChene
PhD, Stanford University

John Doris
PhD, University of Michigan

Julia Driver
PhD, Johns Hopkins University

J. Claude Evans
PhD, State University of New York–Stony Brook

John Heil
PhD, Vanderbilt University
(Philosophy, Philosophy–Neuroscience–Psychology)

Mark Rollins
PhD, Columbia University

Roy Sorensen
PhD, Michigan State University

**Associate Professors**
Anne Margaret Baxley
PhD, University of California–San Diego

**Eric Brown**
PhD, University of Chicago

**Carl Craver**
PhD, University of Pittsburgh

**Ron Mallon**
Associate Professor and Director of Philosophy–Neuroscience–Psychology Program
PhD, Rutgers University

**Gillian Russell**
PhD, Princeton University

**Assistant Professors**
Fay Edwards (Spring 2013)
PhD, King’s College, London

Brett Hyde
PhD, Rutgers University

Charlie Kurth
PhD, University of California–San Diego

Elizabeth Schechter
PhD, University of Maryland

**Adjunct Professors**
John Bruer
PhD, Rockefeller University

Linda J. Nicholson
Susan E. and William P. Stritz Distinguished Professor of Women’s Studies
PhD, Brandeis University

**Post-Doctoral Fellows**
Brian Fiala
PhD, University of Arizona

Philipp Koralus
PhD, Princeton University

**Professors Emeriti**
Robert B. Barrett Jr.
PhD, Johns Hopkins University

William H. Gass
David May Distinguished University Professor Emeritus in the Humanities
PhD, Cornell University

Roger Gibson
PhD, University of Missouri

Lucian W. Krukowski
PhD, Washington University

Jerome P. Schiller
PhD, Harvard University
The Major in Philosophy

**Total units required:** 27 units, of which at least 6 units must be at the 400 level, and an additional 15 units must be at the 300 level or above.

Majors are encouraged to take more than this minimum number of courses, especially if they are considering graduate work in philosophy. Majors and minors are encouraged to fulfill the writing-intensive requirement by taking Phil 390 Philosophical Writing. All majors are required to complete a capstone experience in philosophy, either an Honors thesis (Phil 499) or the Philosophy Capstone Course (Phil 3991). Majors who are planning to do graduate work in philosophy should attain at least reading proficiency in German, Greek, Latin or French.

**Required courses:**

Majors must complete at least one Core Course in each of the three areas below. Students who do not take Phil 100 will be required to take one additional Core Course. The Core Courses, by area, are:

- **Contemporary/Analytic Philosophy:** Phil 301G, 306G, 3113, 315, 321G, 3481
- **History of Philosophy:** Phil 347C, 349C, 357C, 358
- **Value Theory:** Phil 331F, 339F, 340F, 346

On occasion it may be appropriate to substitute a 400-level course in one of these areas for a 300-level core course; individual petitions for substitutions will be considered by the undergraduate director. Generally, for a course to count either as “core” or as partly satisfying the requirement for 6 units at the 400 level, it must be home-based in Philosophy. At most, 3 units of credit in Phil 499 or 500 can be counted toward the required 6 units of 400-level course work.

**Optional tracks:** The department offers the following three special tracks through the major: the Philosophy Research Focus, the Law and Policy Track and the Philosophy of Science Track.

**Philosophy Research Track**

The Philosophy Research Track is especially recommended for students who plan to pursue graduate studies and an advanced degree in philosophy — a must for anyone interested in a career as a university or college philosophy teacher. It will give the student a broad background in philosophy, which is a competitive advantage when applying to graduate programs in the field.

**Requirements:**

- At least 36 units total
- Phil 100 Logic
- One 100-level class in addition to Phil 100G Logic and Critical Analysis, preferably Phil 120F Problems in Philosophy or Phil 125C Great Philosophers
- In Contemporary/Analytic: Phil 301G Symbolic Logic; one of either Phil 3113 Theory of Knowledge or Phil 3481 Introduction to Metaphysics; and one of either Phil 306G Philosophy of Language, Phil 315 Philosophy of Mind or Phil 321G Philosophy of Science
- In History: Any two core courses (a 400-level History course may be substituted for a second 300-level course)
- In Value Theory: Phil 331F Classical Ethical Theories and one of Phil 4315 Normative Ethical Theory and Phil 4310 20th-Century Metaethics (these can satisfy a 400-level requirement)
- Phil 390 Philosophical Writing or another Core course
- Phil 3991 Philosophy Capstone Course or Phil 499 Study for Honors
- At least 30 units at 300-level or above (including core courses)*
- At least 6 of those 30 units at 400-level**
- Courses cannot be taken Pass/Fail and count toward the major.

**Contemporary/Analytic Courses**

Phil 301G Symbolic Logic
Phil 306G Philosophy of Language
Phil 3113 Theory of Knowledge
Phil 315 Philosophy of Mind
Phil 321G Philosophy of Science
Phil 3481 Introduction to Metaphysics

**History Courses**

Phil 347C Ancient Philosophy
Phil 349C Descartes to Hume
Phil 357C Kant and 19th-Century Philosophy
Phil 358 Conceptual Foundations of Modern Science

**Value Theory Courses**

Phil 331F Classical Ethical Theories
Phil 339F Philosophy of the Arts
Phil 340F Social and Political Philosophy
Phil 346 Philosophy of Law
Law and Policy Track
This track is especially recommended for students who intend to pursue a career in law or public policy. The track involves taking certain specific courses for the major, and possibly a few extra courses, that will provide the student with additional preparation and a competitive edge when applying to law school, post-graduate programs in public policy, and related jobs.

Requirements:
- At least 27 units total
- Phil 100G Logic and Critical Analysis or Phil 301G Symbolic Logic
- Strongly recommended: a 100-level class in addition to Phil 100G Logic and Critical Analysis
- One core course in Contemporary/Analytic and one core course in History
- Phil 340F Social and Political Philosophy and Phil 346 Philosophy of Law
- Strongly recommended: At least one other Value Theory course
- Strongly recommended: at least one 200-level course
- Phil 390 Writing-Intensive Course in Philosophy or another Core course
- Phil 3991 Philosophy Capstone Course or Phil 499 Study for Honors
- At least 21 units at 300 level or above (including core courses)*
- At least 6 of those 21 units at 400-level**
- Courses cannot be taken Pass/Fail and count toward the major.

Contemporary/Analytic Courses:
Phil 301G Symbolic Logic
Phil 306G Philosophy of Language
Phil 3113 Theory of Knowledge
Phil 315 Philosophy of Mind
Phil 321G Philosophy of Science
Phil 3481 Introduction to Metaphysics

History Courses:
Phil 347C Ancient Philosophy
Phil 349C Descartes to Hume
Phil 357C Kant and 19th-Century Philosophy
Phil 358 Conceptual Foundations of Modern Science

Value Theory Courses:
Phil 331F Classical Ethical Theories
Phil 339F Philosophy of the Arts
Phil 340F Social and Political Philosophy
Phil 346 Philosophy of Law

Philosophy of Science Track
The Philosophy of Science track is available only as a second major in combination with work in one or more of the sciences. It is intended for those students with a scientific background who have an interest in pursuing philosophical issues relating to the natural and physical sciences.

Requirements:
- At least 27 units total
- In Contemporary/Analytic: Phil 301G Symbolic Logic and Phil 321G Philosophy of Science
- In History: Any one of the core courses listed below
- In Advanced Philosophy of Science: Both core courses Phil 4210 Advanced Philosophy of Science I: Observation and Experiment and Phil 4211 Advanced Philosophy of Science II
- Any three of the Supplementary Courses listed below, which must include Phil 390 Philosophy Writing-Intensive if writing-intensive requirement is to be fulfilled in Philosophy
- Phil 3991 Philosophy Capstone Course or Phil 499 Study for Honors
- At least 27 units at 300 level or above (including core courses)*
- At least 6 of those 27 units at 400-level**
- Courses cannot be taken Pass/Fail and count toward the major.

Contemporary/Analytic Courses:
Phil 301G Symbolic Logic
Phil 306G Philosophy of Language
Phil 3113 Theory of Knowledge
Phil 315 Philosophy of Mind
Phil 321G Philosophy of Science
Phil 3481 Introduction to Metaphysics

History Courses:
Phil 347C Ancient Philosophy
Phil 349C Descartes to Hume
Phil 357C Kant and 19th-Century Philosophy
Phil 358 Conceptual Foundations of Modern Science

Advanced Philosophy of Science Courses:
Phil 4210 Advanced Philosophy of Science I: Observation and Experiment
Phil 4211 Advanced Philosophy of Science II

Supplementary Courses

General Philosophy Courses:
Phil 426 Theories of Concepts
Phil 390 philosophical Writing
Logic and Method Courses:
Phil 403 Mathematical Logic I
Phil 404 Mathematical Logic II
Phil 405 Philosophy of Logic

Epistemology and Metaphysics Courses:
Phil 307 Metaphysics and Epistemology
Phil 4142 Advanced Metaphysics
Phil 4142 Advanced Metaphysics
Phil 4332 Cognition and Computation

Life and Science Courses:
Phil 423 Philosophy of Biological Science
Phil 452 Aristotle

Mind and Science Courses:
Phil 315 Philosophy of Mind
Phil 418 Current Controversies in Cognitive Science
Phil 419 Philosophy of Psychology
Phil 4212 Philosophy of Neuroscience
PNP 495 PNP Seminar (with approval of topic)

Additional Information
Senior Honors: Eligible majors are encouraged to work toward Senior Honors. To qualify, students must have the agreement of a faculty member to serve as thesis adviser. In addition, they must have, at the end of the junior year, at least a 3.5 GPA in the major, a 3.5 GPA in advanced philosophy courses (300 level and above), and a 3.65 overall GPA. For important additional information regarding Senior Honors, consult the web page.

The Writing-Intensive Seminar: Majors are encouraged to fulfill their Writing-Intensive requirement by taking Phil 390, which is specially designated as Writing-Intensive. It is typically taken in the junior year and is limited to 15 students. Significant attention is devoted to conceiving, researching, writing, revising, critiquing and presenting philosophical essays. A philosophy major who does not take a philosophy writing-intensive seminar must take a fourth core course, in any of the three core areas. Priority is given to Philosophy majors and minors who have not yet completed their Writing-Intensive requirement.

Capstone Experience: All Philosophy majors are required to complete a capstone experience, either by writing an honors thesis or by taking the Philosophy Capstone Course (Phil 3991). PLEASE be aware that the Capstone Course is offered ONLY in the spring semester, so you will need to plan your class schedule accordingly, if you decide not to do an honors thesis. To qualify for doing an honors thesis, students must have, at the end of the junior year, at least a 3.5 GPA in the major, a 3.5 GPA in advanced philosophy courses, and a 3.5 overall GPA. Alternatively, majors should sign up for Phil 3991 (a 3-credit course), which will draw together a variety of different philosophical areas. Only Philosophy majors of senior standing may take this course; preference is given to students not pursuing honors.

* At least 30 units of the required upper-level courses must be completed with a minimum of a C–.

** Three of these credits (one course) must not be from Honors Thesis or Independent Study.

Study Abroad: Students can pursue the philosophy major while studying abroad. The department has special study abroad arrangements with University College, London; Kings College, London; Trinity College, Dublin (Ireland); Sussex University (U.K.); Utrecht University (the Netherlands); and the University of Auckland (New Zealand). Information about study abroad and about specific overseas programs is available from the departmental website and the Study Abroad adviser.

The Minor in Philosophy
Units required: 18
Required courses:
You are required to complete at least 12 units at the 300 level or above, which must include at least one course in each of the following three “core” areas:

Contemporary/Analytic Philosophy:
Phil 301G Symbolic Logic
Phil 306G Philosophy of Language
Phil 3113 Theory of Knowledge
Phil 315 Philosophy of Mind
Phil 321G Philosophy of Science
Phil 3481 Introduction to Metaphysics

History of Philosophy:
Phil 347C Ancient Philosophy
Phil 349C Descartes to Hume
Phil 357C Kant and 19th-Century Philosophy
Phil 358 Conceptual Foundations of Modern Science

Value theory:
Phil 331F Classical Ethical Theories
Phil 339F Philosophy of the Arts
Phil 340F Social and Political Philosophy
Phil 346 Philosophy of Law

Additional Information
Minors are encouraged to take the writing-intensive course Philosophical Writing (Phil 390). A philosophy minor must receive a grade of C– or above in each course. Many philosophy courses also can be taken as part of a History and Philosophy of Science minor or a Legal Studies minor.
The Minor in Philosophy of Science

Units required: 18

Required courses:
- Phil 301G Symbolic Logic
- Phil 321G Philosophy of Science
- Phil 4210 Advanced Philosophy of Science I: Observation and Experiment
- Phil 4211 Advanced Philosophy of Science II

Elective courses:
- One course from the following three:
  - Phil 347C Ancient Philosophy
  - Phil 349C Descartes to Hume
  - Phil 358 Conceptual Foundations of Modern Science

- One course from the following:
  - Phil 307 Metaphysics and Epistemology
  - Phil 315 Philosophy of Mind
  - Phil 390 Philosophical Writing
  - Phil 403 Mathematical Logic 1
  - Phil 404 Mathematical Logic II
  - Phil 4051 Philosophy of Logic
  - Phil 4141 Advanced Epistemology
  - Phil 4142 Advanced Metaphysics
  - PNP 418 Current Controversies in Cognitive Science
  - Phil 419 Philosophy of Psychology
  - Phil 4212 Philosophy of Neuroscience
  - Phil 423 Philosophy of Biological Science
  - Phil 426 Theories of Concepts
  - PNP 4332 Cognition and Computation
  - Phil 452 Aristotle
  - PNP 495 PNP Seminar (with approval of topic)

Philosophy

L30 Phil 100G Logic and Critical Analysis
Introduction to the elementary tools of logic required for constructing and critically evaluating arguments and the claims they support. Topics include: the nature of an argument; argument structure; how arguments can fail both in structure and in content; formal and informal fallacies; propositional logic and predicate calculus; and critical analysis of rhetorical strategies for presenting arguments. Students are encouraged to develop critical reasoning skills that can be applied widely.
Credit 3 units. A&S : LA, QA A&S : IQ, NSM, AN BU : HUM FA : SSP

L30 Phil 120F Problems in Philosophy
Introduction to philosophical methods and concepts through an investigation of major issues in Western philosophy such as: what counts as knowledge; truth and belief; the existence of God; the mind-body problem; materialism and idealism; moral theory and concepts of justice. A range of historical and contemporary views on these issues is considered. The aim of the course is to prepare students to think and write about philosophical problems on their own.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH FA : SSP

L30 Phil 125C Great Philosophers
In this course we focus on some of the most important texts in the history of Western philosophy in order to discuss a wide range of central philosophical problems. We typically consider, for example, the existence of God, the justification of claims to knowledge, and the requirements of a good human life, including the demands of morality. Among the philosophers most likely studied are Plato, Aristotle, Descartes, Hume, Kant, Marx, Nietzsche, and Wittgenstein. Our goal is not just to appreciate the genius of some great philosophers but also to grapple with the current philosophical problems they have bequeathed to us.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH FA : SSP

L30 Phil 131F Present Moral Problems
An investigation of a range of contemporary moral issues and controversies that draws on philosophical ethics and culturewide moral considerations. Topics may include: racism, world hunger, war and terrorism, the distribution of income and wealth, gender discrimination, pornography, lesbian and gay rights, abortion, euthanasia, and capital punishment. The aim of the course is to present diverse points of view regarding these topics and to provide conceptual and theoretical tools that enable the student to make headway in thinking carefully and critically about the issues.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH FA : SSP

L30 Phil 233F Biomedical Ethics
A critical examination, in the light of contemporary moral disagreements and traditional ethical theories, of some of the moral issues arising out of medical practice and experimentation in our society. Issues that might be discussed include euthanasia, genetic engineering, organ transplants, medical malpractice, the allocation of medical resources, and the rights of the patient.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH FA : SSP

L30 Phil 235F Introduction to Environmental Ethics
A general survey of current issues in environmental ethics, focusing on problems such as the obligation to future generations, protection of endangered species, animal rights, problems of energy and pollution, wilderness, global justice,
and business obligations. Students also learn some ethical and political theory.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH FA : SSP

L30 Phil 239 Topics in Philosophy and Environment
Philosophical questions are central to study of the environment. Such questions span many philosophical fields including metaethics, value theory, applied ethics, aesthetics, political philosophy and philosophy of science. Given such a diversity of important questions, this course focuses on a different intersection of philosophy and environment each time it runs. It aims to develop students’ understanding of the complex philosophical claims and problems that lie behind environmental values, practices and policies. Examples of topics considered are: wilderness, food and agriculture, and animals.
Credit 3 units. A&S : TH A&S : IQ, HUM

L30 Phil 297 Undergraduate Independent Study
Prerequisite: permission of the department.
Credit -6 unit.

L30 Phil 299 Internship in Philosophy
Students receive credit for a faculty-directed and approved internship. Registration requires completion of the Learning Agreement, which the student obtains from the Career Center and which must be filled out and signed by the Career Center, the site supervisor and the faculty sponsor prior to beginning internship work. Credit should correspond to actual time spent in work activities, e.g., eight to 10 hours a week for 13 or 14 weeks to receive 3 units of credit; 1 or 2 credits for fewer hours.
Credit -3 unit. FA : SSP

L30 Phil 301G Symbolic Logic
In the first half of the course we study some features of truth — functional and first-order classical logics, including studying the model theory and metatheory for first-order logic in much greater depth than in Phil 100. In the second half of the course we go on to study three different styles of proof system — tableaux, axiomatic and natural deduction. This course continues where Phil 100 An introduction to Logic and Critical Analysis leaves off. It is recommended for students who already have taken that introductory course, or for students who already have a strong background in mathematics.
Credit 3 units. A&S : LA A&S : IQ, NSM, AN BU : HUM FA : SSP

L30 Phil 306G Philosophy of Language
A survey of major philosophical problems concerning meaning, reference and truth as they have been addressed within the analytic tradition. Readings that represent diverse positions on these focal issues are selected from the work of leading philosophers in the field, for example: Frege, Russell, Wittgenstein, Davidson, Quine, Kripke and Putnam. Students are encouraged to engage critically the ideas and arguments presented, and to develop and defend their own views on the core topics. Prerequisites: one course in philosophy at the 100 or 200 level or permission of the instructor.
Credit 3 units. A&S : LA A&S : IQ, HUM BU : HUM FA : SSP

L30 Phil 308 Introduction to Semantics
Same as Ling 311
Credit 3 units. A&S : LA A&S : IQ, SSC

L30 Phil 310 Contemporary Jewish Thought
Same as JNE 310
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH FA : Lit, SSP

L30 Phil 3101 Topics in Philosophy of Religion
Same as Re St 3101
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH

L30 Phil 3113 Theory of Knowledge
This course focuses on issues in epistemology with the aim of providing a survey of contemporary work. The course begins with a close reading of Descartes’ first three Meditations. These should help us set some of the problems that figure in more recent work and provide an introduction to certain fundamental epistemological concepts. No particular background is assumed, but participants are expected to come to class prepared to discuss topics at an advanced level. Readings are taken form original sources and can be challenging. Although most assignments are reasonable short, you should allow time for careful reading and rereading. Prerequisite: one 100- or 200-level course in philosophy, or permission of instructor.
Credit 3 units. A&S : TH A&S : IQ, HUM

L30 Phil 315 Philosophy of Mind
An introduction to philosophical analyses of the nature of mind, especially those developed by contemporary philosophers. The focus is on questions such as the following: What is a mind? How does it relate to a person’s brain? How does it relate to a person’s body and the external world? Can a mind exist in a very different kind of body (e.g., a computer or a robot)? Does thinking require a language-like code? If so, can nonlinguistic species think? What is it to have a mental image or to experience pain? Prerequisite: one course in philosophy at the 100 or 200 level, or permission of the instructor.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : SSP
L30 Phil 316 Mind and Morals
This course explores a number of issues at the intersection of ethics and cognitive science. Possible topics include: Are we rational? Do we know our own thoughts and motivations? Can one believe that one ought to do something without being motivated to do it? Do emotions impair or enhance our ability to reason? How do moral beliefs develop through childhood? Are traits such as intelligence and character unchangeable, and what implications follow if they are (or are not)? Does retaining my identity over time require having the same mind, and, if so, am I the same person now as I was as a child? Are nonhuman animals worthy of moral consideration? If brain activity is determined by causal laws, can we have free will? Prerequisite: one course in philosophy at the 100 or 200 level, or permission of the instructor.
Credit 3 units.   A&S : TH   A&S : IQ, HUM   BU : ETH   FA : SSP

L30 Phil 332G Philosophy of Science
Pivotal concepts common to empirical sciences are examined and clarified. These include: explanation, confirmation, prediction, systematization, empirical significance and the relationship of all these concepts to the structure of scientific theory. Examples may be drawn from both contemporary and historical science, including the social, biological and physical sciences. Students with a background in science are particularly encouraged to consider this course. Prerequisite: one course in philosophy at the 100 or 200 level, or permission of the instructor.
Credit 3 units.   A&S : TH   A&S : IQ, HUM   BU : HUM   FA : SSP

L30 Phil 337 Philosophy of Religion
Credit 3 units.   A&S : TH   A&S : IQ

L30 Phil 331F Classical Ethical Theories
Intensive readings of great works in the history of ethics, especially by Plato, Aristotle, Hume, Kant and Mill. Topics may include: the sources of moral knowledge; the nature of practical moral judgment; the moral role of emotion and desire; weakness of will; moral autonomy; and the universality of moral norms. Prerequisite: one course in philosophy at the 100 or 200 level, or permission of the instructor.
Credit 3 units.   A&S : TH   A&S : IQ, HUM   BU : ETH   FA : SSP

L30 Phil 3321 Feminist Philosophy
This course focuses on vital normative issues of government, community, culture and interpersonal relationships that bear on women's lives in distinctive ways. We consider diverse topics from varied feminist perspectives. Probable topics include: race/ethnicity and gender; care and justice; varieties of oppression; lesbianism; sexuality; radical democracy; violence against women; and whether philosophical modes of investigation are biased against women.

L30 Phil 339F Philosophy of the Arts
An examination both of general issues that apply to all types of art and of issues specific to particular art forms. For example, what is art? What are the central artistic values: beauty, truth, emotional expressiveness, representational power or something else? Does art have a moral or political function? How can we account for the history of art and for different artistic styles? In regard to selected forms, there are important questions concerning how pictures represent, whether music and dance are forms of “language,” and the nature of literary interpretation. Some consideration is given to the relation of psychology and theories of the mind to art. Prerequisite: one course in philosophy at the 100 or 200 level, or permission of the instructor.
Credit 3 units.   A&S : TH   A&S : IQ, HUM   FA : AH, SSP

L30 Phil 340F Social and Political Philosophy
Study of certain fundamental issues concerning government, society and culture. For example: what are the nature and limits of legitimate political authority? Are ordinary human beings capable of governing themselves justly? Do citizens have a duty to obey the state? If so, to what extent, if at all, is that duty grounded in consent or contract? Should the state limit or regulate the personal relationships of citizens, such as marriage, family and sexuality? How should social institutions rectify a history of political or social injustice against oppressed groups? Readings from historical and contemporary sources. Prerequisite: one course in philosophy at the 100 or 200 level, or permission of the instructor.
Credit 3 units.   A&S : TH   A&S : IQ, HUM   BU : ETH, HUM   FA : SSP

L30 Phil 345F Issues in Applied Ethics
Advanced study of a selected topic in applied ethics. Abstract ethical theories and methods are brought to bear on the moral problems that arise in an area of social and professional practice such as medicine, business, law, journalism, engineering or scientific and humanistic research. Possible topics include: reproductive health care and policy, the just distribution of medical resources, the social responsibilities of corporations, accountability in the media and public office, and the ethics of research on or affecting human subjects. Prerequisites: one course at the 100 or 200 level in applied ethics; or permission of the instructor.
Credit 3 units.   A&S : TH   A&S : IQ, HUM   BU : ETH   FA : SSP

L30 Phil 346 Philosophy of Law
This course first focuses on the philosophical foundations of law, examining both the relationship between law and rules, as well as the types of legal reasoning. Second, the course focuses on philosophical issues that arise in the key substantive areas of
L30 Phil 347C Ancient Philosophy
An examination of the high-water marks of philosophy in ancient Greece and Rome, focusing primarily on Plato and Aristotle. A wide range of philosophical problems is discussed, including the nature of the good life, the justification of knowledge, and the ultimate nature of mind and world. Attention is paid to how these problems unfolded in their historical context and to how the ancient treatments of them compare to contemporary efforts. Prerequisite: one course in philosophy at the 100 or 200 level or permission of the instructor.
Credit 3 units. A&S : TH, A&S : IQ, HUM, BU : ETH, FA : SSP

L30 Phil 3481 Introduction to Metaphysics
This course is an introduction to central debates of contemporary analytic metaphysics. Metaphysics is concerned with the nature of the most general kinds of things and the relationship between these things. We discuss the nature of and relationship between properties, material objects, persons, time, space and modality. Prerequisite: one 100- or 200-level course in Philosophy.
Credit 3 units. A&S : TH, A&S : IQ, HUM

L30 Phil 349C Descartes to Hume
An examination of major philosophical systems and problems in Modern Philosophy as presented in the original writings of the 17th and 18th centuries. Topics may include rationalism and empiricism, idealism, materialism and skepticism, with readings selected from the continental rationalists Descartes, Spinoza and Leibniz, and from the British empiricists Locke, Berkeley and Hume. Central problems include the mind-body problem, representationalism and transcendentalism. Prerequisite: one course in philosophy at the 100 or 200 level or permission of the instructor.

L30 Phil 357C Kant and 19th-Century Philosophy
Examination of Kant and 19th-century philosophy. We discuss Kant’s “Copernican Turn” in metaphysics and epistemology, as well as his moral philosophy, and we study works of selected 19th-century philosophers such as Hegel, Marx, Mill and Nietzsche. Prerequisite: one course in philosophy at the 100 or 200 level or permission of the instructor.
Credit 3 units. A&S : TH, A&S : IQ, HUM, BU : ETH, FA : SSP

L30 Phil 358 Conceptual Foundations of Modern Science
The aim of this course is to present some of the basic concepts underlying modern science. Insofar as many of those concepts first appeared or became predominant in the 17th and early 18th centuries, the course concentrates on primary works from that period. Among the concepts studied are: (1) nature and natures: the ontology of matter and force; causal closure; (2) methods: observing and intervening, systematic and organized; (3) explanations: appeal to laws and mechanisms; teleology. Prerequisite: One 100- or 200-level course in Philosophy.
Credit 3 units. A&S : TH, A&S : IQ, HUM

L30 Phil 366 Art and the Mind-Brain
In recent years, there has been a growing interest in the bearing of cognitive science on the perception and understanding of art. This interest has roots in tradition: historically, art, aesthetics and vision science have often been linked. But the growth of knowledge in cognitive science has opened up new opportunities for understanding art and addressing philosophical questions. The converse is also true. The production, perception and understanding of art are human capacities that can shed light on the workings of the mind and brain. This course considers questions such as: What is art? How do pictures represent? Does art express emotion? Why does art have a history?.
Credit 3 units. A&S : TH, A&S : IQ, HUM, FA : AH, SSP

L30 Phil 375 Existentialism
The philosophical systems of selected philosophers such as Kierkegaard, Nietzsche and Sartre are examined to determine their historical origins, their ontological and epistemological ramifications, and their relationships to contemporary philosophy. Prerequisite: one course in philosophy at the 100 or 200 level or permission of the instructor.

L30 Phil 390 Philosophical Writing
This seminar has a different topic of central philosophical importance each semester. Significant attention also is devoted to conceiving, researching, writing, revising, critiquing and presenting philosophical essays. Limited to 15 students. Priority is given to philosophy majors and minors who have not yet completed their writing-intensive requirement.
Credit 3 units. A&S : TH, WI, A&S : IQ, HUM, WI, BU : HUM

L30 Phil 397 Undergraduate Independent Study
Credit -6 unit.

L30 Phil 3991 Philosophy Capstone Course
This course focuses either on classic writings from the past century or on contemporary writings that address a major philosophical concern, such as “the meaning of life” or “the concept of self.” In either case, the course draws together a
variety of philosophical specializations. Must be taken by all philosophy majors who are not writing an honors project. Work for the course typically consists of one written project, one oral presentation, and one commentary on another student’s oral presentation. Prerequisites: senior standing and major in philosophy; preference given to those majors not pursuing Honors. Credit 3 units. A&S : TH A&S : IQ, HUM

L30 Phil 403 Mathematical Logic I
A first course in mathematical logic, an introduction to both proof theory and model theory. The structure and properties of first-order logic are studied in detail, with attention to such notions as axiomatic theory, proof, model, completeness, compactness and decidability. Prerequisite: Phil 301G or equivalent or a background in mathematics. Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : SSP

L30 Phil 404 Mathematical Logic II
Godel’s Incompleteness Theorem: its proof, its consequences, its reverberations. Prerequisite: Phil 403 or a strong background in mathematics. Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : SSP

L30 Phil 4051 Philosophy of Logic
This course surveys some important issues in the philosophy of logic. We begin with basic foundational issues in classical logic, including the relation of logic to psychological reasoning and Tarski’s definition of logical consequence, and gradually go on to consider the motivations and status of well-known extensions (sometimes regarded as “neo-classical” logics) such as modal logics and second-order logic. In the last weeks of the course, we examine some outstanding challenges, including intuitionistic and paraconsistent logics. After evaluating the arguments for and against these challenges, we examine one recent, controversial view-logical pluralism — which suggests that we might not need to choose among the rival systems. Many of the readings for this course are classics of contemporary philosophy, and the subject is likely to be of especial interest to students who have interests in logic, and in the philosophy and foundations of mathematics and language. Some of the important ideas in the course presuppose at least a basic acquaintance with formal logic, and hence either Phil 100 or Phil 301 (or permission of the instructor) are prerequisites. Credit 3 units. A&S : TH A&S : IQ, HUM

L30 Phil 4065 Advanced Philosophy of Language
An advanced-level treatment of basic topics in the philosophy of language as this discipline is understood in the analytic tradition. The main positions and the problems they pose are surveyed; focal themes include meaning, reference and truth. The aim of the course is to help students develop effective expository techniques and to provide them with the necessary conceptual resources to analyze and criticize different theoretical views. Prerequisite: one course in philosophy at the 300 level, graduate standing or permission of the instructor. Credit 3 units. A&S : LA A&S : IQ, HUM FA : SSP

L30 Phil 4070 Global Justice
Same as Pol Sci 4070
Credit 3 units. A&S : SS A&S : IQ, SSC

L30 Phil 4141 Advanced Epistemology
Competing theories of knowledge and belief justification are considered. Careful attention is given to selected problems such as skepticism, certainty, foundations, coherence, perception, induction. Prerequisite: one course in philosophy at the 300 level, graduate standing or permission of the instructor. Credit 3 units. A&S : TH A&S : IQ, HUM FA : SSP

L30 Phil 4142 Advanced Metaphysics
Through readings from both classical and contemporary sources, a single traditional metaphysical concern is made the subject of careful and detailed analytic attention. Possible topics include such concepts as substance, category, cause, identity, reality and possibility, and such positions as metaphysical realism, idealism, materialism, relativism and irrealism. Prerequisite: one course in philosophy at the 300 level, graduate standing or permission of the instructor. Credit 3 units. A&S : TH A&S : IQ, HUM FA : SSP

L30 Phil 418 Current Controversies in Cognitive Science
An advanced survey of current debates in cognitive science with an emphasis on the philosophical issues raised by these debates. Topics may include: evolutionary psychology; innateness and neural plasticity; perception and action; consciousness; connectionism; robotics; embodied cognition; moral reason; emergence and artificial life; concepts and content; animal cognition. Prerequisite: one course in Philosophy at the 300 level, graduate standing or permission of the instructor. Same as PNP 418
Credit 3 units. A&S : TH A&S : IQ, HUM

L30 Phil 419 Philosophy of Psychology
An investigation of the philosophical presuppositions and implications of various traditions in psychology, including behaviorism, Gestalt and cognitivism, with a special emphasis on the development of the information processing approach of contemporary cognitivism. The conception of psychological phenomena, data and explanation central to each of these traditions are examined, and typical topics include the debates between propositional and imagistic models of representation,
different accounts of concepts and categorization, and the relation of psychology to ethics. Prerequisite: one previous course in philosophy at the 300 level, graduate standing or permission of the instructor. Credit 3 units. A&S : TH A&S : IQ, HUM FA : SSP

L30 Phil 4202 Contemporary Feminisms
Same as WGSS 420
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD FA : SSP

L30 Phil 4210 Advanced Philosophy of Science I: Observation and Experiment
This course varies in topics related to philosophy of science from semester to semester. Prerequisite: one course in philosophy at the 300 level, graduate standing or permission of the instructor. Credit 3 units. A&S : TH A&S : IQ, HUM FA : SSP

L30 Phil 4212 Philosophy of Neuroscience
This course focuses on the historical roots of neuroscience as well as its contemporary developments. Topics include: (1) the nature of explanatory strategies in neuroscience; (2) the relation between neuroscience research and higher-level disciplines such as psychology; and (3) the epistemology of the investigatory tools of neuroscience. Prerequisite: one previous course in Philosophy at the 300 level, graduate standing or permission of the instructor. Credit 3 units. A&S : TH A&S : IQ, HUM FA : SSP

L30 Phil 4220 Advanced Philosophy of Science II: Causation, Probability and Induction
This advanced course focuses on causal and statistical inference. How can we discover causal relations? How can we distinguish causal relations from mere correlations? Can we discover causal relations without performing experiments? Exploring these questions requires an investigation of the relationship between causality and probability, a critical assessment of the assumptions involved in causal inference and an examination of possible interpretations of the fundamental concepts. The course discusses how modern approaches to causal inference address the traditional problems related to induction and confirmation. This course varies in topics related to philosophy of science from semester to semester. Prerequisite: completion of Phil 321 Philosophy of Science, graduate standing or permission of the instructor. Credit 3 units. A&S : TH A&S : IQ, HUM FA : SSP

L30 Phil 423 Philosophy of Biological Science
This course examines a number of theoretical, conceptual and methodological issues that arise in the attempts of biologists to explain living systems. One sort of problem concerns the relation between biology (and biological descriptions and explanations) and physics and chemistry. Biological phenomena have often seemed very different from ordinary physical phenomena in being teleological or goal oriented. Vitalists, accordingly, resisted the attempt to invoke physics and chemistry in the attempt to explain biological phenomena. But recently biology has come more and more to draw upon physics and chemistry; we examine the conceptual frameworks that underlie these efforts. Another sort of problem concerns the adaptiveness of living organisms. Charles Darwin offered one naturalistic explanation of this feature, an explanation that was further developed in this century as the synthetic theory of evolution. A number of controversial issues have arisen within this context of adaptation, and the range of levels at which selection can occur. The ubiquity of evolution, moreover, has been challenged in recent years, as a number of non-selectionist explanations have recently been put forward. We consider the arguments for the synthetic theory and these alternatives. Credit 3 units. A&S : TH A&S : IQ, HUM FA : SSP

L30 Phil 4246 Theories of Concepts
Concepts are the building blocks of thought. They are implicated in just about every cognitive task. Beyond that, there is little consensus. What information do concepts encode? How are they acquired? How are they combined to form thoughts? How are they related to perception and imagery? Each of these questions has been answered in numerous ways. In this course, we explore competing theories of concepts that have been proposed by philosophers, psychologists and other cognitive scientists. No prior acquaintance with these issues is required. Prerequisite: one previous course in philosophy at the 300 level, graduate standing or permission of the instructor. Credit 3 units. A&S : TH A&S : IQ, HUM FA : SSP

L30 Phil 430 Topics in Ethics
Selected advanced topics in ethics. Prerequisite: 6 units of philosophy, or permission of instructor. Credit 3 units. A&S : TH A&S : IQ, HUM

L30 Phil 4310 20th-Century Metaethics
An examination of metaphysical and epistemological issues in ethics. Topics include: the nature of the good and the right, the meaning of ethical terms, the logic of moral argument, and the status of moral knowledge. We consider philosophical works written since 1900 by such authors as Moore, Ross, Stevenson, Ayer, Foot, Hare, Brink, Harmon, Blackburn and McDowell. Prerequisite: one previous course in philosophy at the 300 level, graduate standing or permission of the instructor. Credit 3 units. A&S : TH A&S : IQ, HUM FA : SSP

L30 Phil 4315 Normative Ethical Theory
An exploration of the three major normative ethical theories debated by philosophers in the past hundred years: Kantian ethics, utilitarianism and virtue theory. Authors covered in the course may include: Henry Sidgwick, R.M. Hare, R.B. Brandt,
L30 Phil 4320 British Moralists
An investigation of the work of the great British moral philosophers of the 17th to 19th centuries, especially Hobbes, Hume and Mill. Other figures may include Reid, Butler, Hutcheson, Bentham and Sidgwick. In considering these philosophers, we explore the relations between normative ethics, moral psychology and political philosophy, and may include a discussion of legal, social and economic philosophies as well. Prerequisite: one course in philosophy at the 300 level, graduate standing or permission of the instructor.
Credit 3 units. A&S: TH A&S: IQ, HUM FA: SSP

L30 Phil 4332 Cognition and Computation
Same as PNP 4332
Credit 3 units. A&S: SS A&S: IQ, SSC

L30 Phil 438 Aesthetics
A careful consideration of selected issues regarding the experience of visual art, architecture, music or literature, as well as of the power or beauty of nature, people and artifacts. For example, is there a special form of aesthetic experience or aesthetic attitude? In what do aesthetic power and beauty consist? Are they different in art and nature? Do the artists' intentions matter? Some central concerns are: how do visual art and literary texts have "meaning," what role do the viewer's or reader's interpretations play, and how might recent work in cognitive science and social theory shed light on these issues? Prerequisites: one course in Philosophy at the 300-level, graduate standing or permission of the instructor.
Credit 3 units. A&S: TH A&S: IQ, HUM FA: AH, SSP

L30 Phil 4400 Advanced Social and Political Philosophy
A selective investigation of one or two advanced topics in the philosophical understanding of society, government and culture. Readings may include both historical and contemporary materials. Possible topics include: liberalism, socialism, communitarianism, citizenship, nationalism, cosmopolitanism, social contract theory, anarchism and the rights of cultural minorities. Prerequisite: one course in philosophy at the 300 level, graduate standing or permission of the instructor.
Credit 3 units. A&S: TH A&S: IQ, HUM FA: AH, SSP

L30 Phil 451 Plato
An examination of some of Plato's most important dialogues, typically including the Gorgias, Phaedo and Republic, with the aim of grasping the development of Plato's most influential thoughts in ethics and in metaphysics and epistemology. In order to provide both historical understanding and philosophical evaluation, attention is paid to the context and structure of the dialogues and to the best of recent secondary literature. Prerequisite: one course in philosophy at the 300 level, graduate standing or permission of the instructor.
Credit 3 units. A&S: TH A&S: IQ, HUM FA: SSP

L30 Phil 452 Aristotle
The works of Aristotle. His logic, natural philosophy, psychology, metaphysics, ethics and political philosophy are discussed, and stress is laid on the interpretive problems facing contemporary philosophers seeking to understand Aristotle's achievement. Prerequisite: one course in philosophy at the 300 level, graduate standing or permission of the instructor.
Credit 3 units. A&S: TH A&S: IQ, HUM FA: SSP

L30 Phil 4530 Hellenistic Philosophy
The Hellenistic Age, traditionally dated from the death of Alexander and his (Macedonian) Empire at 323 BCE to the birth of Augustus' (Roman) Empire in 31 BCE, gave the West three of its most innovative and influential schools of philosophy: Epicureanism, Skepticism and Stoicism. This course investigates the central features of their thought. Special attention is paid to the still-relevant debates between the Stoics and Skeptics about the possibility of knowledge, to the disagreements among all three schools about the issues of freedom, responsibility and determinism, and to their ethical theories. Prerequisite: one course in philosophy at the 300 level, graduate standing or permission of the instructor.
Credit 3 units. A&S: TH A&S: IQ, HUM FA: SSP

L30 Phil 4550 Continental Rationalism
A rationalist is a philosopher for whom at least one certain truth is inborn or comes from reason rather than from empirical or sensory experience. The major systemic writings of Descartes, Spinoza and Leibniz are examined with a focus on the question: does the epistemology determine the ontology of these philosophical systems or vice versa? The lines of development connecting these philosophers are traced, and such enduring problems as the relation of mind to body are examined. Prerequisite: one course in philosophy at the 300 level, graduate standing or permission of the instructor.
Credit 3 units. A&S: TH A&S: IQ, HUM FA: SSP

L30 Phil 4570 Kant's "Critique of Pure Reason"
An in-depth investigation of Kant's Critique of Pure Reason, one of the most important books in the history of Western philosophy. Some supplementary readings from other philosophers are used to situate Kant's work in a systematic and historical context, to present some Kantian positions in current philosophy, and to bring in some important contrasting views and criticisms.
Prerequisite: one course in philosophy at the 300 level, graduate standing or permission of the instructor.
Credit 3 units. A&S : TH A&S : IQ, HUM FA : SSP

L30 Phil 4575 Kant and Kantian Practical Philosophy
An in-depth examination of Kant’s practical philosophy: his moral and political theory. Readings include the Critique of Practical Reason, parts of the Metaphysics of Morals, Perpetual Peace and other writings. Supplementary readings are used to situate Kant’s work in its systematic and historical context, to provide orientation in the world of Kant scholarship, and to introduce important contrasting views and criticisms. We also discuss recent reformulations of Kantian themes in the works of contemporary philosophers. Prerequisite: one course in philosophy at the 300 level, graduate standing or permission of the instructor.
Credit 3 units. A&S : TH A&S : IQ, HUM FA : SSP

L30 Phil 464 Advanced Continental Philosophy
A study of selected texts by such major figures of 20th-century continental philosophy as Husserl, Heidegger, Merleau-Ponty, Sartre, de Beauvoir, Levinas, Habermas, Foucault, Derrida and Irigaray. Such topics as phenomenology, hermeneutics, existentialism, critical theory, structuralism and post-structuralism are investigated. Prerequisite: one course in philosophy at the 300 level, graduate standing or permission of the instructor.
Credit 3 units. A&S : TH A&S : IQ, HUM FA : SSP

L30 Phil 465 Topics in the History of Philosophy
Study of individual philosophers or themes from the ancient, medieval, and/or modern periods. Examples: Spinoza, St. Thomas Aquinas, neo-Platonism, universals in ancient and medieval thought, ancient and modern theories of space and time. Prerequisite: 6 units in philosophy or permission of instructor.
Credit 3 units. A&S : TH A&S : IQ, HUM

L30 Phil 4751 Intellectual History of Feminism
Same as WGSS 475
Credit 3 units. A&S : TH A&S : IQ, HUM FA : Lit

L30 Phil 497 Undergraduate Independent Study
Prerequisite: permission of the department. Credit variable, maximum 6 units.
Credit -6 unit.

L30 Phil 499 Study for Honors
Prerequisites: senior standing, a 3.5 minimum grade point average overall, a 3.5 minimum grade point average in philosophy courses, and the permission of the department. Applications and further information are available in the Department of Philosophy. See further: artsci.wustl.edu/~philos/undergrad/honors.html.
Credit 3 units. A&S : TH FA : SSP

Philosophy–Neuroscience–Psychology
Philosophy–Neuroscience–Psychology (PNP) is an interdisciplinary program that provides an opportunity to examine the mind from multiple perspectives. If you choose to major in PNP, you will learn to bring some of the newest findings in science to bear on some of the oldest questions in philosophy; equally important, you will see new questions emerge and learn to pursue those as well. Examples include: Is the mind–brain a single entity, or does having a mind involve something over and above the activity of a brain? What assumptions are made by cognitive psychologists when they divide mental activity into separate processes and use response times or other measures of task performance to describe those processes? What assumptions are made by neuroscientists when they use imaging techniques to determine where in the brain a cognitive process is carried out? What are we to make of Chomsky’s claim that language is an innate mental organ designed to generate an infinite number of sentences? As a PNP major, you will seek answers to questions such as these in courses offered by PNP and PNP’s affiliated departments.

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**Simine Vazire**  
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(Psychology)

**Desirée A. White**  
Associate Professor
The Major in Philosophy–Neuroscience–Psychology

I. Core Requirements for Philosophy–Neuroscience–Psychology

(Required for all students, Cognitive Neuroscience [CN] and Language, Cognition and Culture [LCC])

Entry Sequence

Choose one of the following:

- PNP 200 Introduction to Cognitive Science (SS)
- PNP 201 Inquiry in the Cognitive Sciences (NS) or Psych 301 Experimental Psychology (NS)

OR

Mind, Brain, Behavior Sequence (MBB) (NS/SS)

"MBB 120 Introduction to Mind-Brain (NS)
" MBB 122 Introduction to the Study of the Mind Brain II (SS) or
PNP 200 Introduction to Cognitive Science (SS)

Core Philosophy Requirements:

Prerequisite:

- Phil 100G Logic and Critical Analysis
- Phil 120F Problems in Philosophy (TH) or
- Phil 125C Great Philosophers (TH).

Upper division: Two courses at the 300 or 400 level.

*You must take either PNP/Phil 315 Philosophy of Mind; or PNP/Phil/Ling 306G Philosophy of Language; and another from the list below.

- PNP/Phil 301G Symbolic Logic (LA)
- PNP/Phil 306G Philosophy of Language (LA)
- PNP/Phil 307 Metaphysics and Epistemology (TH)
- PNP/Phil 315 Philosophy of Mind (TH)
- PNP/Phil 316 Mind and Morals (TH)
- PNP/Phil 321G Philosophy of Science (TH)
- Phil 339F Philosophy of the Arts (TH)
- Phil 3481 Introduction to Metaphysics (TH)
- PNP/Phil 349C Descartes to Hume (TH)
- PNP/Phil 3581/Phil 358 Conceptual Foundations of Modern Science (TH)
- PNP/Phil 366 Art and the Mind-Brain (TH)
- Phil 390 Philosophical Writing* (*approved for FL08, FL10) (TH) (WI)
- PNP/AMCS 4023 Models of Social Science (SS)
- Phil 403 Mathematical Logic 1 (TH)
• Phil 404 Mathematical Logic II (TH)
• PNP/Phil 4051 Philosophy of Logic (TH)
• Phil 4061 Topics in the Philosophy of Language (TH)
• PNP/Phil 4065 Advanced Philosophy of Language (LA)
• PNP 4101/Phil 410 Theories of Perception (TH)
• PNP/Phil 4141 Advanced Epistemology (TH)
• PNP/Phil 4142 Advanced Metaphysics (TH)
• PNP/Phil 418 Current Controversies in Cognitive Science (TH)
• PNP/Phil 419 Philosophy of Psychology (TH)
• PNP/Phil 4210 Advanced Philosophy of Science I: Observation and Experiment (TH)
• PNP/Phil 4212 Philosophy of Neuroscience (TH)
• Phil 423 Philosophy of Biological Science (TH)
• PNP/Phil 426 Theories of Concepts (TH)
• PNP 4332 Cognition and Computation (SS)
• PNP 495 PNP Seminar (SS)** (upon approval of subject matter)
• PNP 496 PNP Seminar (SS)** (upon approval of subject matter)

Core Psychology Requirements:

Prerequisite: Psych 100B Introduction to Psychology (SS)

Upper division: Two courses at the 300 or 400 level

Unless you have completed MBB 120 with a grade of B– or higher, you must take PNP/ Psych 360 Cognitive Psychology, or PNP/Ling 408/ Psych 433 Psychology of Language; and another from the list below.

• Psych 300 Introduction to Psychological Statistics (NS)
• Psych 301 Experimental Psychology (NS)
• PNP 3151/ Psych 315 Introduction to Social Psychology (SS)
• PNP 3211/ Psych 321 Developmental Psychology (SS)
• PNP323/ Educ 337 Play and Development (SS)
• Psych 326 Introduction to the Psychology of Aging (SS)
• PNP/ Psych 330 Sensation and Perception (NS)
• PNP/ Psych 3401 Biological Psychology (NS)
• PNP 3451/ Psych 345 Genes, Environment and Human Behavior (SS)
• PNP 3531/ Psych 353 Psychology of Personality (SS)
• PNP 3541/ Psych 354 Abnormal Psychology (SS)
• Psych 357 Introduction to Clinical Psychology (SS)
• PNP/ Psych 358 Language Acquisition (SS)
• PNP/ Psych 360 Cognitive Psychology (NS)
• PNP/ Psych 361 Psychology of Learning (NS)
• PNP 3661/ Educ 366 Psychology of Creativity (SS)
• Psych 374 Drugs, Brain and Behavior (NS)
• PNP/ Psych 380 Human Learning and Memory (NS)
• PNP 408/ Psych 433 Psychology of Language (SS)
• Psych 4046 Developmental Neuropsychology (NS)
• PNP/ Psych 4047 History of Neuroscience (TH)
• Psych 4182 Perception, Thought and Action (NS)
• PNP/ Psych 4301 Contemporary Topics in Cognitive Development (SS)
• PNP/ Psych 4302 Cognitive Psychology Applied to Education (SS)
• Psych 4625 Autobiographical Memory (SS)
• PNP/ Psych 4651 History and Modern Systems of Psychology (TH)
• PNP 495 PNP Seminar (SS)** (upon approval of subject matter)

II. Track-Specific Requirements

Courses required for the CN Track:

Prerequisite: Biol 2960 or Psych 3401* and permission of instructor; Biol 3058 recommended.

Upper division: Two neuroscience courses at the 300 or 400 level. You MUST take:

• PNP/Biol/Psych 3411 Principles of the Nervous System and
• Psych 3604 Cognitive Neuroscience

[* Psych 3401 Biological Psychology CAN count toward the Depth Requirement in Neuroscience, if taken as a prerequisite]

Courses required for the LCC track:

Prerequisite: Ling/Anthro 170 Introduction to Linguistics (LA) and either:
Anthro/Ling 2151 Language, Culture and Society (SS) OR
Anthro 150A Introduction to Human Evolution (SS)

Upper division: Two courses at the 300 or 400 level, chosen from those below:

• PNP/ Phil 301G Symbolic Logic (LA)
• PNP/ Phil 306G Philosophy of Language (LA)
• PNP/ Ling 309 Syntactic Analysis (LA)
• PNP 3111/ Ling 311 Introduction to Semantics (LA)
• Ling 312 Phonetics (LA)
• PNP/ Ling 313 Phonological Analysis (LA)
• PNP 3171/ Ling 317 Introduction to Computational Linguistics (LA)
• PNP/ Ling 320 Historical and Comparative Linguistics (LA)
• PNP/ Anthro 3383 Cognition and Culture (SS)
• Ling 339 Introduction to Sociolinguistics (SS) (SD)
• PNP/ Psych 358 Language Acquisition (SS)
• PNP/ Anthro 362 The Biological Basis of Human Behavior (NS)
• PNP 3662/ Anthro 3661 Primate Biology (NS)
• PNP/Anthro 3681/AFAS 368 Language and Society in Africa (SS)
• PNP/Ling 3701/ Span 370 Introduction to Hispanic Linguistics (LA) (previously Ling 416)
• PNP/Anthro 3881 Disability and Culture (SS)
• PNP/ Ling 396 Linguistics Seminar (TH)
• Ling 4012/Sphr 401 Anatomy and Physiology of Speech and Hearing
• PNP/ Anthro 406 Primate Ecology and Social Structure (NS)
• PNP/ Phil 4065 Advanced Philosophy of Language (LA)
• PNP 408/ Psych 433 Psychology of Language (SS)
• PNP/Anthro/Ling 4122 Language and Gender (SS)
• Span 416 Introduction to Hispanic Linguistics/Ling 4161 (LA)
• PNP 4192/ Anthro 4191 Primate Cognition (NS)
• PNP/ Educ 4315 Culture, Language and the Education of Black Students (SS)
• Ling/Sphr 433 Acoustical Phonetics & Speech Perception
• Ling 4341/Sphr 434 Normal Language Development
• Psych 4415 Cognitive Neuroscience of Language (SS)
• PNP/Ling/ Span 466 Second-Language Acquisition (LA)
• PNP/ Span 467 Grammar and Vocabulary Acquisition (LA)
• PNP/Ling/Span 469 Reading and Writing in a Second Language (TH)

III. Depth requirement

Students on the CN track must complete at least 9 units, including at least 3 of those units credited from 400 or above, in one area of either philosophy, psychology or neuroscience.

Students on the LCC track must complete at least 9 units, including at least 3 units credited from 400 or above, in one area of either philosophy, psychology, anthropology or linguistics.

Note that courses from another major may count toward satisfying the depth requirement, provided that you have at least 18 standalone units in PNP at level 300 or above.

Three units of MBB 300 may be counted toward the depth requirement in an area appropriate to the research undertaken (e.g. a psychology research project would count toward the psychology depth requirement); providing a total of 6 units were completed.

All 9 depth requirement units must be taken in a single area.
• PNP 3211/ Psych 321 Developmental Psychology (SS)
• PNP 323/ Educ 337 Play and Development (SS)
• Psych 326 Introduction to the Psychology of Aging (SS)
• PNP/ Psych 330 Sensation and Perception (NS)
• PNP/ Psych 3401 Biological Psychology (NS)
• PNP 3451/ Psych 345 Genes, Environment and Human Behavior (SS)
• PNP 3531/ Psych 353 Psychology of Personality (SS)
• PNP 3541/ Psych 354 Abnormal Psychology (SS)
• Psych 357 Introduction to Clinical Psychology (SS)
• PNP/ Psych 358 Language Acquisition (SS)
• PNP/ Psych 360 Cognitive Psychology (NS)
• PNP/ Psych 361 Psychology of Learning (NS)
• PNP 3661/ Educ 366 Psychology of Creativity (SS)
• Psych 374 Drugs, Brain and Behavior (NS)
• PNP/ Psych 380 Human Learning and Memory (NS)
• Psych 4046 Developmental Neuropsychology (NS)
• PNP/ Psych 4047 History of Neuroscience (TH)
• PNP 408/ Psych 433 Psychology of Language (SS)
• Psych 4182 Perception, Thought and Action (NS)
• PNP/ Psych 4301 Contemporary Topics in Cognitive Development (SS)
• PNP/ Psych 4302 Cognitive Psychology Applied to Education (SS)
• Psych 4408 Trauma and Memory (SS)
• PNP/ Psych 4450 Functional Neuroimaging Methods (SS)
• Psych 4591 The Development of Social Cognition (SS)
• Psych 462 Psychology of Memory and Cognition (SS)
• PNP/ Psych 4625 Autobiographical Memory (SS)
• PNP/ Psych 4651 History and Modern Systems of Psychology (TH)
• PNP 495 PNP Seminar (SS) *(upon approval of subject matter, see PNP office for each semester)
• PNP 496 PNP Seminar (SS) *(upon approval of subject matter)

**Neuroscience**

• Biol 3058 Physiological Control Systems *(only 2 units)
• Biol 3421 Introduction to Neuroethology (NS)
• Biol 3422 Genes, Brains and Behavior (NS)
• PNP/ Physics 350 Physics of the Brain (NS)
• PNP/ Physics 355 Physics of Vision (NS)
• Biol 360/ Physics 360 Biophysics Laboratory (NS)
• PNP/ Psych 4001 Introduction to Neuropsychology (NS)
• PNP 402 The Physiology and Biophysics of Consciousness (NS) *(only 2 units)
• PNP/ Biol 4030 Biological Clocks (NS)
• Biol 4031 Biological Clocks (NS) (WI)
• PNP/ Biol 404 Laboratory of Neurophysiology (NS)
• Psych 4046 Developmental Neuropsychology (NS)
• PNP/ Psych 4047 History of Neuroscience (TH)
• PNP/ Phil 4212 Philosophy of Neuroscience (TH)
• Psych 4415 Cognitive Neuroscience of Language (SS)
• PNP 4450/ Psych 4450 Functional Neuroimaging Methods (SS)
• PNP 4488/ Psych 488 The Cognitive Neuroscience of Film (NS)
• BME 4902 Special Topics: Cellular Neurophysiology (Biomedical Engineering course, SP10) **(upon approval of subject matter)
• PNP 495 PNP Seminar (SS) *(upon approval of subject matter, see PNP office for each semester)
• PNP 496 PNP Seminar (SS) **(upon approval of subject matter)

**Anthropology**

• PNP/ Anthro 3383 Cognition and Culture (SS)
• PNP/ Anthro 362 The Biological Basis of Human Behavior (NS)
• PNP 3662/ Anthro 3661 Primate Biology (NS)
• PNP/ Anthro 406 Primate Ecology and Social Structure (NS)
• PNP/ Anthro/Ling 4122 Language and Gender (SS)
• PNP 4190/ Anthro 419 Primate Behavior (NS)
• PNP 4192/ Anthro 4191 Primate Cognition (NS)
• PNP 495 PNP Seminar (SS) **(upon approval of subject matter, see PNP office for each semester)
• PNP 496 PNP Seminar (SS) **(upon approval of subject matter)

**Linguistics**

• PNP/ Phil 301G Symbolic Logic (LA)
• PNP/ Phil 306G Philosophy of Language (LA)
• PNP/ Ling 309 Syntactic Analysis (LA)
• PNP 3111/ Ling 311 Introduction to Semantics (LA)
• Ling 312 Phonetics (LA)
• PNP/ Ling 313 Phonological Analysis (LA)
• PNP 3171/ Ling 317 Introduction to Computational Linguistics (LA)
• PNP/ Ling 320 Historical and Comparative Linguistics (LA)
• Ling 339 Introduction to Sociolinguistics (SS) (SD)
The Minor in Philosophy–Neuroscience–Psychology

Units required: 18

Required courses: You are required to complete at least 15 units, of which 9 must be at the 300 level or above.

The minor is composed of a 6-unit introductory sequence (PNP 200 and 201, or MBB 120 and 121), followed by:

• 3 units in Philosophy:
  - PNP/Phil 315 Philosophy of Mind
  or
  - PNP/Phil 306G Philosophy of Language

• 3 units of Neuroscience:
  - PNP/Biol 3411 Principles of the Nervous System
  or
  - PNP/Psych 3604 Cognitive Neuroscience

• 3 units in Psychology:
  - PNP/Psych 360 Cognitive Psychology
  or
  - PNP 408/Psych 433 Psychology of Language

Additional Information

Psych 100B is the prerequisite for all psychology courses at the 300 level and above. Note that no more than 6 units counted toward a minor in PNP may be transferred or earned abroad, and no more than 6 credits may be counted toward another major or minor.

Philosophy–Neuroscience–Psychology

L64 PNP 200 Introduction Cognitive Science

We seek to understand the mind-brain by integrating findings from several of the cognitive sciences, including philosophy, psychology, neuroscience, linguistics, anthropology and artificial intelligence. This course considers multiple perspectives on such topics as mental imagery, concepts, rationality, consciousness, emotion, language, thought, memory, attention and machine intelligence. Prerequisite: completion of at least one of the following courses: Psych 100B, Phil 120F, Phil 125C, Biol 296A, MBB 120A or Ling 170D.

Credit 3 units.  A&S : SS  A&S : IQ, SSC  BU : HUM

L64 PNP 201 Inquiry in the Cognitive Sciences

Understanding the mind-brain involves orchestrating a variety of conceptual tools and modes of inquiry from the cognitive sciences. This course offers a hands-on introduction to a variety of research tactics used in the behavioral and biological sciences and emphasizes the advantages of combining them.
For example, neuroimaging can enhance the interpretation of experiments by cognitive psychologists and modeling can be used to simulate and understand the effects of brain lesions. Prerequisite: completion of at least one of the following courses: Psych 100B, Phil 120F, Phil 125C, Biol 296A, MBB 120 or Ling 170D.
Credit 3 units. A&S : NS, QA A&S : IQ, NSM, AN

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<td>L64 PNP 301</td>
<td>Symbolic Logic</td>
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<td>L64 PNP 306</td>
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<tr>
<td>L64 PNP 320</td>
<td>Historical and Comparative Linguistics</td>
<td>Same as Ling 320</td>
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<tr>
<td>L64 PNP 321</td>
<td>Philosophy of Science</td>
<td>Same as Phil 321G</td>
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<tr>
<td>L64 PNP 323</td>
<td>Play and Development</td>
<td>Same as Educ 337</td>
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<tr>
<td>L64 PNP 330</td>
<td>Sensation and Perception</td>
<td>Same as Psych 330</td>
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<tr>
<td>L64 PNP 3383</td>
<td>Cognition and Culture</td>
<td>Same as Anthro 3383</td>
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<tr>
<td>L64 PNP 3401</td>
<td>Biological Psychology</td>
<td>Same as Psych 3401</td>
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<tr>
<td>L64 PNP 3411</td>
<td>Principles of the Nervous System</td>
<td>Same as Biol 3411</td>
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<tr>
<td>L64 PNP 3451</td>
<td>Genes, Environment and Human Behavior</td>
<td>Same as Psych 345</td>
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<tr>
<td>L64 PNP 349</td>
<td>Descartes to Hume</td>
<td>Same as Phil 349C</td>
</tr>
</tbody>
</table>
L64 PNP 350 Physics of the Brain
Same as Physics 350
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM  FA : SSP

L64 PNP 3531 Psychology of Personality
Same as Psych 353
Credit 3 units.  A&S : SS  A&S : IQ, SSC  BU : BA  FA : SSP

L64 PNP 3541 Abnormal Psychology
Same as Psych 354
Credit 3 units.  A&S : SS  A&S : IQ, SSC  BU : BA  FA : SSP

L64 PNP 355 Physics of Vision
Same as Physics 355
Credit 3 units.  A&S : NS  A&S : IQ, NSM  BU : SCI  EN : TU  FA : NSM

L64 PNP 358 Language Acquisition
Same as Psych 358
Credit 3 units.  A&S : SS  A&S : IQ, SSC  BU : BA  FA : SSP

L64 PNP 3581 Conceptual Foundations of Modern Science
Same as Phil 358
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L64 PNP 360 Cognitive Psychology
Same as Psych 360
Credit 3 units.  A&S : NS  A&S : IQ, NSM  BU : BA  FA : NSM

L64 PNP 361 Psychology of Learning
Same as Psych 361
Credit 3 units.  A&S : NS  A&S : IQ, NSM  BU : BA  FA : NSM

L64 PNP 362 The Biological Basis of Human Behavior
Same as Anthro 362
Credit 3 units.  A&S : NS, CD, SD  A&S : IQ, NSM, LCD, SD  BU : BA  EN : H  FA : NSM

L64 PNP 3661 Psychology of Creativity
Same as Educ 366
Credit 3 units.  A&S : SS  A&S : IQ, SSC  BU : BA  FA : SSP

L64 PNP 3662 Primate Biology
Same as Anthro 3661
Credit 3 units.  A&S : NS  A&S : IQ, NSM  BU : SCI  FA : NSM

L64 PNP 3701 Introduction to Hispanic Linguistics
Same as Span 370
Credit 3 units.  A&S : LA  A&S : IQ, LCD

L64 PNP 380 Human Learning and Memory
Same as Psych 380
Credit 3 units.  A&S : NS  A&S : IQ, NSM  BU : BA  FA : NSM, SSP

L64 PNP 390 PNP Reading Class
Each time this course is offered a book is selected that does an exemplary job of bringing together insights and results from multiple disciplines in targeting an important topic. We read and discuss the book and possibly a small amount of supplementary reading. A short presentation and paper are required.
Credit 2 units.  A&S : SS  A&S : IQ, SSC  BU : HUM

L64 PNP 396 Linguistics Seminar
Same as Ling 396
Credit 3 units.  A&S : TH  A&S : IQ, SSC

L64 PNP 396W Linguistics Seminar: Writing-Intensive
Same as Ling 396W
Credit 3 units.  A&S : SS, WI  A&S : IQ, SSC, WI

L64 PNP 4001 Introduction to Neuropsychology
Same as Psych 4001
Credit 3 units.  A&S : NS  FA : NSM

L64 PNP 402 The Physiology and Biophysics of Consciousness
This course explores the questions surrounding the search to understand the biophysical substrate of consciousness. Some areas explored: (1) Can consciousness be addressed like any other biological property in the sense that it has evolved by natural selection and that some elements of it are present in simple model systems, such as the fruit fly? Can insight be gained studying simple model systems? (2) Where in the brain is consciousness? What is the pattern of neurological events that occurs during consciousness? Is brain activity generating consciousness localized or distributed? Does it involve interacting brain regions? Does brain activity generating consciousness migrate to different brain regions? (3) How does the dynamic core hypothesis of Edelman relate to these
questions? What can functional brain imaging add to these questions? Are Gamma waves involved in higher mental activity, and do they promote synchronized firing of neurons from different brain areas? How does this relate to the binding problem? (4) How does the brain’s ability to function as a computer relate to consciousness? In many respects the brain functions as a computer using electrical signals called Action Potentials. Action potentials in neuronal networks function in an analogous way as DC electrical impulses function in computer circuits. What is the output of computation in an electrical device? What are the theoretical limitations regarding what computation can achieve and ask whether electrical activity in the brain also has a fundamentally different purpose in addition to computation. (5) Is our knowledge of the physical world too primitive and incomplete to understand consciousness? The brain is an electronic device and consciousness clearly depends on its electrical activity. Yet, electrical forces are poorly understood, both in the context of classical physics and quantum physics. Will understanding consciousness have to wait for a unified theory that more accurately describes electrical forces? Taught in the Medical School: McDonnell Science Building 983. Prerequisites: Biol 3411 or equivalent; college-level physics, some knowledge of computers.

Credit 2 units. A&S : NS  A&S : IQ, NSM

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**L64 PNP 4023 Models of Social Science**
Same as AMCS 4023
Credit 3 units. A&S : SS  A&S : IQ, SSC

**L64 PNP 404 Laboratory of Neurophysiology**
Same as Biol 404
Credit 4 units. A&S : NS, WI  A&S : IQ, NSM, WI  FA : NSM

**L64 PNP 4041 Math Logic II**
Same as Phil 404
Credit 3 units. A&S : TH  A&S : IQ, HUM  FA : SSP

**L64 PNP 4047 History of Neuroscience**
Same as Psych 4047
Credit 3 units. A&S : SS  A&S : IQ, SSC  FA : SSP

**L64 PNP 406 Primate Ecology and Social Structure**
Same as Anthro 406
Credit 3 units. A&S : NS  A&S : IQ, NSM  FA : NSM

**L64 PNP 4065 Advanced Philosophy of Language**
Same as Phil 4065
Credit 3 units. A&S : LA  A&S : IQ, HUM  FA : SSP

**L64 PNP 408 Psychology of Language**
Same as Psych 433
Credit 3 units. A&S : SS  A&S : IQ, SSC  FA : SSP

**L64 PNP 412 Advanced Epistemology**
Same as Phil 4112
Credit 3 units. A&S : TH  A&S : IQ, HUM  FA : SSP

**L64 PNP 4142 Advanced Metaphysics**
Same as Phil 4142
Credit 3 units. A&S : TH  A&S : IQ, HUM  FA : SSP

**L64 PNP 418 Current Controversies in Cognitive Science**
An advanced survey of current debates in cognitive science with an emphasis on the philosophical issues raised by these debates. Topics may include: evolutionary psychology; innateness and neural plasticity; perception and action; consciousness; connectionism; robotics; embodied cognition; moral reason; emergence and artificial life; concepts and content; animal cognition. Prerequisites: one course in Philosophy at the 300 level, graduate standing or permission of the instructor.
Credit 3 units. A&S : TH  A&S : IQ, HUM

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**L64 PNP 419 Philosophy of Psychology**
Same as Phil 419
Credit 3 units. A&S : TH  A&S : IQ, HUM  FA : SSP

**L64 PNP 4190 Primate Behavior**
Same as Anthro 419
Credit 3 units. A&S : NS  A&S : IQ, NSM  FA : NSM

**L64 PNP 4192 Primate Cognition**
Same as Anthro 4191
Credit 3 units. A&S : NS  A&S : IQ, NSM

**L64 PNP 4210 Advanced Philosophy of Science I**
Same as Phil 4210
Credit 3 units. A&S : TH  A&S : IQ, HUM  FA : SSP

**L64 PNP 4212 Philosophy of Neuroscience**
Same as Phil 4212
Credit 3 units. A&S : TH  A&S : IQ, HUM  FA : SSP

**L64 PNP 426 Theories of Concepts**
Same as Phil 426

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L64 PNP 4301 Contemporary Topics in Cognitive Development
Same as Psych 4301
Credit 3 units. A&S : TH A&S : IQ, HUM FA : SSP

L64 PNP 4302 Cognitive Psychology Applied to Education
Same as Psych 4302
Credit 3 units. A&S : SS A&S : IQ, SSC

L64 PNP 4315 Culture, Language and the Education of Black Students
Same as Educ 4315
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD FA : SSP

L64 PNP 4332 Cognition and Computation
This course introduces students to some of the key frameworks for thinking about the mind in computational terms. We look at some basic topics in the theory of computation, in addition to considering philosophical issues raised by computational models of cognitive processes. This course is required for graduate students in the PNP Ph.D. program. Prerequisites: at least two 400-level PNP courses cross-listed in Philosophy.
Credit 3 units. A&S : SS A&S : IQ, SSC

L64 PNP 4450 Functional Neuroimaging Methods
Same as Psych 4450
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L64 PNP 4488 The Cognitive Neuroscience of Film
Same as Psych 488
Credit 3 units. A&S : NS A&S : IQ, NSM

L64 PNP 466 Second Language Acquisition
Same as Ling 466
Credit 3 units. A&S : LA A&S : IQ, HUM

L64 PNP 467 Grammar and Vocabulary Acquisition
Same as Span 467
Credit 3 units. A&S : LA A&S : IQ, LCD BU : BA

L64 PNP 4765 Biological Basis of the Major Mental Disorders
Same as Psych 4765
Credit 3 units. A&S : NS FA : NSM

L64 PNP 495 PNP Seminar
Subject varies per semester. Not always offered as writing-intensive, refer to individual semester listing. Prerequisites: A 300-level Philosophy course (Phil/PNP 315 is recommended) and PNP major standing or approval of Instructor.
Credit 3 units. A&S : SS A&S : IQ, SSC

L64 PNP 495W PNP Seminar: Writing-Intensive
Subject varies per semester. Fulfills Writing-Intensive (WI) requirement. Prerequisites: A 300-level Philosophy course (Phil/PNP 315 is recommended) and PNP major standing or approval of instructor.
Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI

L64 PNP 496 PNP Seminar
Subject varies each semester. Prerequisites: A 300-level Philosophy course (Phil/PNP 315 is recommended) and PNP major standing or approval of instructor.
Credit 3 units. A&S : SS A&S : IQ, SSC

L64 PNP 499 Study for Honors
Prerequisites: senior standing, a grade point average of 3.50 overall, and permission of the department.
Credit 3 units. A&S : SS

Physical Education
As an undergraduate student, you may take both lecture-laboratory and performance courses through the Department of Athletics. A total of 12 performance units may be included in the 120 units required for graduation. All courses are offered only on a credit/no credit basis.

Contact Person: Paula Hardy-Mumm
Phone: 314/935-5185
E-mail: paulah@wustl.edu
Departmental website: http://bearsports.wustl.edu/AthleticsDept/

Director of Athletics and Coordinator of Physical Education
John Schael
MEd, Miami University

Students may take both lecture-laboratory and performance courses through the Department of Athletics; however there is no major in this area.
Arts & Sciences

Students may take both lecture-laboratory and performance courses through the Department of Athletics; however there is no minor in this area.

Physical Education

L28 P.E. 115 Topics in Physical Education: Beginning Weight Training
Beginning Weight Training. Major emphasis is on strength development.
Credit 1 unit.

L28 P.E. 116 Topics in Physical Education: Beginning Racquetball
Beginning Racquetball.
Credit 1 unit.

L28 P.E. 120 Topics in Physical Education: Varsity Sports
Varsity Sports. Prerequisite: permission of instructor.
Credit 1 unit.

L28 P.E. 1201 Fundamentals of Rowing for Fitness
This course focuses on the effective use of Concept II Rowing as a tool to learn the rowing stroke as well as to maintain aerobic fitness and develop strength. Emphasis is placed on the correct use of technique to decrease risk of injury and on varying duration and intensity of work on the machine to develop different energy systems; and using these new skills in developing lifetime fitness. Instruction includes the use of video tape and video monitoring. Athletic shoes and clothes that are not baggy are needed to participate. There is a minimum amount of running of light low-impact aerobic activity required as a warm-up.
Credit 1 unit.

L28 P.E. 121 Topics in Physical Education: Varsity Sports
Varsity Sports. Prerequisite: permission of instructor.
Credit 1 unit.

L28 P.E. 132 Topics in Physical Education: High-Intensity Conditioning
Credit 1 unit.

L28 P.E. 135 Step Aerobics
Step Aerobics. A low-impact aerobic class in which choreography and equipment are combined to meet the needs of participants at all levels of fitness. There is a fee of $45 for this course.
Credit 1 unit.

L28 P.E. 136 Fitness and Conditioning

Students complete fitness testing at the beginning and end of the semester. Individual workout schedules are followed outside of class time.
Credit 1 unit.

L28 P.E. 137 Spinnin’
Music, stationary bicycles and an instructor who cues you to ride through hills, valleys and other terrain, changing resistance and pace to simulate different types of riding. All levels welcome — you can tailor the ride to fit your personal fitness goals and needs. A water bottle and towel are required for this class. There is a $45 fee.
Credit 1 unit.

L28 P.E. 139 Topics in Physical Education: Advanced Tennis
Advanced tennis.
Credit 1 unit.

L28 P.E. 140 Topics in Physical Education: Beginning Tennis
Beginning tennis.
Credit 1 unit.

L28 P.E. 143 Intermediate Tennis
Intermediate Tennis.
Credit 1 unit.

L28 P.E. 148 Topics in Physical Education: Individual Physical Education
Individual physical education. Prerequisite: medical referral.
Credit 1 unit.

L28 P.E. 210 Topics in Physical Education: Beginning Racquetball
BEGINNING RACQUETBALL.
Credit 1 unit.

L28 P.E. 212 Topics in Physical Education: Intermediate and Advanced Basketball
Intermediate and advanced basketball. Designed to develop an appreciation for basketball through team competition and activity. Individual instruction and skill development also are available. Section 01: T/Th 9:30-11 Field House.
Credit 1 unit.

L28 P.E. 214 Topics in Physical Education: Advanced Weight Training
Major emphasis on muscular strength and flexibility through free weight-resistance exercise. Pre- and post-assessment of physical fitness levels may be established. Prerequisite: PE 215
Beginning Weight Training. Section 01: T/Th 8:30-11. Weight Room.
Credit 1 unit.

L28 P.E. 215 Weight Training
Beginning weight training Major emphasis on strength development. Section 01: T/Th 8:00-9:30, Weight Room. Section 02: MWF 10:00-11:00, Weight Room.
Credit 1 unit.

L28 P.E. 216 Soccer
Soccer. Designed to develop an appreciation for soccer through the development of soccer skills, concepts of group play and team competition. Sections: 01 T/Th 10:00-11:30 a.m. Note: Eight -or nine-week course beginning approximately February 14. All students who register must check in with the departmental office during the first two weeks of the semester.
Credit 1 unit.

L28 P.E. 220 Topics in Physical Education: Varsity Sports
Varsity sports. Prerequisite: permission of the department. Credit 1 unit.

L28 P.E. 2201 Fundamentals of Rowing for Fitness
This course focuses on the effective use of Concept II Rowing effective as a tool to learn the rowing stroke as well as to maintain aerobic fitness and develop strength. Emphasis is placed on the correct use of technique to decrease risk of injury; on varying duration and intensity of work on the machine to develop different energy systems; and on using these new skills in developing lifetime fitness. Instruction includes the use of video tape and video monitoring. Athletic shoes and clothes that are not baggy are needed to participate. There is a minimum amount of running or light low-impact aerobic activity required as a warm-up.
Credit 1 unit.

L28 P.E. 221 Topics in Physical Education: Varsity Sports
Varsity sports. Prerequisite: permission of the department. Credit 1 unit.

L28 P.E. 234 Topics in Physical Education: Lifeguard Training
Lifeguard training. The course provides skill instruction and knowledge needed to prevent and respond to aquatic emergencies in a pool setting. Successful completion of requirements results in certification in American Red Cross Lifeguard Training for swimming pools, CPR and First Aid. Prerequisite: swimming test given during the first week of class. Section 01: T/Th 1:30-3:00 p.m. Millstone Pool.
Credit 1 unit.

L28 P.E. 235 Topics in Physical Education: Step Aerobics
Step Aerobics. Section 01: Step Plus: Primarily designed around step aerobics with occasional workouts using other fitness techniques such as box aerobics, interval training. Section 02: Combo Training: Combination of many fitness techniques, such as step aerobics, box aerobics, low-impact. There is a fee of $45 for this course.
Credit 1 unit.

L28 P.E. 236 Topics in Physical Education: Fitness and Conditioning
Fitness and conditioning. Students complete fitness testing at the beginning and end of the semester. Individual workout schedules are followed outside of class time. Students required to attend an orientation session. Step Plus: primarily designed around step aerobics with occasional workouts using other fitness techniques, such as box aerobics, interval training. Combo Training: combination of many fitness techniques, such as step aerobics, box aerobics, low-impact. Section 01: TBA. Athletic Complex. Prerequisite: PE 208.
Credit 1 unit.

L28 P.E. 237 Spinnin'
Credit 1 unit.

L28 P.E. 239 Topics in Physical Education
Credit 1 unit.

L28 P.E. 240 Topics in Physical Education: Intermediate Tennis
Intermediate Tennis. Note: Eight- or nine-week course beginning approximately February 15. All students who register must check in with the departmental office during the first two weeks of the semester. Tao Tennis Courts.
Credit 1 unit.

L28 P.E. 248 Topics in Physical Education: Individual Physical Education
Individual physical education. Prerequisite: medical referral needed. Athletic Complex.
Credit 1 unit.

L28 P.E. 255 Topics in Physical Education: Practicum in Sports Leadership
Practicum in sports leadership. Participation in formal leaderships tasks under the direction of the Washington University Athletic Department personnel. Selection of task and scope of work is determined before enrollment by conference with instructor. Prerequisite: permission of the department. Athletic Complex.
L28 P.E. 258 Spinnin’
Music, stationary bicycles and an instructor who cues you to ride through hills, valleys and other terrain, changing resistance and pace to simulate different types of riding. All levels welcome — you can tailor the ride to fit your personal fitness goals and needs. A water bottle and towel are required. There is a $45 fee. Credit 1 unit.

L28 P.E. 291 Fundamentals of Athletic Training
Study of the duties of the athletic trainer, in relation to physical education classes, competitive sports and recreation, including study and practice of first-aid care and prevention of injuries. Same as Educ 291. Section: 01 MWF 10-11:00 a.m. Athletic Complex. Credit -3 unit.

Physics
Physics is the discipline that deals with the most fundamental aspects of our universe, such as the properties of atoms, nuclei and elementary particles; the nature of the forces between them; and the collective behavior of atoms in solids, liquids and gases. It deals with the entire universe, from its birth to its ultimate fate. At the same time, physics provides the tools that help us to understand extremely complex everyday things, like the behavior of sand piles, the strength of materials, or processes in the brain. Physics developed when people realized that nature operates according to simple mathematical rules; physics seeks to discover and understand those rules. Its early successes in comprehending motion, thermodynamics, electricity and magnetism provided a foundation upon which other physical sciences have grown.

If you are planning a career in science and technology or plan to pursue graduate studies in physics, astronomy, earth sciences, environmental sciences, medical physics, meteorology or oceanography, a major in physics provides a solid foundation. The program is sufficiently flexible to allow you to combine this major with a second major in chemistry, mathematics or engineering, or with premedical studies and other disciplines in the humanities and social sciences. Our programs are designed to give you, in addition to the fundamentals of physics, a broad range of skills in laboratory techniques, critical thinking, computer use and teamwork, which will serve you well in your chosen career. You may design a program of study, in consultation with your adviser, to meet your personal goals and interests. As a physics major, you are strongly encouraged to participate in physics research projects directed by faculty members.

Introductory Physics: Physics 197–198 is an advanced calculus-based introduction to physics intended for adequately prepared students interested in majoring in physics. An alternative calculus-based sequence, Physics 117A–118A, also may be used to enter the major program, but it is primarily intended for students who want an introduction to the physical sciences and for those who are preparing for professional study of various kinds, including medicine. Physics 117A also fulfills the requirements of the College of Architecture.

The department offers several other courses of general interest to the nonscience student. In most cases, these have no prerequisite. Most form part of natural science clusters.

Departmental website: http://www.physics.wustl.edu/

Chair
Kenneth F. Kelton
Arthur Holly Compton Professor of Physics
PhD, Harvard University

Endowed Professors
Carl M. Bender
Wilfred R. and Ann Lee Konneker Professor of Physics
PhD, Harvard University

John W. Clark
Wayman Crow Professor of Physics in Arts & Sciences
PhD, Washington University

James G. Miller
Albert Gordon Hill Professor of Physics
PhD, Washington University

Stuart A. Solin
Charles M. Hohenberg Professor of Experimental Physics
PhD, Purdue University

Clifford M. Will
James S. McDonnell Professor of Physics
PhD, California Institute of Technology

Professors
Claude W. Bernard
PhD, Harvard University

Thomas Bernatowicz
PhD, Washington University

James H. Buckley
PhD, University of Chicago

Anders E. Carlsson
PhD, Harvard University

Mark S. Conradi
PhD, Washington University

Ramanath Cowsik
The Major in Physics

Total units required: 42-49

Prerequisites: As prerequisites for the major, you should complete Physics I and II (Physics 197–198) or General Physics I and II (Physics 117A–118A) your first year. You should consider taking Physics 217, 316 or 321, 318, and 411 in your second year.

Required Physics courses: For the major, you are required to complete a minimum program of 21 units of advanced courses (300 level or higher) in Physics. These 21 units must include:

- Physics 322 Physical Measurement Laboratory
- Physics 411 Mechanics
- Physics 421 Electricity and Magnetism

• One additional upper-level laboratory course (choose from Physics 316, 321, 360, 451, 452)
• If Physics 217 is not taken, either Physics 318 or 471.
• The remaining physics courses must be at the 300 level or above, excluding Physics 303, 304, 341, 342, 441, 442, 499 and 500.

Recommended Physics courses: If you are preparing for graduate study in physics or astronomy, you should consider taking, in addition to the above requirements, Physics 422, 463 and 471, as well as some of Physics 472, 474, 476 and...
additional lab courses. You also should consider taking Physics/Math 501–502 and additional mathematics courses.

If you are preparing for employment after the A.B. degree, you should take additional laboratory courses from Physics 316, 321, 360, 451 and 452. Other relevant courses may include Physics 314, 350, 351, 352, 355, 422, 463, 471 and 472. You also might consider Chem 435 and 436.

If you are preparing for medical school, you should give special consideration to Physics 314, 316, 321, 350, 351, 352, 355, 360.

Math courses required for the Physics major:

- Math 131 Calculus I
- Math 132 Calculus II
- Math 233 Calculus III
- Math 217 Differential Equations (We recommend that Math 217 precede Physics 411)

Math courses recommended for the Physics major:

- ESE 317 Engineering Mathematics or Math 308 Mathematics for the Physical Sciences (We recommend that one of these courses precede Physics 421.)
- Math 309 Matrix Algebra (We recommend that Math 309 precede Physics 471.)
- Physics/Math 501 and 502 also are recommended.

Science-breadth requirement: Majors must select three of the following courses to satisfy the science-breadth requirement. One of the three courses must be Chem 111A, Chem 112A, Chem 401 or Chem 402.

- Chem 111A General Chemistry I
- Chem 112A General Chemistry II
- Chem 151 General Chemistry Laboratory I
- Chem 152 General Chemistry Laboratory II
- Chem 401 Physical Chemistry I
- Chem 402 Physical Chemistry II
- Chem 445 Instrumental Methods: Physical Chemistry
- CSE 126 Introduction to Computer Programming
- CSE 131 Computer Science I
- CSE 132 Computer Science II
- CSE 200 Engineering and Scientific Computing

Additional Information

Senior Honors: You are encouraged to work toward honors in physics. To qualify, you must meet the academic requirements of the college and successfully complete a suitable project under the supervision of a faculty member in the department. The project, whether experimental or theoretical, should demonstrate your capacity for independent work. You must apply to the Undergraduate Studies Committee no later than the beginning of the senior year. Your application should include a description of the proposed project, co-signed by the supervising professor. A written report of the completed work must be submitted to the committee by a deadline in March. By enrolling in Physics 499, you may earn up to 6 units of credit for the honors project.

The Minor in Physics

Units required: 17

Required courses:

- Physics 117A General Physics I or Physics 197 Physics I
- Physics 118A General Physics II or Physics 198 Physics II
- Physics 217 Introduction to Quantum Physics
- Physics 318 Introduction to Quantum Physics II

Elective courses:

At least one course at the 300 level or above (with the exception of Physics 303, 304, 341, 342, 441, 442, 499 and 500) with a grade of C– or better.

Additional Information

Corequisite for taking Physics 117A General Physics I is enrollment in or placement out of Math 131 Calculus I. Math 132 Calculus II is a corequisite for Physics 197 Physics I. Calculus II also is necessary to provide adequate preparation for Physics 217/318 Quantum Physics I, II. Note that for some advanced courses, Math 233 Calculus III and Math 217 Differential Equations are prerequisites.

The Minor in Biomedical Physics

Units required: 17

Required courses:

- Physics 117A General Physics I or Physics 197 Physics I
- Physics 118A General Physics II or Physics 198 Physics II

Elective courses:

Two courses from the following four:

- Physics 314 Physics of the Heart
- Physics 351 Introduction to Biomedical Physics
- Physics 350 Physics of the Brain
- Physics 355 Physics of Vision

One course from the following four laboratory courses:

- Physics 316 Optics and Wave Physics Laboratory
- Physics 321 Electronics Laboratory
- Physics 322 Physical Measurement Laboratory
- Physics 360 Biophysics Laboratory

Additional Information

This is a minor for students interested in the discussion and application of methods and techniques from physics to topics in the area of biology and medicine. The program may be of interest to the premedicine student or the research-oriented
many of its applications in science are examined. A good
variational calculus is explained at an elementary level and
functions that extremize specific functionals. In this seminar
quantum physics, the physical world is expressed in terms of
describing the physical world. In all areas of classical and
science major. New courses are being developed that also will
satisfy these requirements.

Physics

L31 Physics 101A Basic Physical Science
An introduction to the concepts and modes of thought involved
in understanding the physical world. The focus is not only
on everyday phenomena (e.g., falling objects, skidding cars,
the tides) but also on questions of cosmic significance (e.g.,
relativity, the Big Bang, black holes, the origin of the elements). Verbal reasoning is emphasized. No prerequisites.
Credit 3 units. A&S : NS, QA  A&S : IQ, NSM, AN  BU : SCI

L31 Physics 107A How Things Work
Why is the sky blue? How can a baseball curve? Natural and
mammade phenomena can be understood by simple and
basic ideas of physics. This course illustrates these underlying
principles by using examples from everyday life as well as
from physics and other fields. Because the phenomena are
many and the principles are few we find that apparently very
different events sometimes have similar explanations; we come
to understand how the stretching of a rubber band is related to
ice skating, and how the blue of the sky is related to the red of
the sunset and the white color of milk. No prerequisites.
Credit 3 units. A&S : NS, QA  A&S : IQ, NSM, AN  BU : SCI
FA : NSM

L31 Physics 110A Awesome Ideas in Physics
The ideas of physics that have revolutionized our perception of
the world and reality. Emphasis is on understanding a selected
set of crucial concepts without losing track of the numbers.
Using the writings of Hawking, Feynman and Lightman, a study
is made of such topics as energy and conservation laws, the
relativity of time, the wave-particle duality, the modern picture
of matter at the smallest and the largest distance scales, and
the history of the universe. Must be taken for a letter grade. No prerequisites.
Credit 3 units. A&S : NS, QA  A&S : IQ, NSM, AN  BU : SCI
FA : NSM

L31 Physics 111A General Physics I
Calculus-based introduction to the concepts, laws and structure
of physics. Topics include kinematics, Newton’s laws, energy,
linear momentum, angular momentum, the conservation
laws, gravitational force, harmonic motion, wave motion and
interference, sound, and special relativity. Prerequisite: previous
or concurrent enrollment in Math 131 Calculus I or permission of
instructor. Concurrent registration in a Physics 117 lab section is
required. Credit may not be obtained for both Physics 117A and
Physics 197.
Credit 4 units. A&S : NS, QA  A&S : IQ, NSM, AN  BU : SCI
FA : NSM

L31 Physics 117A General Physics II
Continuation of Physics 117. Calculus-based introduction
to concepts, laws and structure of physics. Topics include
electromagnetic forces and fields, direct current circuits,
capacitance and inductance, electromagnetic radiation, light,
geometrical and physical optics, interference and diffraction,
early quantum theory, and nuclear physics. Prerequisite: Physics
117A, Physics 197 or permission of instructor. Concurrent
registration in a Physics 118 lab section is required. Previous or
concurrent enrollment in Calculus II Math 132 is recommended.
Credit may not be obtained for both Physics 118 and Physics
198.
Credit 4 units. A&S : NS, QA  A&S : IQ, NSM, AN  BU : SCI
FA : NSM

L31 Physics 125A Solar System Astronomy
Designed for the nonscience major, this course deals with
the planets, their moons and rings, comets, meteorites and
interplanetary dust particles. In order to understand both
classical astronomy and the results obtained from modern
telescopes and the space program, basic scientific ideas
(including optics and the laws of motion) are reviewed first.
There also is some discussion of astronomical history to show
how we have arrived at our present ideas of the structure and
evolution of the solar system. Prerequisites: high school algebra
and trigonometry or concurrent enrollment in Math 131.
Credit 3 units. A&S : NS, QA  A&S : IQ, NSM, AN  BU : SCI
FA : NSM

L31 Physics 126A Stars, Galaxies and Cosmology
Intended as a general survey for the nonscience major. Topics
include the structure and evolution of stars, such as red giants,
white dwarfs, neutron stars, pulsars and black holes; galaxies
and quasars; cosmology and the Big Bang theory. Prerequisites:
high school algebra and trigonometry, or concurrent enrollment
in Math 131.
L31 Physics 197 Physics I
An advanced, calculus-based introduction to central concepts in classical and modern physics for students who desire to major in physics or another physical science, or who have a special interest in physics. The course is structured around three themes that are treated in depth: electricity and magnetism, quantum physics, and statistical and thermal physics. A daily regimen of homework and reading as well as active class participation are integral parts of the course. Prerequisite: Physics 197 and Math 132 Calculus II. Students who have not taken Physics 197 may not register for Physics 198. Concurrent registration in a Physics 198 lab section is required. Credit may not be obtained for both Physics 118A and Physics 198. Students who intend to major in Physics are encouraged to register for Section 02.
Credit 4 units. A&S : NS, QA A&S : IQ, NSM, AN BU : SCI

L31 Physics 198 Physics II
Continuation of Physics 197. An advanced, calculus-based introduction to central concepts in physics for students who desire to major in physics or another physical science, or who have a special interest in physics. The course is structured around three themes that are treated in depth: electricity and magnetism, quantum physics, and statistical and thermal physics. A daily regimen of homework and reading as well as active class participation are integral parts of the course. Prerequisite: Physics 197 and Math 132 Calculus II. Students who have not taken Physics 197 may not register for Physics 198. Concurrent registration in a Physics 198 lab section is required. Credit may not be obtained for both Physics 118A and Physics 198. Students who intend to major in Physics are encouraged to register for Section 02.
Credit 4 units. A&S : NS, QA A&S : IQ, NSM, AN BU : SCI

L31 Physics 210A Epic of Evolution: Life, Earth and the Cosmos
The evolution of the universe, the Earth and life, woven together in narrative. Themes of complexity, scale, entropy and information applied to the Big Bang, origins of matter, formation and history of the Earth, origins of life and diversification of species. Discussion sections explore the implications of the scientific epic for religion, philosophy, the arts and ethics. Three class hours and one one-hour discussion section per week. Same as Biol 210A and EPSC 210A. Same as EPSc 210A
Credit 4 units. A&S : NS, QA A&S : IQ, NSM, AN BU : SCI

L31 Physics 216 Introduction to Relativity: The Special Theory
Introduction to the special and general theories of relativity. Einstein’s postulates of the principle of relativity and the constancy of the speed of light. Simple kinematics and dynamics: simultaneity, time dilation, space-time diagrams, twin and other “paradoxes.” E=mc^2, laws of motion. Elements of general relativity: curved spacetime, experimental tests, black holes, gravitational waves. Prerequisite: Physics 117A, Physics 197 or permission of the instructor.
Credit 1 unit. A&S : NS A&S : IQ, NSM BU : SCI FA : NSM

L31 Physics 217 Introduction to Quantum Physics
Theoretical and experimental basis for quantum mechanics, following the historical development of 20th-century physics. Failure of classical physics; the Bohr theory of the atom; the Heisenberg uncertainty principle; the Schroedinger equation; atomic and molecular structure. Prerequisites: Physics 117A and 118A or Physics 197 and 198.
Credit 3 units. A&S : NS A&S : IQ, NSM, AN BU : SCI FA : NSM

L31 Physics 219 Energy and the Environment

L31 Physics 241 Select Topics in Physics II
Topics of special interest (e.g., holography, relativistic nuclear power, computer applications in physics, etc.) may be studied under the supervision of a faculty member, variously by lectures, seminars or individual study or research. Students hoping to arrange such a course must prepare a proposal and secure consent to undertake direction of the course from a faculty member and finally secure approval of the department chair.
Credit -3 unit.  A&S : NS  A&S : IQ, NSM  BU : SCI  FA : NSM

L31 Physics 242 Selected Topics in Physics II
Topics of special interest (e.g., holography, relativistic nuclear power, computer applications in physics, etc.) may be studied under the supervision of a faculty member, variously by lectures, seminars or individual study or research. Students hoping to arrange such a course must prepare a proposal and secure the instructor's consent to undertake direction of the course from a faculty member and finally secure approval of the department chair.
Credit -3 unit.  A&S : NS  A&S : IQ, NSM  BU : IS  FA : NSM

L31 Physics 312 Introduction to Astrophysics
Introduction to modern astronomy and astrophysics: stellar structure and evolution, nucleosynthesis, galactic structure, cosmology. Prerequisite: Physics 117A and 118A or Physics 197 and 198 or permission of instructor.
Credit 3 units.  A&S : NS  A&S : IQ, NSM  BU : IS  FA : NSM

L31 Physics 314 Physics of the Heart
A lecture and demonstration course that may be of particular interest to premedical and life-science students. Basic physics of the human cardiovascular system. Elasticity of vessels: properties of elastin and collagen. Energetics of the circulation: arterial and venous blood pressure, total fluid energy, gravitational potential energy, kinetic energy. Streamline flow and turbulence: effects of stenosis. Static and dynamic energy consumption of the heart: cardiac efficiency, the tension-time integral, Laplace’s law, Starling’s law. Metabolism of cardiac muscle. Electrophysiology: the heartbeat and cardiac arrhythmias. The physics of phonocardiograms, echocardiograms and other non-invasive techniques for physical assessment of cardiac abnormalities, including ischemia and myocardial infarction. Models of mechanical properties: contractile element, series elastic and parallel elastic elements. Corequisite: Physics 118A, Physics 198 or permission of instructor.
Credit 3 units.  A&S : NS  A&S : IQ, NSM  BU : SCI  EN : SU, TU  FA : NSM

L31 Physics 316 Optics and Wave Physics Laboratory
Introduction to optics and to treatment of experimental data. Experiments and lectures on refraction, interference, diffraction, polarization and coherence properties of waves with emphasis on light. Data analysis using statistical methods. Prerequisites: Physics 117A–118A or Physics 197–198.
Credit 3 units.  A&S : NS  A&S : IQ, NSM  BU : SCI  FA : NSM

L31 Physics 318 Introduction to Quantum Physics II
Application of elementary quantum principles to atomic and molecular physics, solid-state physics, and nuclear and particle physics. Prerequisite: Physics 217.
Credit 3 units.  A&S : NS  A&S : IQ, NSM, AN  BU : SCI  EN : DU, SU, TU  FA : NSM

L31 Physics 321 Electronics Laboratory
Topics of special interest (e.g., superconductivity, quasicrystals, neural networks, chaos, etc.) may be studied under the supervision of a faculty member, variously by lectures, seminars or individual study or research. Students hoping to arrange such a course must prepare a proposal and secure consent to undertake direction of the course from a faculty member and finally secure approval of the department chair.
Credit -3 unit.  A&S : NS  A&S : IQ, NSM, AN  BU : SCI  EN : DU, SU, TU  FA : NSM

L31 Physics 322 Physical Measurement Laboratory
A variety of classical and modern experiments in physics including three experiments in nuclear radiation and four experiments with biophysical content. Use of computers in experiment control, data acquisition and data analysis. Development of skills in writing lab notebooks and formal reports and giving short oral reports on experiments. Corequisite: junior or senior standing. Two lab periods and one discussion period per week.
Credit 3 units.  A&S : NS, WI  A&S : IQ, NSM, WI  EN : TU  FA : NSM

L31 Physics 341 Selected Topics in Physics III
Topics of special interest (e.g., superconductivity, quasicrystals, neural networks, chaos, etc.) may be studied under the supervision of a faculty member, variously by lectures, seminars or individual study or research. Students hoping to arrange such a course must prepare a proposal and secure consent to undertake direction of the course from a faculty member and finally secure approval of the department chair.
Credit -3 unit.  A&S : NS  A&S : IQ, NSM  BU : SCI  FA : NSM

L31 Physics 342 Selected Topics in Physics III
Topics of special interest (e.g., holography, relativistic nuclear power, computer application in physics, etc.) may be studied under the supervision of a faculty member, variously by lectures, seminars or individual study or research. Students hoping to arrange such a course must prepare a proposal and secure the instructor's consent to undertake direction of the course from a
faculty member and finally secure approval of the department chair.
Credit 3 units. A&S : NS A&S : IQ, NSM FA : NSM

L31 Physics 344 Energy and Environmental Physics
This intermediate-level course applies basic physics principles to this increasingly important area. It is designed for all science and engineering majors with an interest in energy and environmental issues. Topics covered include population trends, fossil fuel use, renewable energy sources, energy storage strategies and climate change. Particular emphasis is given to the use of the fundamental laws of physics, such as energy conservation, as well as more general concepts such as local and global stability, chaotic behavior, probability and risk. The aim of the course is the development of analytical skills and familiarity with important concepts, in order to enable an independent and informed view of environmental problems and possible solutions. A one-year introductory physics class on the level of Physics 117–118 or 197–198 is required. This course also may be taken as Physics 444, which requires an additional independent project.
Credit 3 units. A&S : NS A&S : IQ, NSM

L31 Physics 350 Physics of the Brain
Concepts and techniques of physics are applied to study the functioning of neurons and neuronal circuits in the brain. Neurons and neural systems are modeled at two levels: (1) at the physical level, in terms of the electrical and chemical signals that are generated and transmitted, and (2) at the information-processing level, in terms of the computational tasks performed. Specific topics include: neuronal electrophysiology, neural codes, neural plasticity, sensory processing, neural network architectures and learning algorithms, and neural networks as dynamical and statistical systems. Course grade is based primarily on an individualized term project. Prerequisites: Physics 117A–118A, Physics 197–198, or permission of the instructor. Credit 3 units. A&S : NS A&S : IQ, NSM BU : SCI EN : SU, TU FA : NSM

L31 Physics 351 Introduction to Biomedical Physics
Principles and application of key physical methods used in the diagnosis and treatment of diseases, and in biomedical research. Topics include interaction of radiation with living systems: fundamentals of optical and electron microscopy; imaging via X-rays, magnetic resonance and ultrasound; and electrical properties of organs and cells. Prerequisite: Physics 117A–118A or Physics 197–198.
Credit 3 units. A&S : NS BU : SCI EN : TU FA : NSM

L31 Physics 352 Physics of Biomolecules
This course emphasizes the application of physical laws and concepts in understanding biomolecules and their interactions, and in developing tools to investigate their biological properties and functionalities. Topics include (1) a general introduction to biomolecules and cells, (2) physics of biopolymers as modeled by stochastic analyses, (3) transport processes in biological systems including diffusion, reaction kinetics and "life at low Reynolds number," and (4) the physics of fluorescence and its contemporary applications to dynamics of biomolecules, such as optical tweezers. Prerequisite: Physics 117–118 or Physics 197–198. Some familiarity with thermodynamics; Chem 111A–112A recommended.
Credit 3 units. A&S : NS A&S : IQ, NSM

L31 Physics 355 Physics of Vision
How do the eyes capture an image and convert it to neural messages that ultimately result in visual experience? This lecture and demonstration course covers the physics of how we see. The course is addressed to physics, premedical and life-sciences students with an interest in biophysics. Topics include physical properties of light, evolution of the eyes, image formation in the eye, image sampling with an array of photoreceptors, transducing light into electrical signals, color coding, retinal organization, computing with nerve cells, compressing the 3-D world into optic nerve signals, inferring the 3-D world from optic nerve signals, biomechanics of eye movement, engineered vision in machines. The functional impact of biophysical mechanisms for visual experience is illustrated with psychophysical demonstrations. Corequisite: Physics 117A, Physics 197 or permission of instructor.
Credit 3 units. A&S : NS A&S : IQ, NSM BU : SCI EN : SU, TU FA : NSM

L31 Physics 360 Biophysics Laboratory
This laboratory course consists of "table-top" experiments in biological physics that are designed to introduce the student to concepts, methods and biological model systems in biophysics. Most experiments combine experimentation with computer simulations. The list of available experiments includes electrophysiology, human bioelectricity, optical tweezers, ultrasonic imaging, mass spectrometer and viscosity measurements. Prerequisites: prior completion of Physics 117A–118A, Physics 197–198 or permission of instructor.
Credit 3 units. A&S : NS A&S : IQ, NSM, AN

L31 Physics 400 Physical Science in 12 Problems
Same as Chem 400
Credit 1 unit. A&S : NS A&S : IQ, NSM

L31 Physics 411 Mechanics
Motion of a point particle, rotational motion, oscillation, gravitation and central forces, Lagrangian and Hamiltonian formulation. Prerequisites: Physics 117A–118A or Physics 197–198, Math 217 or permission of instructor.
Credit 3 units. A&S : NS A&S : IQ, NSM FA : NSM
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Credit Units</th>
<th>Notes</th>
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<tr>
<td>L31 Physics 421 Electricity and Magnetism</td>
<td>Starting from Coulomb’s law, the Biot-Savart law, and Faraday’s law, the electrical and magnetic fields are defined and applied. Maxwell’s equations are derived and their consequences, such as electromagnetic waves and relativity, are explored. Prerequisites: Physics 117A–118A or Physics 197–198, Math 217 or permission of instructor.</td>
<td></td>
<td>Credit 3 units. A&amp;S : NS A&amp;S : IQ, NSM, AN BU : SCI EN : DU, SU, TU FA : NSM</td>
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<tr>
<td>L31 Physics 422 Electricity and Magnetism II</td>
<td>The second course in a two-part series covering the classical theory of electricity and magnetism leading to the derivation and application of Maxwell’s equation. Topics in electrodynamics including Faraday’s law, the displacement current and Maxwell’s equations in vacuum and in matter are covered. Electromagnetic waves and radiation, special relativity and relativistic electrodynamics also are discussed. Prerequisite: Physics 421 or permission of instructor.</td>
<td></td>
<td>Credit 3 units. A&amp;S : NS A&amp;S : IQ, NSM EN : DU, SU, TU FA : NSM</td>
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<td>L31 Physics 427 Introduction to Computational Physics</td>
<td>Lectures and hands-on experience in computational physics combining topics in numerical analysis, algorithms, statistics, visualization, and computer algebra with projects in contemporary areas of physics. Prerequisites: Physics 217 or equivalent and familiarity with a programming language.</td>
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<td>Credit 3 units. A&amp;S : NS A&amp;S : IQ, NSM FA : NSM</td>
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<td>L31 Physics 435 Nuclear and Radiochemistry Lab</td>
<td>Application of radiochemical techniques to problems in chemistry, physics and nuclear medicine. Prerequisites: 3 units of physical chemistry and permission of instructor. One lecture hour and five hours of laboratory a week. Same as Chem 435</td>
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<td>Credit 3 units. A&amp;S : NS A&amp;S : IQ, NSM FA : NSM</td>
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<td>L31 Physics 436 Introduction to the Atomic Nucleus</td>
<td>Same as Chem 436</td>
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<td>Credit 3 units. A&amp;S : NS A&amp;S : IQ, NSM FA : NSM</td>
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<td>L31 Physics 441 Selected Topics in Physics IV</td>
<td>Topics of special interest (e.g., holography, relativity, nuclear power, computer applications in physics, etc.) may be studied under the supervision of a faculty member, variously by lectures, seminars or individual study or research. Students hoping to arrange such a course must prepare a proposal and secure the instructor’s consent to undertake direction of the course from a faculty member and finally secure approval of the department chair.</td>
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<td>Credit 3 units. A&amp;S : NS A&amp;S : IQ, NSM BU : SCI FA : NSM</td>
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<td>L31 Physics 442 Selected Topics in Physics IV</td>
<td>Topics of special interest (e.g., holography, relativity, nuclear power, computer applications in physics, etc.) may be studied under the supervision of a faculty member, variously by lectures, seminars or individual study or research. Students hoping to arrange such a course must prepare a proposal and secure the instructor’s consent to undertake direction of the course from a faculty member and finally secure approval of the department chair.</td>
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<td>Credit 3 units. A&amp;S : NS A&amp;S : IQ, NSM FA : NSM</td>
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<td>L31 Physics 444 Energy and Environmental Physics</td>
<td>Contents are the same as Physics 344. Physics 444 requires an additional independent project. Prerequisites: Physics 117–118 or 197–198. Same as Physics 344</td>
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<td>Credit 3 units. A&amp;S : NS A&amp;S : IQ, NSM</td>
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<td>L31 Physics 450 Physics of the Brain</td>
<td>Contents are the same as Physics 350. Also intended for graduate students. Includes a more sophisticated term project than Physics 350. Prerequisites: Physics 117A–118A or Physics 197–198, or permission of instructor.</td>
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<td>Credit 3 units. A&amp;S : NS A&amp;S : IQ, NSM BU : SCI EN : SU, TU FA : NSM</td>
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<td>L31 Physics 451 Advanced Laboratory I</td>
<td>Applications of analog and digital electronics. Contents are the same as Physics 321 plus a term project. Intended for graduate students. Prerequisite: Physics 118A, an equivalent course or permission of instructor.</td>
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<td>Credit 3 units. A&amp;S : NS A&amp;S : IQ, NSM FA : NSM</td>
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<td>L31 Physics 452 Advanced Laboratory II</td>
<td>Applications of analog and digital electronics and microprocessor techniques, followed by projects in modern physics with concurrent lectures on methods of experimental physics. Prerequisite: Physics 322 or permission of instructor. Two laboratories a week.</td>
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<td>Credit 3 units. A&amp;S : NS, WI A&amp;S : IQ, NSM, WI FA : NSM</td>
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<td>L31 Physics 455 Physics of Vision</td>
<td>Contents are the same as Physics 355. Also intended for graduate students. Includes a more sophisticated term project than Physics 355. Corequisite: Physics 117A, Physics 197 or permission of instructor.</td>
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<td>Credit 3 units. A&amp;S : NS A&amp;S : IQ, NSM FA : NSM</td>
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<td>L31 Physics 463 Statistical Mechanics and Thermodynamics</td>
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Basic methods of classical and quantum statistical mechanics, thermodynamics and transport theory. Prerequisite: Physics 217 or permission of instructor. Credit 3 units.  A&S: NS  A&S: IQ, NSM  FA: NSM

L31 Physics 471 Quantum Mechanics
Origins of quantum theory, wave packets and uncertainty relations, Schroedinger’s equation in one dimension; step potentials and harmonic oscillators; eigenfunctions and eigenvalues; Schroedinger’s equation in three dimensions; the hydrogen atom; symmetry; spin and the periodic table; approximation methods for time independent problems; quantum statistics. Prerequisite: Math 217, Physics 217, Physics 421 or permission of instructor. Credit 3 units.  A&S: NS  A&S: IQ, NSM  EN: SU, TU  FA: NSM

L31 Physics 472 Solid State Physics
Crystal structures, binding energies, thermal properties, dielectrics, magnetism, free electron theory of metals, band theory, semiconductors, defects in solids. Prerequisite: Physics 471. Credit 3 units.  A&S: NS  A&S: IQ, NSM  FA: NSM

L31 Physics 474 Introduction to Particle Physics
Introduction to the standard model of particle physics, including symmetries, conservation laws, the weak interaction, the strong interaction, quark confinement and some more exotic ideas such as grand unified theories. Prerequisite: Physics 471. Credit 3 units.  A&S: NS  A&S: IQ, NSM  FA: NSM

L31 Physics 476 Astrophysics
This is the first of a four-semester sequence in astrophysics, with two semesters of classical astrophysics of stars and stellar systems, followed by two semesters of high-energy astrophysics of cosmic rays, radio, X-ray and gamma-ray astronomies. Each of these is a self-contained course and may be attended by advanced undergraduates and graduate students. In the first semester we discuss observations of stars; stellar populations; physical processes in stars; birth, evolutions and death of stars; energy generation; nucleosynthesis; variable stars; supernovae; collapsed objects; solar neutrinos; helioseismology; and selected topics in galactic astrophysics, cosmology and exobiology. Additional reading assignments for students registered for Physics 576. Prerequisites: Physics 411, Physics 421 and Physics 463, or permission of the instructor. Credit 3 units.  A&S: NS  A&S: IQ, NSM  FA: NSM

L31 Physics 477 Physics of Finite and Infinite Nuclear Systems

L31 Physics 478 From Black Holes to the Big Bang
An introduction to general relativity. The goal is to illustrate important features of general relativity without the full-blown mathematics of Einstein’s equations by restricting attention to spherically symmetric space times. Topics include: principle of equivalence; curved spacetime; spherical stars and black holes; the Big Bang model, observational cosmology. Prerequisite: Physics 411 or permission of instructor. Credit 3 units.  A&S: NS  A&S: IQ, NSM

L31 Physics 482 Research Seminar
Designed to introduce students to current developments in physics and to research carried out by faculty. Topics vary each year. Each member of the department addresses their particular specialty. Interested undergraduates may take this seminar in their junior or senior year. Must be taken pass/fail. Credit 1 unit.  A&S: NS  A&S: IQ, NSM  FA: NSM

L31 Physics 499 Honors Program
Prerequisites: junior standing, an average grade of B or better, and permission of the chair of the department. Program and credit to be determined; maximum 6 units. Credit units.  A&S: NS  FA: NSM

Political Economy
The program in Political Economy offers students majoring in economics or political science an interdisciplinary second major that provides the opportunity to gain an understanding of the theoretical bases of both fields and to undertake research on current policy issues in political economy.

Students majoring in political science gain an appreciation of the deductive methods of economics and the role of economic forces in politics. Economics majors see the wider applicability of economic theory and learn how politics interact with economic behavior in the real world.
Central to the program is the senior seminar, taught by one of the faculty members of the Center in Political Economy. Enrollment in the senior seminar is restricted to seniors who are second majors in political economy and to senior economics and political science students with strong backgrounds in both fields. New theoretical developments and recent empirical studies in political economy form the foundation of the seminar. Students prepare term papers that demonstrate their ability both to understand theory and to apply it to substantive issues.

Students choosing political economy as a second major will be especially well prepared for graduate study in economics, political science or business, and for both academic and nonacademic careers in policy analysis, business administration, law, governmental relations and other fields. A student majoring in economics or political science who selects a second major in political economy is assigned an adviser from the program who assists in organizing the student’s course of study.

Contact Person: Cherie Moore
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E-mail: cherie.moore@wustl.edu
Departmental website: http://cpe.wustl.edu/

Director
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William Taussig Professor of Political Economy
PhD, Essex University
LittD, Liverpool University
Doctorat d'Etat, Université de Caen
(Political Science, Economics)

Endowed Professors
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George Alexander Madill Professor of Law and Professor of Economics
JD, Stanford University
(Law, Economics)

Randall Calvert
Thomas F. Eagleton University Professor of Public Affairs and Political Science
PhD, California Institute of Technology
(Political Science)

Robert A. Pollak
Hennrich Distinguished Professor of Economics
PhD, Massachusetts Institute of Technology
(Economics)

Professors
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PhD, University of California–Berkeley
(Economics)

Matthew Gabel
PhD, University of Rochester
(Political Science)

Sebastian Galiani
DPhil, Oxford University
(Economics)

William R. Lowry
PhD, Stanford University
(Political Science)

Andrew D. Martin
PhD, Washington University
(Law, Political Science)

Gary J. Miller
PhD, University of Texas–Austin
(Political Science)

John H. Nachbar
PhD, Harvard University
(Economics)

Robert P. Parks
PhD, Purdue University
(Economics)

Itai Sened
PhD, University of Rochester
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Sunita Parikh
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John Patty
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Elizabeth Penn
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(Political Science)  
**Andrew Rehfeld**  
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(Political Science)  
**Guillermo Rosas**  
PhD, Duke University  
(Political Science)  
**Margit Tavits**  
PhD, University of Pittsburgh  
(Political Science)  

**Assistant Professors**  
**Mariagiovanna Baccara**  
PhD, Princeton University  
(Economics)  
**Dawn Brancati**  
PhD, Columbia University  
(Political Science)  
**Jacob Montgomery**  
PhD, Duke University  
(Political Science)  
**Ryan Moore**  
PhD, Harvard University  
(Political Science)  
**Melanie Springer**  
PhD, Columbia University  
(Political Science)  

**Professor Emeritus**  
**Douglass C. North**  
Spencer T. Olin Professor in Arts & Sciences  
PhD, University of California–Berkeley  
(Economics)  

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**The Major in Political Economy**  

Not available as a standalone major  
Total units required: 21  
Required course:  
Pol Econ 498 Senior Seminar in Political Economy (3 units)  
Elective courses:  
At least 18 units of approved courses at the 300 level or above.  
None of the 18 units may be counted toward the first major, and no more than 3 of the 18 units may be earned in the department of the first major.  
Economics majors must include among the 18 units of required credit at least 9 units of political science; political science majors must include at least 9 units of economics. Published prerequisites for courses numbered 300 and above must be fulfilled to satisfy the requirements for enrollment (including Econ 1011 [103B], Econ 1021 [104B], Econ 4011 [401] or Econ 4021 [402]). Econ 1011 (103B) and Econ 1021 (104B) may not be counted toward the 18-unit requirement. You and your adviser will choose the remaining 6 units that will complete the major.

**Additional Information**  

**Honors Program:** Students with a strong record of academic achievement may apply for the honors program at the end of the junior year. First majors in economics with the second major in political economy are asked to complete 12 units of political science, completing 21 rather than 18 hours in the second major. Three of the four political science courses required are to be completed at the 400 or 500 level. First majors in political science with the second major in political economy are asked to complete 12 units of economics, choosing either Econ 4011 Intermediate Microeconomic Theory or Econ 4021 Intermediate Macroeconomic Theory, also completing 21 rather than 18 hours in the second major. Two of the four economics courses must be taken at the 400 level.

Honors students also are required to enroll in Pol Econ 488 Honors Thesis Research and to complete a thesis (approximately 40 pages or 10,000 words) based on research undertaken under the supervision of one of the fellows of the Center in Political Economy. Interested students should see the director of the program to discuss research projects.

The program in Political Economy does not offer a minor.

**Political Economy**  

**L50 Pol Econ 413 Introduction to Econometrics**  
Course provides a basic working knowledge of econometrics. Topics include: translation of economic theory into statistical models, statistical foundations of econometrics, pre-regression analysis bivariate and multiple regression techniques, hypothesis testing, multicollinearity, specification error, auto correlation, errors in variables, identification, and simultaneous estimation. Prerequisites: Econ 103B, Econ 104B and Math 320 or equivalent.  
Same as Econ 413  
Credit 3 units. A&S : SS  A&S : IQ, SSC  FA : SSP

**L50 Pol Econ 435 Open Economy Macroeconomics**  
This course begins with a review of international trade theory, of the balance of payment accounts and their relationship to international borrowing and lending. We then study the asset approach to exchange rates determination, exchange rate behavior in the short and in the long run, and the relationship of exchange rates with prices and output. The course also
explores monetary and fiscal policy under both fixed and floating exchange rates, macroeconomic policy coordination and optimum currency areas, international debt problems of developing countries and their relation to stabilization program. Prerequisite: Econ 402.
Same as Econ 435
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L50 Pol Econ 451 Environmental Policy
Course examines the relationship between environmental economics and environmental policy. The course focuses on air pollution, water pollution and hazardous wastes, with some attention given to biodiversity and global climate change. The course examines critically two prescriptions that economics usually endorses: (1) "balancing" of benefits against costs (e.g., benefit-cost analysis) and the use of risk analysis in evaluating policy alternatives; (2) use of market incentives (e.g., prices, taxes or charges) or "property rights" instead of traditional command-and-control regulations to implement environmental policy. Prerequisite: Econ 103B.
Same as Econ 451
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA, ETH FA : SSP

L50 Pol Econ 467 Game Theory
Introduction to the mathematical theory of games as applied to the study of economics. Topics include games of complete and incomplete information, non-cooperative games with and without time dependency, and cooperative games with and without transferable utilities. Emphasis placed on game theoretic models of industrial organization and political economy. Prerequisites: Econ 401, Math 132 and Math 320.
Same as Econ 467
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L50 Pol Econ 488 Honors Thesis Research
Adviser’s approval required.
Credit 3 units. A&S : SS

L50 Pol Econ 490 Independent Study
Prerequisite: permission of department.
Credit -6 unit.

L50 Pol Econ 495 Readings in Political Economy
By arrangement with Political Economy faculty.
Credit -3 unit.

L50 Pol Econ 498 Senior Seminar in Political Economy
Special topics in the theory and applications of political economy. Property rights theory and topics from the theory of games, with applications to economic history, development politics, American political institutions and other fields. Each student is responsible for class presentation of research in one of these theoretical or applied areas. Required for the second major in Political Economy.
Credit 3 units. A&S : SS A&S : IQ, SSC

L50 Pol Econ 499 Senior Honors Thesis
Independent research for Honors thesis. Students individually investigate a topic under the supervision of a Political Economy faculty sponsor.
Credit 3 units.

Political Science
The Department of Political Science offers undergraduates the opportunity to study all aspects of politics using cutting-edge technical and theoretical tools. Our courses are animated by longstanding problems related to the use of power, its rightful exercise by governments and individual actors, and the institutions that affect how that power is exercised. Reflecting the breadth of the discipline, we offer a range of classes, including courses on elections and electoral politics; international political economy; justice and the state; and comparative analyses of political institutions across states.

A major in political science thus exposes students to the primary themes of the discipline: American politics, comparative politics, international politics, judicial politics, political methodology and political theory. A major in political science can prepare you well for professional training and advanced study in law, business, education, journalism, policy analysis, political science, public administration, social work and urban planning. Political science graduates enter careers in business; federal, state and local government; the media; and nonprofit organizations.

Because political science is a broad discipline, students often choose to combine the major with such related fields as African and African-American studies; American culture studies; anthropology; economics; environmental policy; history; international studies; Jewish, Islamic and Near Eastern studies; Latin American studies; philosophy; psychology; and women, gender and sexuality studies.

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James W. Davis
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John H. Kautsky
PhD, Harvard University

John Sprague
Sidney W. Souers Professor Emeritus of Government
PhD, Stanford University

The Major in Political Science
Total units: Students who major in political science are required to complete 30 graded units (10 classes) in political science with a C or better, distributed as follows:

Required courses:
• Substantive Introductory Courses: Six graded units must come from any two introductory classes. (*Note: if you have Advanced Placement credit, you may be able to substitute an upper-level class for the related introductory course.)

• Methodology Course: Three graded units must come from Pol Sci 363 Quantitative Political Methodology. All majors are urged to take this course in the fall of their sophomore year. (*Note: some statistics courses offered in other departments will allow you to opt out of this class, but those credits will not count toward your political science major.)

Elective courses:

• Distribution Requirement: 18 graded units must come from any six 300- or 400-level classes. Of these 18 units, you must complete at least one 3-unit course in three of the following five fields: American politics, comparative politics, international politics, political methodology or political theory. (*Note: Pol Sci 363 does not count toward this upper-level distribution requirement.)

• Other courses: A student’s remaining graded units may be earned by any political science course or independent study. However, credits given for writing a senior thesis (see below) do not count toward the major.

Limitations

No more than 6 units from the following may count toward the major: service learning, study abroad, summer school, Pol Sci 419 Teaching Practicum in Political Science, transfer credit and University College.

No more than 6 units from the following may count toward the major: Pol Sci 413 Directed Research, Pol Sci 412 Directed Readings and independent study.

Additional Information

Concentrations: Political science majors may concentrate in a subfield of political science by taking (as part of their distribution requirement) three upper-level courses in any one of the five subfields (American politics, comparative politics, international politics, political methodology or political theory) and submitting a subfield concentration form. Students may earn concentrations in up to two subfields. The successful completion of a subfield concentration will be listed on a student’s transcript.

Senior Thesis/Capstone Option: The department encourages serious students to pursue independent research by working toward a senior thesis. Students admitted to this program work closely with a faculty advisor for a full calendar year, beginning at the end of their junior year. Students writing a senior thesis receive 6 units of college credit for two semesters of work by enrolling in Pol Sci 415 Senior Thesis Research; however, this credit does not count toward the completion of the political science major. Although there is no GPA requirement for writing a senior thesis, an application is required. For more information, contact the department office. All majors may apply.

To qualify to write a senior thesis, students must:

• Complete Pol Sci 363 Quantitative Political Methodology or its equivalent by the fall of their junior year (all majors are strongly urged to take this in the fall of their sophomore year);
• Complete Pol Sci 495 Research Design and Methods in the spring semester of their junior year;
• Complete a second methods course appropriate for their thesis by the start of their senior year (A complete list of courses can be found on http://polisci.wustl.edu; Pol Sci 495 does not count toward this requirement);
• Complete a subfield concentration (see above) by the end of their senior year in the subfield appropriate for their senior thesis. At least two-thirds of the concentration must be completed by the end of their junior year;
• Apply during their junior year for admission into the program;
• Students planning to study abroad and write a senior thesis should take Pol Sci 363 Quantitative Political Methodology in the fall of their sophomore year and should go abroad during the fall of their junior year. Students who wish to study abroad in the spring of their junior year and write a thesis senior year, must meet with the director of Undergraduate Study before the start of their junior year.

Senior Honors: To graduate with Latin Honors, students must successfully complete a senior thesis and have the minimum grade point average specified by the College of Arts & Sciences.

The Major in Environmental Policy

Required units: 40

Students who major in Environmental Policy will be required to complete 40 graded units (13 classes) distributed as follows:

• 16 units from required foundation courses.
• 9 units from research methods requirements.
• 12 units from the list of upper-division courses in the social sciences.
• 3 units from a substantive distribution requirement.

At least 24 of those total units must be at the 300-400 level.

We also strongly recommend that students do a capstone experience. Possible options include a senior Honors thesis, the environmental law clinic or an appropriate internship. We intend to develop more capstone possibilities in the future.

Required courses:

All students take the following five foundation courses (16 units):

EPSc 201 Earth and the Environment (4 units)
**Arts & Sciences**

Biol 2950 Introduction to Environmental Biology (3 units)
Pol Sci 2010 Introduction to Environmental Policy (3 units)
Pol Sci 331 Topics in Politics: Theories of Justice (3 units)*
Anthro 361 Culture and Environment (3 units)

*Note: Traditional Environmental Studies students may count EnSt 294 for the Introduction to Environmental Policy course and Environmental Ethics for the Theories of Justice requirement. Students also may substitute Pol Sci 331 Social Justice or Pol Sci 4070 Theories of Justice for the Ethics course.

**Research Methods Requirements:**

Students take three methods courses (9 units)
- Pol Sci 363 Quantitative Political Methodology** (3 units)
- Econ 1011 Introduction to Microeconomics (3 units)
- Pol Sci 4043 Public Policy Analysis, Assessment and Practical Wisdom (3 units)

**Note: You may place out of this requirement if you have completed QBA I or II. Math 1011 and University College Applied Statistics will not satisfy this requirement. Additionally, students who place out of this requirement and do not take Pol Sci 363 must take another upper-level class to complete the 40 credits.

**Upper-Division Requirements:**

Students need 12 additional units of upper-level course work (300-400 level) distributed in the following way:

(1) 9 units (three courses) must come from the following Political Science courses***:
- Pol Sci 332 Environmental and Energy Issues
- Pol Sci 3211 Public Opinion and American Democracy
- Pol Sci 345 Legislative Process
- Pol Sci 349 Politics in Bureaucracies
- Pol Sci 4001 American Democracy and the Policy-Making Process (DC Program Only)
- Pol Sci 4731 Global Political Economy
- Pol Sci 4792 Globalization and National Politics
- Pol Sci 480 Topics in International Politics: Growth and Development
- Pol Sci 4013 Negotiating Major Legislation in Congress
- Pol Sci 3070 Politics and Policymaking in the American States
- Pol Sci 489 Politics of Regulation
- Pol Sci 4050 Political Representation
- Pol Sci XXX Environmental Law and Politics in the U.S.
- Pol Sci 3240 The Political Economy of Public Goods
- Pol Sci xxx Environmental Politics in the U.S.

- Pol Sci 3752 Topics in American Politics: Globalization, Urbanization and the Environment
- Pol Sci xxx Public Opinion, Organized Interests and Environmental Politics in the U.S.
- Pol Sci xxx International Relations and the Environment

***Students who have not taken 363 will need to complete four courses.

(2) Social Science breadth requirement. Take at least one offering (3 units) from the following:
- Anthro 3053 Nomadic Strategies and Extreme Ecologies
- Anthro 3322 Brave New Crops
- Anthro 3391 Anthropology of Development
- Anthro 3612 Population and Society
- Anthro 379 Meltdown: The Archaeology of Climate Change
- Anthro 399B Rich Nations, Poor Nations
- Anthro 406 Primate Ecology and Social Structure
- Anthro 4244 Oil Wars: America and the Cultural Politics of Global Energy
- Anthro 4253 Researching Fertility, Mortality and Migration (WI course)
- Anthro 4282 Political Ecology
- ARCH 336A Sustainability
- ARCH 336B Designing Sustainable Environments
- ARCH 654D Metropolitan Landscapes
- Econ 1021 Introduction to Macroeconomics
- Econ 451 Environmental Policy
- Econ 403 Economics of Law
- CNISS 5825 Research Seminar I
- CNISS 5826 Research Seminar II
- U85 IA 5421 International Environmental Issues

(3) Substantive Distribution Requirement

The environmental policy major provides students with the social scientific tools to address policy problems related to the environment. To supplement this social scientific knowledge, it is also important that students have substantive knowledge of the natural science of the environment itself and/or practical experience in the policy area. All students are therefore required to complete one substantive area course (3 units) with a passing grade***:

- Biol 381 Introduction to Ecology
- EPSc 323 Biogeochemistry
to familiarize students with a broad array of political systems.

One of the primary goals of a course in comparative politics is the interactions between political actors throughout the American political system. The pursuit of various objectives. We explore the many ways in which this aspect of political behavior impacts institutions and political science research today. The course is designed around underlying assumptions and themes of contemporary politics and political science research today. The course is designed around the careful reading of primary text materials and engagement with contemporary problems of politics available on the front pages of any daily newspaper. Although designed as a two-semester class, students may enroll in either one or both.

The approach taken in this course can best be characterized as the active acquisition and use of a set of tools for looking at the political world. In other words, instead of putting emphasis on what textbook writers think political scientists know, in this course the emphasis is on “how we know what we know” and on building knowledge. This approach equips students with a set of tools to use long after the course is over. These comparative tools are focused on historical, recent and current events, and students are provided the opportunity to delve more deeply into a study of the parts of the world they find most interesting.

Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA, IS FA : SSP

L32 Pol Sci 103B International Politics
Globalization, the accelerating rate of interaction between people of different countries, creates a qualitative shift in the relationship between nation-states and national economies. Conflict and war are forms of international interaction. Movements of capital, goods, services, production, information, disease, environmental degradation and people across national boundaries are other forms of international interactions. This course introduces the study of global political-economic relations. We focus upon building a toolkit that helps us understand the micro-foundations of the globalization of material and social relations.

Credit 3 units. A&S : SS A&S : IQ, SSC BU : ETH, IS FA : SSP

L32 Pol Sci 1041 Freshman Seminar: Introduction to Political Theory I
Why is democracy a good form of government? What if a benevolent dictator arose who wrote and enforced laws that were just and equitable? What if she honored the sanctity of human life and its flourishing, guaranteed a full range of liberties to her citizens — including political ones, such as the right of free speech and organization (but not including the right to rule)?

Given the problems of most living democracies, why wouldn’t this be a better regime than a democratic one? And are people really capable of governing themselves anyway? Why should we trust them so? In short, what’s so special about “democracy” and its corresponding idol, “public opinion,” that people bow to them as hallowed virtues of a good society? In this class we provide a framework in which these and other central questions of political theory have been and can be addressed. This course is designed to introduce students to the main theoretical issues of Western political theory, including but not limited to the following concepts: justice, legitimacy, equality, democracy, liberty, sovereignty and the role of history in the political and social world. In short, the questions are meant to explore the underlying assumptions and themes of contemporary politics and political science research today. The course is designed around the careful reading of primary text materials and engagement with contemporary problems of politics available on the front pages of any daily newspaper. Although designed as a two-semester class, students may enroll in either one or both.
In this first semester, we lay out the fundamental themes of political theory in Plato’s *Republic* and Aristotle’s *Politics* asking, among other things, what justice is and what place democracy has among other forms of government. Passing briefly onto Augustine and Aquinas’ struggles with religion and civil society, we emerge in modernity with Machiavelli’s Prince and question whether the “good” and the political” are or ought to be different aims. We conclude the semester with the social contract theory of Hobbes and Locke in which political legitimacy is based on the terms familiar to citizens of modernity: the right to rule is somehow related to a citizen’s consent to be governed. In the spring semester, we turn to the struggle that modernity and the Enlightenment raised for issues of politics, including that of history, nature, institution building and economics, guided by the texts of Rousseau, Hamilton and Madison, Tocqueville, Mill, Marx, Nietzsche, and Weber.

Credit 3 units.  A&S : SS

L32 Pol Sci 106 Introduction to Political Theory
This course offers an undergraduate-level introduction to the field of political theory. We focus on three major themes — social justice, power and freedom, and democracy — reading some canonical texts, such as Bentham’s Introduction to the Principles of Morals and Legislation and Marx’s Capital, but emphasizing contemporary works, such as those of John Rawls, Michael Walzer, Michel Foucault and Robert Dahl.
Credit 3 units.  A&S : SS  A&S : IQ, SSC  BU : BA

L32 Pol Sci 2010 Introduction to Environmental Policy
This course provides an introduction to and overview of environmental policy. Subjects covered include the policy process, the behavior of interest groups and political parties, and the actions of policymakers like Congress and the President. We also examine issues such as pollution control, climate change and biodiversity.
Credit 3 units.  A&S : SS  A&S : IQ, SSC

L32 Pol Sci 203C Early Political Thought: Text and Tradition
Same as Hum 203C
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM  FA : SSP

L32 Pol Sci 226 The Immigrant Experience
Same as AMCS 226.
Same as AMCS 202
Credit 3 units.  A&S : SS, CD  A&S : IQ, SSC, LCD  BU : ETH, HUM  FA : SSP

L32 Pol Sci 227 Just Do It! Skills That Turn Passion Into Policy
The course focuses on skills related to the democratic expression of political rights and responsibilities. The course balances background knowledge of the issues with application. Students explore how to use coalition building and advocacy skills to relate to personal issues to public issues. Students research a current Missouri bill, create a strategic plan for its passage or failure, and prepare to give testimony on such bill in a mock House of Representatives committee hearing. Students also learn about ethical dilemmas in policy and politics and create a plan for turning their passions into policy.
Credit 1 unit.  A&S : SS  A&S : IQ, SSC

L32 Pol Sci 258 Law, Politics and Society
This course is an introduction to the functions of law and the legal system in American society. The course material stresses the realities of the operation of the legal system (in contrast to legal mythology), as well as the continuous interaction and feedback between the legal and political systems. There are four specific objectives to the course: (1) to introduce legal concepts and legal theories; (2) to analyze the operation of the appellate courts, with particular emphasis on the U.S. Supreme Court; (3) to analyze the operation of American trial courts, especially juries and the criminal courts; and (4) to examine the linkages between culture and law. Not open to students who have previously taken Pol Sci 358.
Credit 3 units.  A&S : SS  A&S : IQ, SSC

L32 Pol Sci 260 Game Theory in Science and Culture
Introduces the major intellectual insights of game theory in a nontechnical fashion, and examines the influence game theory has had on geopolitics, social philosophy, psychology, art and the humanities. In addition to covering the basic machinery of the theory, the class participates in numerous illustrative classroom games; examines game theory in film, literature and literary criticism; sees how game theory has contributed to social theory; and learns about the background of game theory and its history and perception as a hoped-for tool in the Cold War. Grades based on problems, short essays, two short essay exams and participation.
Credit 3 units.  A&S : SS  A&S : IQ, SSC

L32 Pol Sci 3010 Gender and Politics
This course surveys central topics in the study of gender and politics, covering such issues as women’s participation in political parties and social movements, women as voters and candidates in political elections, feminism and the state, and gender and international politics. It draws on examples from various world regions and time periods to analyze similarities and differences across cases around the globe.
Credit 3 units.  A&S : SS

L32 Pol Sci 3011 Computational Modeling in the Social Sciences
This course introduces students to the theory and practice of computational modeling in social science. Computational modeling allows us to explore topics — including complexity, emergence and dynamics — that are difficult to study using traditional analytic methods. This course covers the theoretical foundations behind computational modeling in addition to offering an introduction to the design and programming of such models.

L32 Pol Sci 3012 Advanced Modeling in the Social Sciences
This course explores advanced topics and issues in the building and validation of models in the social sciences. The principal component of the course is the design and development of an individual research project by each student. The conclusion of the course involves a public research symposium with a poster session in which all students present their models and findings to the broader campus community. Prerequisite: Pol Sci 3011 Computational Modeling in Social Science.
Credit 3 units. A&S : SS A&S : IQ, SSC

L32 Pol Sci 3024 International Institutions
This course surveys in historically and theoretically informed fashion the role of various international institutions in international relations. It addresses the fundamental question of the contribution of international institutions to world order. The course first traces the historical evolution of international organizations before turning to international institutions since World War II. It then focuses on the following: the most important regional international organization, the European Union; the most important international organizations dealing with the issues of peace and security, the United Nations and NATO; and the major international economic institutions, the WTO, the IMF and the World Bank. Prerequisite: Pol Sci 103B Introduction to International Politics.
Credit 3 units. A&S : SS A&S : IQ, SSC, BU : IS

L32 Pol Sci 3031 Race and Ethnicity in American Politics
This seminar discusses the continuing importance of race and ethnicity in American politics and the politics of racial minority groups in America. It examines the disadvantage minorities have in the American political structure, including problems with political participation. It examines how the structure and functions of the branches of government and its bureaucracy affect the aspirations of minorities. The roll of pressure groups on political structure is discussed. Additional discussion focuses on urban politics and tensions.
Credit 3 units. A&S : SS A&S : IQ, SSC

L32 Pol Sci 3030 Civil War and Peace
This course examines the causes and consequences of intrastate conflict as well as the potential solutions to it, drawing on examples from countries throughout the world, including Bosnia-Herzegovina, India, Iraq, Russia, Rwanda, Spain, etc. We consider many potential causes of intrastate violence, including ethnic and religious identities, economic and security concerns, elite manipulation, and international diffusion. In order to understand the challenges countries face recovering from violence, we subsequently examine different ways in which conflicts are conducted, as well as their consequences, including economic underdevelopment, rape, child soldiers and disease. Finally, using what we have learned about the causes and consequences of conflict, we analyze the utility of different tools for managing intrastate conflict, including, but not limited to, minority representation, consociationalism, decentralization and partition.
Credit 3 units. A&S : SS A&S : IQ, SSC, BU : BA

L32 Pol Sci 3093 Politics of the European Union
This class is designed to introduce undergraduates at the junior and senior level to the history and politics of the European Union (EU) and European integration. In the first part of the class, students learn about the interplay of theory and practice in the history of European integration. In the second part, we study the institutions and decision-making processes with reference to the theoretical concepts developed earlier in the course. From there, we examine some of the key EU policies and their implementation. In the final two sections of the course, we look at constitutional politics, and some of the more recent policies and developments.
Credit 3 units. A&S : SS A&S : IQ, SSC

L32 Pol Sci 3103 Topics in Politics: Middle East Politics
This course is intended primarily for sophomores and juniors. The topic of this course varies by semester, dependent on faculty and student interests.
Credit 3 units. A&S : SS A&S : IQ, SSC, BU : BA FA : SSP
The relationship between public opinion and public policy includes presidential approval, congressional approval and the political orientation (ideology and party identification), political information processing, education, core values, racial attitudes, which influence the formation, structure and variation in public opinion: the course describes and analyzes many of the factors that influence the political behavior of citizens and elites, therefore, the course describes and analyzes many of the factors that influence the formation, structure and variation in public opinion: information processing, education, core values, racial attitudes, political orientation (ideology and party identification), political elites, social groups, the media and religion. Additional topics include presidential approval, congressional approval and the relationship between public opinion and public policy. The course also trains students in several concepts of statistical analysis (assuming no prior knowledge) so that students can use these tools as part of their own research projects. Prerequisite: previous course work in American politics or communications.

This course explores the nature of public goods by investigating the economic and political rationales for providing them. We explore the endogenous creation of public goods, such as the formation of mutually agreed upon constitutions to protect property rights and the exogenous imposition of public goods, such as the regulatory framework that provides clean air. Through the use of efficiency analysis, we explore the costs and benefits to alternative institutional arrangements, such as private property or market exchanges, to the government or voluntary provision of public goods.

This course is an introduction to the politics in Latin America, focusing on the trend toward the establishment of democracy. We examine the impact of political culture, economic development, and the legacy of authoritarian regimes on contemporary politics. The course also reviews many of the most pressing challenges confronting Latin-American governments: the role of the military in politics; the reform of political institutions; threats from radical guerrillas and drug traffickers; debt and economic restructuring; and relations with the United States. Country studies focus on Argentina, Brazil, Chile, Peru, Mexico and Nicaragua. Prerequisite: 100-level introductory course in Political Science or its equivalent in History or International and Area Studies.
This class examines the history and politics of American immigration from colonial times to the present. It begins with an overview of the colonial period, then discusses the immigration experiences; transnational issues in immigration; and the impact of immigration on other American social and political processes and events. This class is a writing-intensive and modified version of Pol Sci 226/AMCS 202. Students who have taken that course should not take this course. Because this is a writing-intensive class, we also spend time studying research paper design and writing.

Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI

L32 Pol Sci 3280 Political Intolerance in World Politics
This course is an investigation into the meaning, causes and consequences of political intolerance. The goal is to expose students to contemporary research on (a) how political intolerance is conceptualized and understood, especially within the context of theories of democracy; (b) how political intolerance can be measured, both at the level of the individual and the institution/society; (c) where intolerance originates, both in terms of individual psychology and system-level politics; and (d) what consequences flow from intolerance, especially in terms of legal and extra-legal political repression, as well as cultural consequences (e.g., a “culture of conformity”). The course makes little distinction between American politics and politics in other parts of the world (although no knowledge of specific non-U.S. systems is required as a prerequisite).

Credit 3 units. A&S : SS A&S : IQ, SSC BU : IS

L32 Pol Sci 3292 Topics in Politics: Modern South Asian Politics
This course focuses on the recent political history and development of South Asia. It begins with a review of the British colonial period and the Independence movement. The remainder of the course examines different political issues in India, Pakistan, Bangladesh and Sri Lanka. Topics include political mobilization; land reform; law and politics; social movements; religious and caste politics; the rise of religious nationalism; and political control of the economy. Course website: http://artsci.wustl.edu/~polisci/parikh/asian/.

Credit 3 units. A&S : SS A&S : IQ, SSC BU : HUM, IS FA : SSP

L32 Pol Sci 3293 Modern South Asian Politics
Same as AMCS 3292

Credit 3 units. A&S : SS BU : IS

L32 Pol Sci 3302 Politics and Policies of Immigration in the United States
This class examines the history and politics of American immigration from colonial times to the present. It begins with an overview of the colonial period, then discusses the immigration waves of the 19th and early 20th centuries, and concludes with an examination of current topics and debates about immigration. Issues include racial, ethnic and class relations among groups; changes in immigration policies over time; comparative group experiences; transnational issues in immigration; and the impact of immigration on other American social and political processes and events. This class is a writing-intensive and modified version of Pol Sci 226/AMCS 202. Students who have taken that course should not take this course. Because this is a writing-intensive class, we also spend time studying research paper design and writing.

Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI

L32 Pol Sci 331B Gender and American Politics
This course examines the ways in which issues pertaining to gender are salient in U.S. politics. The course is divided into four parts. First, we examine theoretical approaches to the study of gender and politics, including the use of gender as an analytical category and the relationship between gender, race, ethnicity and power. Second, we study gender-based social movements, including the suffrage and women’s rights movements, women’s participation in the Civil Rights Movement, the contemporary feminist and anti-feminist movements, the gay rights/queer movement and the women’s peace movement. Third, we examine the role of gender in the electoral arena, in terms of how it affects voting, running for office and being in office. Finally, we examine contemporary debates about public policy issues, including the integration of women and gays in the military, sexual harassment, pornography and equal rights.

Credit 3 units. A&S : SS, SD BU : BA, ETH FA : SSP

L32 Pol Sci 3321 Topics in Politics: Constitutionalism and Democracy
An introductory analysis of a range of issues related to constitutions and democratic government. The main focus is on such theoretical questions as: Why do societies produce constitutions? Why do subsequent generations abide by them? What is the relationship between constitutional principles and democratic decision making? Who benefits from constitutional constraints?

Credit 3 units. A&S : SS BU : BA

L32 Pol Sci 3325 Topics in Politics: Constitutional Politics in the United States
The principal purpose of this course is to introduce students to the politics of constitutional interpretation. We first discuss the origins of the Constitution; the structure, operation and work of
courts; and judicial decision making. Afterwards, we examine various areas of the law relating to institutional powers and constraints (e.g., federalism, presidential powers, Congressional authority). In so doing, we develop an understanding for the legal doctrine in each area of the law and also examine explanations for the legal change we observe.

Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L32 Pol Sci 332B Environmental and Energy Issues
This course considers the major issues in these increasingly important areas of public policy. We discuss the importance of political processes and actors on such phenomenon as pollution, global warming, and wilderness protection. This course emphasizes the American experience but also considers international implications. Two lectures and one section meeting each week.

Credit 3 units. A&S : SS A&S : IQ, SSC BU : ETH FA : SSP

L32 Pol Sci 333 Topics in Politics
This course is intended primarily for sophomores and juniors. The topic of this course varies by semester, dependent on faculty and student interests.

Credit 3 units. A&S : SS A&S : IQ, SSC BU : ETH FA : SSP

This course is intended primarily for sophomores and juniors. The topic of this course varies by semester, dependent on faculty and student interests.

Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L32 Pol Sci 3381 Topics in Politics: National Security, Civil Liberties and the Law
This course is intended primarily for sophomores and juniors. The topic of this course varies by semester, dependent on faculty and student interests.

Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L32 Pol Sci 340 Topics in Politics
This course is intended primarily for sophomores and juniors. The topic of this course varies by semester, dependent on faculty and student interests.

Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L32 Pol Sci 3400 Social and Political Philosophy
Same as Phil 340F

Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH, HUM FA : SSP

L32 Pol Sci 3401 Topics in Political Thought
This course is intended primarily for sophomores and juniors. The topic of this course varies by semester, dependent on faculty and student interests.

Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA, ETH, HUM FA : SSP

L32 Pol Sci 342 The American Presidency
Consideration of part played by the president in American politics and public policy. The powers of the president; the staffing and organization of the executive office; the relations of the president with Congress, the bureaucracy and other participants in American politics; presidential elections. Recommended: Pol Sci 101B.

Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L32 Pol Sci 3422 Americans and Their Presidents
Same as AMCS 3422

Credit 3 units. A&S : TH A&S : IQ, HUM

L32 Pol Sci 3431 Constitutional Law
Introduction to constitutional law and practice in the United States. Emphasis on the role of the U.S. Supreme Court as an interpreter of the Constitution.

Credit 3 units. A&S : SS BU : BA FA : SSP

L32 Pol Sci 344 Courts and Civil Liberties
This course focuses on constitutional law principles in the Bill of Rights, and examines how Supreme Court decisions influence these principles in everyday life. We explore how the courts, and particularly the Supreme Court, have interpreted these rights in light of changing times and emerging issues. Topics include the First Amendment; free exercise of religion and the establishment clause; freedom of speech, assembly and association; freedom of the press; the Fourth Amendment and the rights of those accused and convicted of crimes; the right to privacy, including reproductive freedom and the right to die; equal protection and civil rights, including race, gender, sexual orientation; immigrants' rights and voting rights; and civil liberties after September 11. Recommended for the Liberal Arts and Business (LAB) Certificate.

Credit 3 units. A&S : SS BU : BA, ETH, HUM FA : SSP

L32 Pol Sci 3441 Defendant's Rights
This course explores the operations of the American criminal justice system. Substantial emphasis on the constitutional rights accorded to the criminally accused. Readings consist primarily, but not exclusively, of Supreme Court cases.

Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA, ETH FA : SSP

L32 Pol Sci 349 Politics in Bureaucracies
Focuses on politics and political conflicts involving bureaucratic organizations, primarily but not exclusively those of the federal government. Attention given to the characteristics of bureaucratic organizations and their members; their relations with one another as well as with other participants in policy making also considered. Major activities within bureaucracies — planning, program development, organizing, budgeting and service delivery — discussed with a view to clarifying their political implications and consequences; problems associated with controlling and changing bureaucracies.
Credit 3 units. A&S : SS  A&S : IQ, SSC  BU : BA  FA : SSP

L32 Pol Sci 3510 Topics in American Politics: The Supreme Court
This course is intended primarily for sophomores and juniors. The topic of this course varies by semester, dependent on faculty and student interests.
Credit 3 units. A&S : SS  A&S : IQ, SSC  BU : BA  FA : SSP

L32 Pol Sci 3551 The Welfare State and Social Policy in America
How can we understand the recent debate about fundamental health care reform? Should social security be partially or wholly privatized? Was the 1996 welfare reform a success? Contemporary political questions frequently focus on the American welfare state and the social policies that compose it. The first half of this course describes the American welfare state broadly construed, places it in a comparative context, and elucidates major political science explanations for the size and scope of American social policy. We touch on several areas of social policy while constructing the generalized lenses through which particular political outcomes can be understood. The second part of the course then focuses on three major aspects of the American welfare state: health care, old age pensions and policies related to work, poverty and inequality.
Credit 3 units. A&S : SS  A&S : IQ, SSC

L32 Pol Sci 3552 Political Economy of Democracy
In the past few years, a number of important books have appeared that combine elements of economics reasoning and political science, in an effort to understand the wide variation in economic development in the world. This course deals with the logic apparatus underpinning these books. In addition, the course introduces the student to the theoretical apparatus that can be used to examine democratic institutions in the developed world, and the success or otherwise of moves to democratization in the less-developed world.
Credit 3 units. A&S : SS  A&S : IQ, SSC

L32 Pol Sci 358 Law, Politics and Society
This course is an introduction to the functions of law and the legal system in American society. The course material stresses the realities of the operation of the legal system (in contrast to legal mythology), as well as the continuous interaction and feedback between the legal and political systems. There are four specific objectives to the course: (1) to introduce students to legal concepts and legal theories; (2) to analyze the operation of the appellate courts, with particular emphasis on the U.S. Supreme Court; (3) to analyze the operation of American trial courts, especially juries and the criminal courts; and (4) to examine the linkages between culture and law.
Credit 3 units. A&S : SS  A&S : IQ, SSC  BU : BA, HUM  FA : SSP

L32 Pol Sci 359 The Mathematics of Elections
Voting procedures provide the most common means of aggregating the preferences of individuals into societal outcomes. These procedures play an integral role in our daily lives, from having a show of hands to decide which type of pizza to order for a club meeting, to electing a president. This course examines the effects that different voting procedures have on how groups make decisions. We evaluate electoral systems mathematically, by considering the various properties that procedures may or may not satisfy. A classic example is Arrow’s Impossibility Theorem, which tells us that every electoral system must fail to satisfy one or more criteria of fairness or sensibility. In addition to Arrow’s claim, we examine other legislative paradoxes and learn why the choice of electoral procedure is critical to our understanding of how “good” and “bad” decisions can be made. We also discuss the comparative properties of electoral systems in operation, such as fairness, proportionality, representativeness and legitimacy.
Credit 3 units. A&S : SS  A&S : IQ, SSC

L32 Pol Sci 3610 Legislative Politics
This course is an introduction to the politics of the U.S. Congress and the federal lawmaking process. We focus on the behavior of individual legislators and the role they play in crafting federal legislation in policy areas such as health care, civil rights and the environment. In general we examine questions such as: Why do legislators behave as they do? Whose interests are being represented?
Credit 3 units. A&S : SS  A&S : IQ, SSC  BU : BA

L32 Pol Sci 362 Politics and the Theory of Games
This course is intended to cover through analytical discussion and illustrations the basic concepts and major achievements of Game Theory in different subfields of research in the social sciences today. We discuss examples of the usefulness of cooperative and noncooperative game theory to the study of human behavior in general and political science and political economy in particular.
Credit 3 units. A&S : SS  A&S : IQ, SSC  BU : BA  FA : SSP

L32 Pol Sci 363 Quantitative Political Methodology
This is an introduction to research methodology and quantitative analysis for social scientists. Students are introduced to the logic of social scientific inquiry, and to the basic statistical tools used to study politics. Students learn and apply the following to answer substantive questions: measurement, descriptive analysis, correlation, graphical analysis, hypothesis testing, confidence intervals, analysis of variance and regression analysis. Major components of the course include learning how to collect, manage and analyze data using computer software, and how to effectively communicate to others results from statistical analyses. Students work collaboratively on research projects in which they pose their own questions, design a study, collect and analyze the data, and present their findings in a research paper.

Credit 3 units. A&S : SS, QA A&S : IQ, SSC, AN FA : SSP

L32 Pol Sci 3690 Politics of International Trade
In this course we study the relationship between international trade and domestic politics. We cover the basic models of international trade, the distributional consequences of international trade, the relationship between trade and economic development, an analysis of the trade protectionism (causes and consequences) and an analysis of international organizations related to international trade (special focus on the World Trade Organization). Prerequisite: Pol Sci 103B.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : IS

L32 Pol Sci 373 International Political Economy
Analysis of the interplay of economics and politics in the world arena, focused primarily on the political basis of economic policies in both advanced and less-developed societies. Treating differing perspectives on the international economy, production, trade and finance, and international economic relations. Prerequisite: junior standing or permission of instructor.
Credit 3 units. A&S : SS BU : IS FA : SSP

L32 Pol Sci 374 Contemporary American Foreign Policy
This course surveys post-war American foreign policy in historical perspective. It begins by evaluating the rise of the United States as a world power during the 20th century, its current position of primacy and its consequences in the post-Cold War period, and the distinctive traditions and institutions shaping the making of American foreign policy. It then examines the origins of the strategy of containment in the early Cold War period before considering how these debates animated the changing course of American foreign policy through the various phases of the Cold War conflict. The course concludes by analyzing American foreign policy since the end of the Cold War, up to and including debates about the consequences of September 11, 2001 for the United States’ position of primacy, the Bush Doctrine and the American-led intervention in and subsequent occupation of Iraq.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : IS FA : SSP

L32 Pol Sci 3781 Topics in Politics: Israeli Politics
This course is intended primarily for sophomores and juniors. The topic of this course varies by semester, dependent on faculty and student interests.
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD BU : IS FA : SSP

L32 Pol Sci 3782 Topics in Comparative Politics: Terrorism and Political Violence
This course is intended primarily for sophomores and juniors. The topic of this course varies by semester, dependent on faculty and student interests.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA

L32 Pol Sci 381 The Politics of Electoral Systems
It is impossible to appreciate the variety of electoral systems used to select legislative bodies without taking a comparative perspective. We begin this course with a brief consideration of what goals political founders and reformers are pursuing when they design an electoral system. Then we define the conceptual dimensions along which electoral rules can vary. With these basic concepts in hand, we then study specific national cases to assess the impact of electoral laws on party systems, legislator behavior and interbranch relations. After completing a series of case studies, we return to a comparative perspective to discuss recent scholarly research in this field. This research conceives of electoral systems as incentive structures for voters, candidates, parties and politicians. To wrap up the course, we return to the question of what founders and reformers can hope to achieve when selecting electoral systems.
Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI BU : BA

L32 Pol Sci 389 Power, Justice and the City
This course examines normative theoretical questions of power and justice through the lens of the contemporary city, with a particular focus on American urban life. It explores urban political economic problems, questions of racial hierarchy and racial injustice in the modern metropolis, and the normative and practical dilemmas posed by “privatism” in cities and their suburbs. In addition, the course devotes considerable attention to honing students’ writing skills, through class assignments that stress rewriting and revising, and also through four in-class writing workshops devoted to formulating a thesis and making an argument; revising and rewriting; writing with style; and peer consultation.
Credit 3 units. A&S : SS, SD, WI A&S : IQ, SSC, SD, WI BU : BA

L32 Pol Sci 389A Power, Justice and the City
This course examines normative theoretical questions of power and justice through the lens of the contemporary city, with a particular focus on American urban life. It explores urban
political economic problems, questions of racial hierarchy and racial injustice in the modern metropolis, and the normative and practical dilemmas posed by "privatism" in cities and their suburbs. In addition, the course devotes considerable attention to honing students' writing skills, through class assignments that stress rewriting and revising, and also through four in-class writing workshops devoted to formulating a thesis and making an argument; revising and rewriting; writing with style; and peer consultation.

Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD EN : S

L32 Pol Sci 391 History of Political Thought I: Justice, Virtue and the Soul
This course offers a critical introduction to the main issues and debates in Western political theory, including but not limited to the topics of justice, legitimacy, equality, democracy, liberty, sovereignty and the role of history in the political and social world. This course is the first in a three-semester sequence on the history of political thought, and students are encouraged, but not required, to take the courses in chronological sequence. The first semester begins with ancient Greek political thought and follows its development up to the early 16th century.

Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA

L32 Pol Sci 391A Democracy and Citizenship Seminar II
What does it mean to be a citizen in a democratic society? What are the rights of citizenship and what are its responsibilities? How are the answers to these questions different for citizens of the United States of America, with its particular history, values and status in the world? Enrollment in this seminar is limited to freshmen who have been admitted to the Democracy and Citizenship Focus Program.

Credit 1 unit.

L32 Pol Sci 392 History of Political Thought II: Legitimacy, Equality and the Social Contract
Government is often justified as legitimate on the grounds that it is based on the consent of the governed. In this course, we examine the origins of this view, focusing our attention on canonical works in the social contract tradition, by Thomas Hobbes (1588–1679), John Locke (1632–1704), Jean-Jacques Rousseau (1712–1778), David Hume (1711–1776) and Immanuel Kant (1724–1804). This course is the second in a three-semester sequence on the history of political thought. Students are encouraged but not required to take all three courses. Prerequisite: one previous course in political theory or political philosophy.

Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA

L32 Pol Sci 393 History of Political Thought III: Liberty, Democracy and Revolution
How, if at all, should the political institutions of the modern state express and secure the liberty and equality of citizens? What is the political significance of private property? Is world history to be understood as progress toward one best form of government — capitalist democracy, perhaps, or communism? What forces drive history? We address these and other timeless political questions through close reading and rigorous analysis of classic texts in the history of Western political thought. Authors studied include Hegel, Marx, Tocqueville, John Stuart Mill and Nietzsche. Prerequisite: one previous course in political theory or political philosophy. The course is the third in a three-semester sequence on the history of political thought, and students are encouraged but not required to take the courses in chronological sequence.

Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA

L32 Pol Sci 400 Research Experience in Institutional Analysis
Same as ISA 400
Credit 3 units.

L32 Pol Sci 4001 American Democracy and the Policy-Making Process
Credit 3 units.

L32 Pol Sci 4010 Pluralism, Liberalism and Education
How should liberal democratic states respond to religious and cultural pluralism? In what ways is pluralism different from mere disagreement, and what normative implications does pluralism have for public policy? How can liberal states justify using their coercive power against a background of pluralism and in ways that systematically disadvantage certain religious and cultural groups in society? In particular, what is to be done when religious parents and the liberal state make conflicting judgments about the proper education of children? When should the state defer to parental judgments and what are the grounds for legitimately refusing to do so? Readings are taken from contemporary political philosophy. Prerequisites: Poli Sci 106, Poli Sci 107, Phil 340, or permission of instructor.

Credit 3 units. A&S : SS A&S : IQ, SSC

L32 Pol Sci 4013 Negotiating Major Legislation in Congress
This course examines the outcomes of the legislative process in the United States. The first third of the course examines key concepts and major determinants of the negotiation process: majority rule instability, agenda control, political parties, the amendment process and the uncovered set. The rest of the course examines the negotiations that led to some of the most
significant legislation in the past 100 years, from the Federal Reserve Act of 1913 through the Voting Rights Act of 1965 to the immigration bill of 2006. Along with other assignments, each student writes several drafts of a major research project on a major piece of legislation. Each research project examines the amendments offered, the strategic intentions of the amendments’ sponsors, the agenda process and the role of party. Prerequisite: Pol Sci 101B.
Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI

L32 Pol Sci 402 Topics in Political Thought
Credit 3 units. A&S : SS A&S : IQ, SSC

L32 Pol Sci 4025 Experiments in Politics
This is a lab-style seminar in which we design, field and analyze an experimental study on political attitudes or political behavior. Our ultimate goal is to publish a scholarly article in a peer-reviewed journal in political science. Prerequisite: Pol Sci 363 Quantitative Political Methodology (can be taken concurrently).
Credit 3 units.

L32 Pol Sci 4030 Political Theory of Education
This course explores issues of authority, legitimacy, citizenship, freedom and equality through contemporary readings in the political theory of education. What is to be done when parents, citizens and educational experts make conflicting judgments about the proper education of children? When should the state defer to parental judgments and what are the grounds for legitimately refusing to do so? How should public schools aim to equip their students for the responsibilities of citizenship in a diverse liberal democratic state? What do the concepts of equality and equality of opportunity mean in the context of education, and (how) should governments pursue these values through education policy? We explore these issues through contemporary works of political theory as well as through considering a number of important U.S. court cases, including those dealing with the schooling of children from minority religious and cultural groups, affirmative action in university admissions, and school desegregation plans. Prerequisite: one previous course in political theory or political philosophy.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : ETH

L32 Pol Sci 4040 Capstone Seminar in International Politics: Public Policy Responses to Global Poverty
This course is designed for senior political science majors with a background in international politics (see prerequisites). In this course we examine the theoretical and empirical literature on the causes of global poverty and evaluate public policy responses from the international community. Topics include: foreign aid (including micro-finance), debt relief, trade reform, global health initiatives and private-public partnerships. Students are expected to have a strong theoretical background in the tools and concepts in political science and a strong interest in development topics. As a capstone class, the teaching style focuses on a student-centered classroom, where students run the class and help moderate discussions with outside speakers. Prerequisites: Pol Sci 103B, one advanced course in international politics, and a second advanced course in either international or comparative politics.
Credit 3 units. A&S : SS A&S : IQ, SSC

L32 Pol Sci 4043 Public Policy Analysis, Assessment and Practical Wisdom
This course provides an introduction to the study, professional practice, ex-ante and ex-post assessment of public policy and the professional practice of public analysis. We rely heavily on David L. Weimer and Aidan R. Vining’s text, Policy Analysis: Concepts and Practice. This course covers a series of critical concepts in the understanding of practicing, analyzing and assessing public policy.
Credit 3 units. A&S : SS A&S : IQ, SSC

L32 Pol Sci 405 Topics in Political Thought
Credit 3 units. A&S : SS A&S : IQ, SSC

L32 Pol Sci 4050 Political Representation
In this class we study the concept of representation. Historically, how has representation been conceived? Conceptually, what should count as political representation, and must it always be democratic? As a normative problem, what should representatives do? And how should institutions be designed to foster these normative ends? Readings provide a broad overview of the subject and address enduring questions, including problems of minority representation, voting rights and redistricting. Prerequisite: Pol Sci 106 or Pol Sci 107.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : ETH

L32 Pol Sci 406 Topics in Political Thought
Questions regarding the relationship between the state and civil society are among the most enduring in political science — and the most pressing in contemporary political practice. This course examines an array of texts in political theory and recent empirical studies of the relationship between state and civil society. Among the questions we address are the following: What kinds of groups “count” as being part of civil society? What is the relationship between the state and civil society in a democracy? Can we meaningfully distinguish between political associations and economic associations? What is the relationship between voluntary associations and the market? What is the purpose of civil society? This course focuses on close readings of the assigned texts and consideration of contemporary understandings of the topic. It is aimed at students interested in comparative politics, political philosophy and political economy.
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP
L32 Pol Sci 4070 Global Justice
This course examines contemporary debates and controversies regarding global justice. Seminar discussions are arranged around significant issues in the current literature. For example: What (if anything) do we owe to the distantly needy? Do we have special obligations to our compatriots? Do political borders have normative significance? And so on. This course is of interest not only to political theorists, but also students in other fields interested in social justice or international relations generally. Credit 3 units. A&S : SS A&S : IQ, SSC

L32 Pol Sci 412 Directed Readings
This is a course of readings in political science taken under the direction of an instructor in the department. Credit -3 unit. A&S : SS FA : SSP

L32 Pol Sci 413 Directed Research
Research activities or project in political science done under the direction of an instructor in the department. Credit -3 unit. A&S : SS FA : SSP

L32 Pol Sci 414 Directed Fieldwork
This course is a fieldwork project carried out under the direction of an instructor in the department. Credit -9 unit. A&S : SS FA : SSP

L32 Pol Sci 415 Senior Thesis Research
Intensive research, conducted under the supervision and guidance of a faculty sponsor of the thesis. Credit -3 unit. A&S : SS FA : SSP

L32 Pol Sci 419 Teaching Practicum in Political Science
This course is an opportunity for undergraduates to assist in course instruction, tutoring and preparation of problems, readings and exam materials with permission and under supervision of instructor. This course counts toward up to 6 hours of credit in an advanced field for the Political Science major. Credit -3 unit. A&S : SS FA : SSP

L32 Pol Sci 4212 Elections
This course examines how politicians and policies are selected by citizens in democracies. The literature exploring the rules and procedures that govern elections is perhaps the most theoretically and empirically sophisticated body of knowledge in the study of politics. We explore how differences in these institutional rules across a variety of democracies shape the types of strategic choices voters make, the coalitions that legislators form, whose interests are represented, the structure of parties, the career paths of politicians, and the policies that governments pursue. We further investigate how, when and why electoral rules are changed with reference to several recent cases of electoral reform. Credit 3 units. A&S : SS A&S : IQ, SSC

L32 Pol Sci 4231 Contemporary Issues in Latin America
How do the institutional designs of contemporary democratic governments help us understand the nature and quality of representation? We concentrate on variations in the powers granted presidents by constitutions as well as the institutional determinants of whether executives are likely to find support for their policies in the legislature. In addition, we explore how incentives established by electoral laws influence the priorities of members of congress. Given all these variations in democratic institutional design, can voters go to the polls with the confidence that politicians will implement the economic policies for which their parties have long stood or which they promised in their campaigns?. Credit 3 units. A&S : SS A&S : IQ, SSC BU : IS FA : SSP

L32 Pol Sci 4241 Topics in American Politics: Race and Politics
From the moment enslaved Africans were brought to American shores, race and racism has been central to the American political project. In this class we examine how notions of race and racism inform conceptions of citizenship, the allocation of state resources, the development of political parties, and political participation. We also examine the way that race and racism influence public opinion. Credit 3 units. A&S : SS A&S : IQ, SSC, BU : IS FA : SSP

L32 Pol Sci 426 Topics in American Politics: Politics of the Civil Rights Movement
This course is intended primarily for sophomores and juniors. The topic of this course varies by semester, dependent on faculty and student interests. Prerequisite: Pol Sci 101B. Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD FA : SSP

L32 Pol Sci 4260 Writing about Civil Rights
The substantive goal of this course is to study the civil rights movement in order to learn more about the role of social movements, federalism, the legislative process, the presidency, political parties and the courts in American politics. This is a writing-intensive seminar, limited to 18 students, each of whom write three essays. Each student submits an early draft of each essay, which is edited and returned to the student for polishing. There are review sessions on grammar, punctuation, word usage and paragraph construction. The readings for the course include some of the best essays on the subject of civil rights by W.E.B. DuBois, Malcolm X, Martin Luther King Jr. and others. Prerequisite: Pol Sci 101B. Credit 3 units. A&S : SS, SD, WI A&S : IQ, SSC, SD, WI
L32 Pol Sci 4281 Comparative Political Parties
An introduction to theories and concepts used in the analysis of political parties in democratic regimes, with emphasis on the classic literature covering West European advanced industrial democracies and the more recent scholarship on Latin-American party systems. The course illuminates the complex aims, consequences and characteristics of modern party politics. Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L32 Pol Sci 4331 Topics in Comparative Politics
Credit 3 units. A&S : SS A&S : IQ, SSC

L32 Pol Sci 4400 Advanced Social and Political Philosophy
Same as Phil 4400
Credit 3 units. A&S : TH A&S : IQ, HUM FA : SSP

L32 Pol Sci 4402 Topics in Political and Social Theory: Constitutionalism
This course is intended primarily for sophomores and juniors. The topic of this course varies by semester, dependent on faculty and student interests. Credit 3 units. A&S : SS

L32 Pol Sci 4451 Contemporary Politics in India
This seminar examines current topics and controversies in contemporary Indian politics. The course has three main foci: the links between politics and economic liberalization over the past two decades; the links between ascriptive identities such as religion, caste and gender and contemporary political processes, including ethnic and gender quotas; and the changes in party politics at the national and state levels that have accompanied the decline of Congress party dominance. Specific topics include the role of caste and religion in contemporary politics; the rise of state parties and its effects on federal relations; the effects of economic reform and globalization on economy and society; urbanization and migration flows; the rise of modern Hindu nationalism; and the links between collective violence and electoral politics. Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD BU : IS

L32 Pol Sci 4504 Contemporary Democratic Theory
Contemporary debates in democratic theory have produced a number of challenging and provocative accounts of how democratic institutions can and should work. In this course we analyze a number of competing theories of democracy and assess the similarities and differences among them. Although the course focuses primarily on theoretical issues, special attention is given to how empirical research in the social sciences on democratic institutions and procedures informs and clarifies these debates. Credit 3 units. A&S : SS, WI FA : SSP

L32 Pol Sci 451 Topics in American Politics: Supreme Court
This seminar has two purposes: to introduce students to the state of the art in studies of the Supreme Court and to cover a series of particular topics with emphasis on the major controversies within the field of law and the courts. Credit 3 units. A&S : SS FA : SSP

L32 Pol Sci 4513 Topics in Politics: Criminal Law and Criminal Justice: Homicide
Seminar investigates current controversies surrounding the homicide laws. Topics include the definitions of homicide and claims of self-defense, the controversies about admissions of evidence at various stages of prosecution, and the debates about the use of capital punishment (including the capital punishment of youths). Includes general academic readings, readings of recent court opinions, and guest discussants from the legal community. Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI BU : BA FA : SSP

L32 Pol Sci 4522 Topics in American Politics
This course is intended primarily for sophomores and juniors. The topic of this course varies by semester, dependent on faculty and student interests. Credit 3 units. A&S : SS

L32 Pol Sci 4551 Seminar in Political Economy
This research seminar introduces the student to recent work on the political economy of democracy. We start with a historical account of the development of democratic institutions in Britain and the United States, and then continue with recent work on modeling elections. We compare elections in countries that make use of proportional electoral systems, such as Israel, with those such as the United States and Britain that are highly majoritarian. Finally, we discuss the forces of democratization and globalization. The required work for the seminar is a research paper approximately 20 pages (double-spaced) in length. Credit 3 units. A&S : SS A&S : IQ, SSC

L32 Pol Sci 4552 Comparative Political Economy
This seminar introduces the student to aspects of social choice theory, applied to themes to do with the economic origins of democracy, democratization and the stability of social orders. We read and discuss a number of recent books: Acemoglu and Robinson, Economic Origins of Dictatorship and Democracy; North, Weingast and Wallis, Violence and Social Orders; Przeworski, Democracy and Development; Ferguson, The Ascent of Money; and Collier, Wars, Guns and Votes. If time permits, we may discuss recent work by Stern, The Economics of Climate Change. Students are expected to work on two short
L32 Pol Sci 4621 Politics and the Theory of Games
This course covers basic primitives and more sophisticated tools of game theory as they are used in contemporary political science. It covers some issues of the forefront of contemporary research in game theory as the central analytical tool in studying the science of politics. The main substantive issues are the emergence of law and order in society, markets vs. political mechanisms, and the distinctive characteristics of parliamentary vs. presidential democratic systems. The course also includes some real case studies, basic experiments and, in general, a lot of fun.
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

Same as History 4894
Credit 4 units. A&S : TH A&S : IQ, HUM FA : SSP

L32 Pol Sci 4730 Political Economy of Multinational Enterprises
In this class we explore the literature in political science and economics on the relationship between multinational enterprises and domestic governments. The four main themes of the course are: (1) defining and understanding multinational enterprises; (2) governments attracting and competing for multinationals; (3) the impact of multinationals on economic development and groups within society; and (4) attempts to regulate multinationals both domestically and internationally. Prerequisite: Pol Sci 102 or 103B.
Credit 3 units. A&S : SS A&S : IQ, SSC

L32 Pol Sci 4731 Global Political Economy
This course borrows on the insights of international relations scholarship and economic theory to develop a broad understanding of international economic relations. Specifically, this course attempts to address the following two sets of questions: (1) How do global economic relations fit into the broader category of international relations? How do the existing theories in international relations (liberalism, realism and Marxism) help us understand international economic relations between nation-states? (2) What are the effects of these international economic forces (trade, finance and multinational production) on domestic governments and societies?
Credit 3 units. A&S : SS A&S : IQ, SSC BU : IS FA : SSP

L32 Pol Sci 475 Topics in International Politics
This course is intended primarily for sophomores and juniors. The topic of this course varies by semester, dependent on faculty and student interests.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : IS FA : SSP

L32 Pol Sci 4761 Politics of International Finance
In this course we examine the complex relationship between international finance, economic development and domestic politics by drawing on the recent scholarly literature in economics, political science and finance. The focus is on the theoretical literature on both the determinants of international financial flows and its effects on domestic societies. Specially, we focus on five forms of international finance: (1) international equity markets (stocks), (2) flows of foreign direct investment (multinational corporations), (3) currency markets (with a special focus on currency crisis), (4) international debt and (5) international aid.
Credit 3 units. A&S : SS FA : SSP

L32 Pol Sci 4792 Globalization and National Politics
This seminar examines globalization and its interaction with national politics. The movements of ideas, capital, goods, services, production and people across national borders provide a skeletal framework for the global political economy. Politicians, policy makers and societies discover new opportunities, but also dilemmas, as expanding interdependence challenges traditional notions of sovereignty and national policy autonomy. Prerequisite: Pol Sci 102 or Pol Sci 103.
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L32 Pol Sci 480 Topics in International Politics: Growth and Development
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L32 Pol Sci 489 Politics of Regulation
Events such as the Gulf oil spill and the economic meltdown have dramatized the importance of regulation in the United States, and at the same time called into question the most fundamental beliefs about the nature of the regulatory process. This course reviews the notion of market failure as basic to understanding the rationale for government regulation; it also examines theories of governmental failure as a source of skepticism and concern regarding impediments to effective regulation. Much of the course reviews the development of regulatory machinery in the 20th century. We examine the political forces that have resulted in expansion of the institutions of regulation — interest groups, partisan conflict, legislative negotiation and executive leadership. We examine these forces in detail in examining the political and legislative response to recent financial and environmental crises.
Credit 3 units. A&S : SS WI A&S : IQ, SSC, WI
L32 Pol Sci 491 Collection and Analysis of Qualitative Data
This course covers basic techniques for collecting, interpreting and analyzing qualitative data. Students select a research project, collect appropriate qualitative data and conduct a preliminary analysis. Students learn how to gather several types of qualitative data, including participant observation and open- and closed-ended interviews. In addition, they evaluate and analyze primary data collected by others including oral histories, archival records, interview transcripts. We consider the advantages and disadvantages of non-randomly collected data, such as those gathered though ethnographic and archival methods. We assess the utility of building statistical datasets from such data, and students learn the basic techniques of using computer programs such as Nvivo and Atlas.ti for qualitative data. Biweekly assignments that focus on different aspects of collection and analysis are designed to help students produce a research paper as a final project.
Credit 3 units. A&S : SS A&S : IQ, SSC

L32 Pol Sci 495 Research Design and Methods
This course provides an introduction to qualitative and quantitative research methods in political science. Topics address issues related to theory building as well as theory testing. Technical issues related to these methods are not the focus of this course, as are theoretical issues regarding the advantages and disadvantages of the different approaches. Ultimately, the goal of this course is twofold: (1) to instruct students to critically analyze scholarly articles with particular attention to research design; and (2) to guide students in how to design an original research project. Both the reading assignments, including methodological and applied readings, and the written assignments are directed toward these goals.
Credit 3 units. A&S : SS A&S : IQ, SSC

L32 Pol Sci 496 Game Theory and Collective Choice
An introduction to models of collective choice important in political science, including game theory, the spatial voting model and axiomatic social choice theory. The course concentrates primarily on noncooperative game theory, whose main topics include: strategic and sequential forms, Nash equilibrium, solution by backward induction, imperfect information, repeated games; and applications to voting, campaigning, public goods, agenda design, bargaining and collective action. With noncooperative games as a foundation, the course then examines cooperative game theory (games in coalition form), voting as a social choice mechanism (including the median voter theorem and global cycling theorems), and social-choice possibility theorems (such as Arrow’s Theorem). Prerequisite: Math 131 Calculus I or Pol Sci 5052 Mathematical Modeling, or equivalent.
Credit 3 units. A&S : SS A&S : IQ, SSC

Portuguese
Portuguese is the language spoken in nine countries spanning four continents. The giant looming in this group, of course, is Brazil, a powerful emerging economy of this century. A few years ago, students learning Portuguese were attracted by the vibrant Brazilian culture, its world-renowned music and Capoeira, an African influenced martial art, as well as its five soccer World Cup titles. Nowadays, even though these features still enchant people here and elsewhere, more and more business, economics and environment majors are taking Portuguese, aware of the importance of the country in the new world order.

Energy-independent since 2006 and a pioneer in the production of ethanol, “Brazil has an energy policy that has spawned the world’s most vibrant biofuels industry,” a Newsweek article of 2009 reports. With a population of more than 190 million people, it is one of the 10 largest markets in the world.

The reasons may vary. You may be interested in Latin American issues or in global matters, willing to explore rich natural resources or participate in the country’s technological possibilities. Portuguese language can supplement your education and, for those already fluent in Spanish, it represents a chance to take fast-paced classes and be fluent in one more language in no time.

At Washington University, Portuguese classes are marked by a positive environment and the same joy that make Brazil the right place to host the Summer Olympics in 2016 and the World Cup in 2014. Outside the classroom, you can improve your fluency at Mesa Brasileira, a weekly conversation table, and choose from study abroad programs affiliated with the university, either for the summer or for an entire semester.

Finally, remember that Brazil offers more than 7,000 miles of coastline with beautiful beaches to reward all your hard work. Bem-vindos!

Contact Person: Helene Abrams
Phone: 314/935-5173
E-mail: hcabrams@wustl.edu
Departmental website: http://rll.wustl.edu

For a list of affiliated faculty, please see the Department of Romance Languages and Literatures faculty (p. 666) page.

The Department of Romance Languages and Literatures offers course work in Portuguese; however there is no major in this area.

The Department of Romance Languages and Literatures offers course work in Portuguese; however there is no minor in this area.
**Portuguese**

L37 Portug 101 Portuguese I
Introduction to Portuguese language. The course emphasizes acquisition of communicative ability. It also covers basic grammar points through reading and writing activities. Classes are taught entirely in Portuguese. No prior experience in the language is required.
Credit 5 units. A&S : LA A&S : IQ, LCD, LS BU : IS

L37 Portug 102A Portuguese II
Introduction to Portuguese language. This second course in the Portuguese program emphasizes acquisition of communicative ability. It also covers basic grammar structures through reading and writing activities. Classes are taught entirely in Portuguese. Prerequisite: Portug 101 or permission of instructor.
Credit 5 units. A&S : LA A&S : IQ, LCD, LS BU : IS

L37 Portug 103 Portuguese for Spanish Speakers I
Intensive and accelerated course especially designed to take advantage of students' knowledge of Spanish and to promote a more rapid learning of Portuguese. Classes are entirely taught in Portuguese and stress oral communication, basic use of grammar, reading and writing skills. Intermediate online placement exam in Spanish is required.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : HUM

L37 Portug 104 Portuguese for Spanish Speakers II
This course intends to offer a sequence in the learning process initiated in Portug 103. It is a fast-paced class, designated for Spanish speakers with the objective of improving conversational, writing and reading skills. Prerequisite: Portug 103 or permission of instructor.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : HUM

L37 Portug 201 Intermediate Portuguese 1: Reading and Conversation
The goal of this accelerated-pace course is to review and to enhance the content learned at the basic level. Through reading (we read three short contemporary Brazilian novels) and related conversational activities, students are expected to enrich their vocabulary, gain fluency and improve reading comprehension ability. Prerequisites: two college semesters of Portuguese or permission of instructor.
Credit 3 units. BU : IS

L37 Portug 201 Reading and Conversation I
The goal of this course is to review and to enhance the content learned at the basic level. Through reading (we read three short contemporary Brazilian novels) and related conversational activities, students are expected to enrich their vocabulary, gain fluency and improve reading comprehension ability. Prerequisites: two college semesters of Portuguese or permission of instructor.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : IS

L37 Portug 220 Reading and Conversation II: Intermediate Portuguese
This course is a continuation of Portug 215, therefore an intermediate level in the Portuguese section. Its main goal is to improve students' reading proficiency, as well as to provide a class environment in which conversational skills can be practiced and made into a solid foundation. In addition, the class provides tools to expand vocabulary and promote a cultural understanding of Brazil. Prerequisite: Portug 215 or permission of instructor.
Credit 3 units. A&S : LA A&S : IQ, LCD

**Praxis**

The Praxis program provides an exciting opportunity to combine the analytical reading, writing and thinking skills of a liberal arts education with the marketable skills required in the 21st century to take students into career paths of their own design.

**Eligibility Requirements:** The program is designed for students entering their sophomore year. Students must fill out an application for the program (available online at college.artsci.wustl.edu/praxis) by the middle of the second semester of their freshman year. Students must have maintained at least a 3.0 grade point average in their first semester to be considered eligible.

**Faculty:** The Arts & Sciences faculty, from a wide variety of backgrounds, have helped to develop the program and are eager to teach, monitor and mentor the Praxis students. In addition, leaders in business, nonprofit organizations, government and the like, many of whom discovered the foundation for their success in liberal arts studies, will be lecturers in the signature Praxis courses.

**Focused Workforce Curriculum:** Not only does the Praxis program provide you with the foundation of a liberal arts education, the curriculum is designed specifically to provide you with many additional tools essential for your future in the world of work. Besides the specialized content of your particular field, you will be acquiring the expertise essential for your first job as well as for careers that may not yet exist:

- Analysis of multiple perspectives essential in the increasing globalization of our world
- Critical thinking
- Familiarity with quantitative analysis and methods

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• Outstanding writing and speaking skills
• Foreign language literacy and culture
• Team and group work expertise and psychology
• Essential skills in traditional and emerging technology.

Internships: Your Praxis experience culminates in an internship taken normally at the end of your junior year that allows you to synthesize the tools and theories you have learned and use them in the workplace. Locations for internships may include national and international sites.

Community: The success of our students is central to our program. Your academic advisers, as well as each Praxis faculty member, assist you in tailoring your education to your own interests and goals. In particular, your own faculty mentor closely monitors your progress. The faculty and staff, you and your fellow Praxis students form a supportive community that stimulates and encourages the highest standards of excellence in your studies and in your chosen careers.

The Program

1. Leadership and group experience (3 units) (fall of sophomore year)
   
   Required: Praxis 201 Leaders in Context

2. Information technology skills (2 units) (fall of sophomore year)
   
   Required: Praxis 207 Fluency in Sociotechnology

3. Communication skills, both written and oral (3 units) (spring of sophomore year)
   
   Required: Praxis 285 Communication That Works

4. Analytic and problem-solving requirement (6 units)
   
   Required: Econ 1011 Introduction to Microeconomics
   
   A second course in analytic skills (select one from below):
   Econ 1021 Introduction to Macroeconomics
   Phil 100G Logic and Critical Analysis

5. Quantitative Skills (3 units)
   
   Required: A course in statistics (select one from below):
   Math 1011 Introduction to Statistics
   Math 2200 Elementary Probability and Statistics
   Math 3200 Elementary to Intermediate Statistics and Data Analysis

6. International perspective or experience (3 units)
   
   Required:
   The study of any language through the 300 level
   or
   Study Abroad
   or

One course in international economics or economic development, or by petition (must be 300 level or above), namely:

- Anthro 306B Africa: Peoples and Cultures
- Anthro 3322 Brave New Crops

7. Internship (3 units)
   
   As the capstone experience of the Praxis program, the internship allows students to put into practice the skills and knowledge learned in the Praxis curriculum. The Praxis internship is conducted with the mentorship of a sponsoring Praxis faculty member and usually occurs by the end of the junior year. Students should contact the Praxis internship coordinator and have a faculty mentor in place before beginning the internship. It is not possible to fulfill the internship portion of the Praxis program with an internship that occurred before completing the majority of Praxis requirements, and the internship should consist of 135 hours.

Upon completion of the internship, there are two options available for students in order to fulfill the Praxis internship requirement. In conjunction with the approval of the faculty sponsor, the student submits a 10-page paper exploring the relevant issues and questions set by the sponsoring faculty. Depending on the topic, nature of the internship and discretion of the sponsoring faculty, a daily journal may be submitted in lieu of the 10-page paper. For details as to the requirements for this internship, contact Dean Kiefer at jkiefer@wustl.edu. Required for completion of the Praxis program.

8. Praxis Seniors Master Class (1 unit)
   
   As a capstone to the Praxis Program experience, this course revisits the major themes of the core Praxis courses in order to analyze their meanings in an interdisciplinary way. Students learn and explore the deeper applications of the topics introduced to them in their Praxis course work at a time in which they can reflect about what they have learned in the context of their internship experience.

Interdisciplinary lectures from the Praxis associated faculty in political science, anthropology and psychology will include the topics of organizational culture, leadership, followership, cooperation, communication, decision-making and presentation. This course is a requirement for the seniors enrolled in the Praxis program.

Contact Person: Dean Kiefer
E-mail: praxis@artscli.wustl.edu
Departmental website: http://college.artscli.wustl.edu/praxis

Director
Joy Kiefer
Assistant Dean
PhD, Washington University
The Praxis program is not a major program. It is designed for students entering their sophomore year and is available by application only. Students must apply online at college.artsci.wustl.edu/praxis by the middle of the second semester of their freshman year.

The Praxis program is not a minor program. It is designed for students entering their sophomore year and is available by application only. Students must apply online at college.artsci.wustl.edu/praxis by the middle of the second semester of their freshman year.

Praxis

L62 Praxis 201 Leaders in Context
In this course we explore leadership both theoretically and practically. Focus is on understanding the concept of culture and how the cultural context informs a leader’s style and effectiveness. This course also is designed to help students develop insights about leadership practice through readings, discussions, conversations with leaders, and group projects based on fieldwork. Students examine a wide variety of leaders and leadership styles in order to better understand how leaders mobilize followers within the constraints of their particular settings. Students also analyze the creation of institutional identity within organizations and corporate culture and explore effective leadership practices within these settings, as well as analyzing some cross-cultural examples of leadership. This course is limited only to students enrolled in the Praxis program. Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA

L62 Praxis 207 Fluency in Sociotechnology
This course studies the fundamentals of technology and how that technology is effectively implemented in organizations and affects human interactions and processes. We consider much of Microsoft Office: Excel, Access and PowerPoint and how the presentation of data in these forms affects our decision-making processes and how humans interact using these technologies. We also develop web skills with a close look at how presentation of information and data in general functions or does not function based simply on how it is presented. This course is limited only to students enrolled in the Praxis program. Credit 2 units. A&S : SS A&S : IQ, SSC

This course seeks to add in-depth sophistication to the functional skills acquired in one of the Praxis core courses, Fluency in Sociotechnology. Through interdisciplinary reading and exercises, the course illustrates to students that not all visual messages are created equal even when they contain the same information. For example, the most commonly used presentation tool, Microsoft PowerPoint, is routinely used in ways that misrepresents the data it is meant to explain. Organizations often create confusing and complicated spreadsheets that produce numerous and costly errors, the very thing the software is meant to eliminate. Furthermore, websites are regularly so difficult to navigate and use they unknowingly hemorrhage profits and customers, the two things the technology is designed to attract. In this course, students learn the social, psychological and organizational implications of using these technologies so they may become more skillful and effective practitioners. This course is limited only to students in the Praxis program. Prerequisite: Praxis 207 Fluency in Sociotechnology. Credit 3 units. A&S : SS A&S : IQ, SSC

L62 Praxis 285 Communication That Works
This course focuses on the communication forms and skills essential to contemporary living and working. Various forms of writing for different audiences and purposes: business letters, memorandums, proposals, reports, press releases, speeches as well as public speaking are practiced and critiqued. The use of technology common in public speaking is practiced and critiqued. The use of technology common in public presentations is expected. Course reading is supplemented with viewing and listening. Final grade is based on combination of quizzes, writing assignments and demonstration of speaking skills. This course is limited only to students enrolled in the Praxis program. Credit 3 units. A&S : LA A&S : IQ, HUM
L62 Praxis 286 Entrepreneurship and the Liberal Arts
It is a little-known truth that more entrepreneurs come out of Arts & Sciences than any other college. This course begins by exploring why this is so, examining in particular the creative and innovative qualities developed in liberal arts that are crucial to the success of the entrepreneur. We then move on to examine entrepreneurs in action, hearing from those in the field and reading of others, learning how the liberal arts proved instrumental in various ways to their development and ultimate success as entrepreneurs.
Credit 3 units. A&S : TH A&S : IQ, HUM

L62 Praxis 300 Praxis Seniors Master Class
As a capstone to the Praxis Program experience, this course revisits the major themes of the core Praxis courses in order to analyze their meanings in an interdisciplinary way. Students learn and explore the deeper applications of the topics introduced to them in their Praxis course work at a time in which they can reflect about what they have learned in the context of their internship experience. Interdisciplinary lectures from the Praxis associated faculty in political science, anthropology, psychology, topics include organizational culture, leadership, followership, cooperation, communication, decision making and presentation. This course is a requirement for seniors enrolled in the Praxis Program.
Credit 1 unit. A&S : SS A&S : IQ, SSC

L62 Praxis 367 Seminar in Positive Psychology
Reviews the relatively recent development in the field known as: “Positive Psychology.” Topics may include: happiness and life satisfaction, positive self-esteem, creativity, caring relationships, love (passionate and otherwise), empathy, optimism, ambition, moral character development, attachment, compassion, forgiveness, helping, work ethics and successful aging. Designed to take a sampling of those aspects of psychology that emphasize the positive side of human nature. Psych 100B and at least one 300-level course. Same as Psych 367
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

Psychology
Psychology allows you to examine in depth the study of behavior in the areas of:
• Aging and development
• Biological bases of behavior
• Brain-behavior interactions
• Clinical and abnormal psychology
• Cognition
• Cognitive neuroscience

• Learning and memory
• Personality
• Sensation and perception
• Social interactions

The psychology department at Washington University has particular strengths in the areas of:
• Aging
• Human development
• Cognitive neuroscience
• Learning and operant conditioning
• Neuropsychology
• Personality and psychopathology
• Sensory processes in vision and audition
• Social theories of self and social processes

Opportunities for undergraduates include:
• Research involvement with faculty members
• Supervised internships with community service agencies
• Practicum in Applied Behavior Analysis
• Study abroad
• Supplemental concentrations within the major
• Senior Honors
• Membership in Psi Chi, the national honor society in psychology

Contact Person: Sharon Corcoran
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Departmental website: http://www.artsci.wustl.edu/~psych/

Chair
Randy J. Larsen
William R. Stuckenberg Professor of Human Values and Moral Development
PhD, University of Illinois

Associate Chair
Michael J. Strube
Professor
PhD, University of Utah

Endowed Professors
John Baugh
Margaret Bush Wilson Professor in Arts & Sciences
PhD, University of Pennsylvania
(African and African-American Studies, Anthropology, Education, English)
Pascal R. Boyer
Henry Luce Professor of Individual and Collective Memory
PhD, University of Paris–Nanterre
(Anthropology)

Steven E. Petersen
James S. McDonnell Professor of Cognitive Neuroscience
PhD, California Institute of Technology
(Neurology and Neurological Surgery)

Thomas F. Oltmanns
Edgar James Swift Professor of Arts & Sciences
PhD, State University of New York–Stony Brook

Henry L. Roediger III
James S. McDonnell Distinguished University Professor
PhD, Yale University

Rebecca A. Treiman
Burke and Elizabeth High Baker Professor of Child Developmental Psychology
PhD, University of Pennsylvania

Professors

Richard A. Abrams
PhD, University of Michigan

David A. Balota
PhD, University of South Carolina

Deanna M. Barch
PhD, University of Illinois, Urbana–Champaign

Todd Braver
PhD, Carnegie Mellon University

Leonard S. Green
PhD, State University of New York at Stony Brook

Larry L. Jacoby (part-time)
PhD, Southern Illinois University–Carbondale

Kathleen B. McDermott
PhD, Rice University

Michael Merbaum (part-time)
PhD, University of North Carolina–Chapel Hill

Mark A. McDaniel
PhD, University of Colorado

Mitchell Sommers
PhD, University of Michigan

Desirée A. White
PhD, Washington University

Denise E. Willfley
PhD, University of Missouri

Jeffrey M. Zacks
PhD, Stanford University

Associate Professors

Brian D. Carpenter
PhD, Case Western Reserve University

Ian G. Dobbins
PhD, University of California–Davis

Janet M. Duchek
PhD, University of South Carolina

Sandra S. Hale
PhD, University of Wisconsin–Milwaukee

Denise P. Head
PhD, University of Memphis

Brett Kessler
PhD, Stanford University

Alan J. Lambert
PhD, University of Illinois, Urbana–Champaign

Lori Markson
PhD, University of Arizona

Tom Rodebaugh
PhD, University of North Carolina–Chapel Hill

Simine Vazire
PhD, University of Texas–Austin

Assistant Professors

Ryan Bogdan
PhD, Harvard University

Julie M. Bugg
PhD, Colorado State University

Joshua Jackson
PhD, University of Illinois, Urbana–Champaign

Adjunct Professors

Robert Carney
PhD, Washington University
(Psychiatry)

Kenneth Freedland
PhD, University of Hawaii
(Psychiatry)

Barry Hong
PhD, Saint Louis University
(Psychiatry)

Patrick Lustman
PhD, Michigan State University
(Psychiatry)

Marcus E. Raichle
MD, University of Washington
(Radiology)
Eugene Rubin  
MD, PhD, Washington University School of Medicine  
(Psychiatry)

James V. Wertsch  
Marshall S. Snow Professor in Arts & Sciences  
PhD, University of Chicago  
(Anthropology, International and Area Studies, Education)

Adjunct Associate Professors

C. Robert Almli  
PhD, Michigan State University  
(Occupational Therapy)

John Newcomer  
MD, Wayne State University  
(Psychiatry)

John Rohrbaugh  
PhD, University of Illinois  
(Psychiatry)

R. Keith Sawyer  
PhD, University of Chicago  
(Education)

Research Professor

Joel Myerson  
PhD, Arizona State University

Lecturers

Arpana Agrawal  
PhD, Virginia Commonwealth University

Amy D. Bertelson  
PhD, Ohio State University

Patricia Cooper  
PhD, Washington University

Joachim Faust  
PhD, University of Kansas

Delores Kennedy  
PhD, Pennsylvania State University

Pascale Michelon  
PhD, University of Lyon (France)

James D. Reid  
PhD, Fordham University

Heather Rice  
PhD, Duke University

Robinson Welch  
PhD, University of Missouri–Columbia

Professors Emeriti

Stanley Finger  
PhD, Indiana University–Bloomington

Richard M. Kurtz  
PhD, University of Cincinnati

Anthony Schuham  
PhD, Washington University

Martha Storandt  
PhD, Washington University

Robert L. Williams  
PhD, Washington University

The Major in Psychology

Total units required: 28 units, of which at least 22 must be at the 300 level or above.

Required courses:

- Psych 100B Introduction to Psychology is a prerequisite for all upper-level courses (numbered 300 and above). Exemption from Psych 100B is possible in the following circumstances:
  - Completion of an equivalent course transferred from another institution, if approved by the Director of Undergraduate Studies.
  - An AP Psychology test score of 5 or IB score of 6 or 7. (N.B. AP or IB earns exemption from Psych 100B, but no credit.)

- Psych 300 Introduction to Psychological Statistics
- Psych 301 Experimental Psychology or Psych 3011 Experimental Psychology

Elective courses: At least one course from each of the following three categories:

Social/Developmental:

Psych 315 Introduction to Social Psychology
Psych 321 Developmental Psychology
Psych 325 Psychology of Adolescence
Psych 326 Introduction to the Psychology of Aging

Personality/Abnormal:

Psych 353 Psychology of Personality
Psych 354 Abnormal Psychology
Psych 357 Introduction to Clinical Psychology
Psych 314 Behavior Modification and Self-management

Behavior, Brain and Cognition:

Psych 330 Sensation and Perception
Psych 3401 Biological Psychology
Psych 360 Cognitive Psychology
Psych 3604 Cognitive Neuroscience or Psych 4604 Cognitive Neuroscience
Psych 361 Psychology of Learning
Psych 380 Human Learning and Memory  
Psych 433 Psychology of Language

No more than 6 units from the following categories may be used to satisfy the minimum requirements for the psychology major:

- Psych 225 Internship in Psychology
- Psych 235 Practicum in Applied Behavior Analysis: Autism/ PDD
- Psych 500 Independent Study
- Psych 498 and 499 Honors
- Approved Study Abroad
- University College-approved psychology classes
- Cross-listed, not psychology home-based classes
- 100/200-level classes (other than 100B)
- Transfer classes (students transferring from another college, see below.)

Additional Information

Transfer Credit: If accepted by the College of Arts & Sciences, transfer credits will be evaluated by the Director of Undergraduate Studies in the psychology department for their applicability toward the major. At least 15 units of course work in psychology must be completed at Washington University to earn a major.

Senior Honors: The primary goal of the Honors Program in Psychology is to provide students who have achieved a superior academic record the opportunity to conduct a comprehensive empirical investigation under the direction of a faculty member.

To be admitted into the honors program, you must meet the following requirements:

- Overall and psychology GPAs ≥ 3.65
- Completion of both Psych 300 and 301 (or 3011)
- Have an approved honors research adviser.

Supplemental Concentration in Psychology

To augment the broadly based Psychology major, the department offers Supplemental Concentrations for students who wish to engage more intensively with a specific area within the discipline. The Supplemental Concentration is meant as an enrichment of the major, and the classes for a concentration may not be used to fulfill the requirements of the major, nor can they be counted toward any other major or minor. In addition, to complete the Supplemental Concentration, students will have to undertake an approved research assistantship (Psych 500A Independent Study for a Supplemental Concentration), or approved internship, or practicum.

A concentration entails 9 to 10 units of course work over and above the minimum major requirements and includes an advanced, 400-level class. The research assistantship, internship or practicum that is a requirement for the concentration may count toward the 28 units required for the Psychology major.

The Supplemental Concentration will be a valuable experience for students planning on graduate study in psychology or related fields, or for those who have a particular interest or want to gain expertise in one of the approved concentrations. Each concentration will have a member of the faculty as contact person to meet with and advise students in the concentration.

There are at present six Supplemental Concentrations, listed below.

Cognition in Children — This concentration allows students to acquire deeper knowledge of cognition and its development in the first few years of life. The courses for the concentration consider child development more generally and then explore in more depth the early development of cognitive, conceptual and social-cognitive abilities. Adviser/coordinator: Professor Lori Markson.

Course work required: Psych 321 Developmental Psychology

Electives (must include two classes, at least one of which is at the 400 level):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psych 4046</td>
<td>Developmental Neuropsychology</td>
<td>3</td>
</tr>
<tr>
<td>Psych 4301</td>
<td>Contemporary Topics in Cognitive Development</td>
<td>3</td>
</tr>
<tr>
<td>Psych 4591</td>
<td>The Development of Social Cognition</td>
<td>3</td>
</tr>
</tbody>
</table>

Research mentorship: Prior approved research mentorship with a relevant faculty member and successful completion of a research paper. Relevant faculty: Pascal Boyer, Sandra Hale, Lori Markson, Desiree White.

Cognitive Neuroscience — This concentration allows students to acquire deeper knowledge of the relation between mind and brain. The courses for the concentration consider the neurobiological basis for psychological functions at a more general level, and then explore in greater depth specialized topics relating to how higher cognitive processes, such as memory, attention, perception and emotion, emerge from brain function. Adviser/coordinator: Professor Todd Braver.

Course work required:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psych 3401</td>
<td>Biological Psychology</td>
<td>3</td>
</tr>
<tr>
<td>or Psych 344</td>
<td>Principles of the Nervous System</td>
<td></td>
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</tbody>
</table>

Electives (must include two classes, at least one of which is at the 400 level):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psych 374</td>
<td>Drugs, Brain and Behavior</td>
<td>3</td>
</tr>
<tr>
<td>Psych 3604</td>
<td>Cognitive Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>Psych 4604</td>
<td>Cognitive Neuroscience</td>
<td>3</td>
</tr>
</tbody>
</table>

(cannot take both 3604 and 4604)
Lifespan Development — Many introductory courses in Developmental Psychology focus on changes that occur from birth to adolescence. The supplemental concentration in Lifespan Development provides students with an understanding of the cognitive and physiological changes that occur over the lifespan, with a primary focus on older adulthood. A major goal of the concentration is to provide students with an understanding of the similarities and differences in development at different stages of the lifespan. Adviser/coordinator: Professor Mitchell Sommers.

Course work required:

- Psych 326 Introduction to the Psychology of Aging  
- Psych 427 Social Gerontology  
- Electives (must select at least one of the following courses):
  - Psych 321 Developmental Psychology  
  - Psych 4301 Contemporary Topics in Cognitive Development

Research mentorship or internship experience: Students can complete this aspect of the concentration with either a prior approved research mentorship or an approved internship related to older adults. Successful completion of a paper is required in either case. Relevant faculty for research mentorship: Mitchell Sommers, David Balota, Sandra Hale, Denise Head, Brian Carpenter. Possible internships: Work in an assisted-living facility or other community-based program designed to assist older adults. Other internships are available; see Dr. Brian Carpenter for opportunities.

Experimental Psychopathology — This concentration allows students to acquire more advanced knowledge of the ways in which psychologists study mental disorders. Current research has demonstrated the importance of integrating psychological and biological variables in understanding the classification, etiology and treatment of a wide variety of mental disorders, including schizophrenia, mood disorders, anxiety disorders, substance use disorders and eating disorders. Students who pursue this concentration will develop a broadly based appreciation for conceptual and methodological issues that are central to research in psychopathology. Adviser/coordinator: Professor Deanna Barch.

Course work required: Psych 354 Abnormal Psychology

Electives (must include two classes, at least one of which is at the 400 level):

- Psych 345 Genes, Environment and Human Behavior
- Psych 374 Drugs, Brain and Behavior
- Psych 4541 Personality and Psychopathology
- Psych 4557 Biopsychosocial Aspects of Eating Disorders and Obesity
- Psych 4765 Biological Basis of the Major Mental Disorders

Research mentorship: Prior approved research mentorship with a relevant faculty member and successful completion of a research paper. Relevant faculty: Deanna Barch, Tom Ottmanns, Denise Willsey, Tom Rodebaugh.

Personality and Individual Differences — This concentration allows students to acquire deeper knowledge of how and why individuals differ from one another and the ways in which individual (e.g., personality, self) and group differences (e.g., gender) influence behavior, emotion, experience, identity and psychopathology. The core course for the concentration (Psych 353) considers personality more generally. The seminars explore in depth specific aspects of personality and individual differences, including biological bases of individual differences (i.e., genetics), the interpersonal processes associated with personality and personality judgment, individual differences in self and identity, group differences and personality pathology. Adviser/coordinator: Professor Simine Vazire.

Course work required: Psych 353 Psychology of Personality

Electives (must include two classes, at least one of which is at the 400 level):

- Psych 3091 Lesbian, Gay, Bisexual Identity Development
- Psych 3290 Psychology of Women
- Psych 4361 Psychological Perspectives on the Self
Arts & Sciences

Psych 4535  Personality Judgment: How We Perceive Ourselves and Others  3
Psych 4541  Personality and Psychopathology  3

Research mentorship: Prior approved research mentorship with a relevant faculty member and successful completion of a research paper. Relevant faculty: Simine Vazire, Randy Larsen, Michael Strube, Tom Oltmanns.

The Minor in Psychology

Units required: 15
Required course: Psych 100B Introduction to Psychology.
Elective courses:
Four additional courses (i.e., a minimum of 12 units of additional course work) in Psychology, all of which must be at the 300-level or above.

Additional Information

No more than 3 units of a previously approved cross-listed course originating outside the Department of Psychology, an approved psychology course taken in University College, an approved psychology course taken at another university, or an independent study-type course (e.g., Psych 500) may count toward the minor. (Transfer students must complete at least 9 advanced units of home-based Psychology courses at Washington University.)

For those who have a broad or general interest in psychology, we recommend taking several courses from the three core areas (i.e., Social/Developmental; Personality/Abnormal; and Behavior, Brain and Cognition).

For those students who want to concentrate in a more specialized area, courses can reflect such specialization. For example, a student interested in the helping professions or counseling may wish to select from such courses as Psych 353 Psychology of Personality, Psych 354 Abnormal Psychology, Psych 361 Psychology of Learning, Psych 321 Developmental Psychology and Psych 314 Behavior Modification and Self-management. A student wishing to pursue a specialization in experimental psychology/neuroscientific bases of behavior might select from such classes as Psych 3401 Biological Psychology, Psych 361 Psychology of Learning, Psych 330 Sensation and Perception, Psych 360 Cognitive Psychology and Psych 3604 Cognitive Neuroscience and consider doing Independent Study (Psych 500).

Psychology

L33 Psych 100B Introduction to Psychology
A survey and analysis of concepts, theory and research covering the areas of learning, memory, social, abnormal, clinical, physiological and sensory psychology. This is a general survey course designed to introduce students to the diversity of areas, approaches and theories that comprise the study of mind and behavior. Psych 100B is required of all majors and is prerequisite to all upper-level courses in Psychology. Open to freshmen.

Note: For students enrolled in Psych 100B who are interested in exploring a few areas of Psychology within a seminar format, see the companion course, Psych 102 Seminar: Introduction to Psychology.
Credit 3 units.  A&S : SS  A&S : IQ  BU : BA  FA : SSP

L33 Psych 102 Seminar: Introduction to Psychology
This seminar enables students enrolled in Psych 100B Introduction to Psychology to explore in greater depth several of the ideas and concepts in contemporary psychology. Open to freshmen who are concurrently enrolled in or have completed Psych 100B. Also open to sophomores who are concurrently enrolled in Psych 100B. Sections are limited to 15 students.
Credit 1 unit.  A&S : SS  BU : BA

L33 Psych 104 Cognitive Illusions: Understanding Distortions in Perceiving, Remembering and Thinking
Cognitive processes (such as perceiving, attending, remembering, judging and predicting) are critical for keeping us in touch with our environments and for deciding what actions we take. Although these processes usually are accurate, they also are subject to error. Cognitive illusions are the systematic errors people make in perceiving the world, remembering events from the past, and thinking and reasoning about the future. This course explores these cognitive distortions, what they tell us about how the mind works, and practical challenges they pose. For example, if a witness cannot accurately remember the face of an individual who committed a crime, an innocent person might be convicted. If a pilot is subject to perceptual distortions while flying, an accident may result.
Credit 3 units.  BU : BA

L33 Psych 105 Psychology of Young Adulthood: College Years
This course covers selected topics relevant to the developmental, social, personal and cognitive issues confronting young adults during their college years. Material is drawn mainly from the field of psychology, and the emphasis is on the scientific basis of concepts and on empirically supported strategies for growth and development. The knowledge gained may contribute to academic success, personal development and a more rewarding social and academic experience over the course of college and beyond. Freshman standing, entering first-year undergraduates only.
Credit 1 unit.

L33 Psych 109 Research Seminar in Psychology
Weekly presentations by various members of the psychology faculty; introduces students to research areas and current
issues. Attendance at all lectures required. Open to freshmen and sophomores only. Prerequisite: Psych 100B. Credit/no credit only. Credit 1 unit. A&S : SS A&S : IQ, SSC FA : SSP

L33 Psych 204 Psychobiography
Exploration of the use of psychological perspectives in the in-depth study of the life of an individual, with a focus on historical, literary and artistic figures. We examine how research is conducted, and how one writes a narrative account of a life. After looking at essays describing what is involved in investigating an individual life, we read psychological studies of such figures as Franklin and Eleanor Roosevelt; William, Henry and Alice James; Woodrow Wilson; Mohandas Gandhi; Sigmund Freud; Edith Wharton; and Frank Lloyd Wright. The main project in the course for each student is the writing of a study of an individual life. Prerequisite: Psych 100B. Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA

L33 Psych 221 Freshman Seminar: Introduction to Memory Studies
This course focuses on memory not only as an individual phenomenon but also as the basis for the transmission of culture and the construction of collective identity. We survey such topics as experimental methods and findings in the study of individual memory; questions of accuracy and vividness of memory and witness reports; repressed memories; transmission of cultural norms and identity through narratives; shared historical memories; individual trauma and historical upheaval; revision of the past and political usage of collective memory. Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA

L33 Psych 222 Human Memory from Neurons to Novels: How Scientists and Other Scholars Study Memory
Introduces students to the different methods used in the study of memory, from neuroscience to anthropology and from experimental psychology to literary studies and history. We consider how e.g. an historian works from documents and sources, how a neuroscientist explains the details of particular experimental findings, how an anthropologist comments on the connections between historical past and individual identity in a particular place, how a cognitive psychologist uses laboratory results to understand memory function. Prerequisites: Psych 221, Psych 100B. Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA

L33 Psych 225 Internship in Psychology
An opportunity to gain supervised, applied experience in a nonacademic, community service agency. For a description of prerequisites, goals, agency selection, registration policies and course requirements, obtain a copy of A Guide to Internships in Psychology online at http://www.artsci.wustl.edu/~psych/undergrad.html or available outside of Room 221 and Room 419A, Psychology Building. In addition to work at their internship site, students are required to meet regularly with the internship coordinator. This course can be taken only once. CBTL course. Credit/no credit only. Credit 3 units. FA : SSP

L33 Psych 234 Introduction to Speech and Hearing Sciences and Disorders
Same as Educ 234
Credit 3 units.

L33 Psych 235 Practicum in Applied Behavior Analysis: Autism/PDD
An opportunity to be trained in applied behavior analytic techniques and to work with a child with autism/pervasive developmental disorder. Training and supervision are arranged and coordinated by the family of the child and their consultant. To receive credit, students must undertake a year's work with the child, complete the minimum number of hours of training and therapy, and attend regular therapy meetings. In addition, students must meet with the practicum coordinator for discussion of assigned readings and presentations on autism and therapy. Completion of a paper also is required. For further information and petition form, pick up the Practicum brochure from the department. This course can be taken only once for credit. Credit/no credit only. Enrollment through the practicum coordinator only. CBTL course. Credit 3 units. FA : SSP

L33 Psych 300 Introduction to Psychological Statistics
Descriptive statistics including correlation and regression. Inferential statistics including nonparametric and parametric tests of significance through two-way analysis of variance. Course emphasizes underlying logic and is not primarily mathematical, although knowledge of elementary algebra is essential. Prerequisite: Psych 100B. Credit 3 units. A&S : NS, QA A&S : IQ, NSM, AN FA : NSM

L33 Psych 301 Experimental Psychology
This course provides training in the logic and techniques of psychological research so as to provide students with experience in the design of psychology experiments and interpretation of results. Topics include experimental design and control, library research, quantitative treatment of data, graphical presentation of results, and clarity of scientific writing. Lectures focus on general principles of experimentation, whereas the laboratory sections provide an introduction to a range of psychological phenomena through hands-on experience in experimentation. Each student also completes an independent research project. Declared Psychology majors are given priority over others to enroll. Limited to 15 students per section. Prerequisites: Psych 100B and 300.
L33 Psych 3011 Experimental Psychology
Psych 3011 is limited to students who have not taken Psych 300 and want to enroll in Psych 300 and Experimental Psychology concurrently. Therefore, students who enroll in Psych 3011 also must register for Psych 300. Psych 3011 fulfills the Psych 301 requirement for the major. Topics in the two courses (Psych 300 and Psych 3011) are coordinated in order to integrate the concepts from Statistics course with those from Experimental Psychology course. Experimental Psychology provides training in the logic and techniques of psychological research so as to provide students with experience in the design of psychology experiments and interpretation of results. Topics include experimental design and control, library research, quantitative treatment of data, graphical presentation of results, and clarity of scientific writing. Lectures focus on general principles of experimentation while the laboratory component provides an introduction to a range of psychological phenomena through hands-on experience in experimentation. Each student also completes an independent research project of his or her own design under supervision of a faculty member. Enrollment limited to 15 students. Prerequisite: Psych 100B. Credit 4 units. A&S : NS A&S : IQ, NSM BU : BA FA : NSM

L33 Psych 304 Educational Psychology
Same as Educ 304
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L33 Psych 3091 Lesbian, Gay, Bisexual Identity Development
Examination of sexual orientation and identity. Topics: historical perspectives, gender socialization, identity formation across the life span, cultural prejudices, the liberation movement, and recent legal changes affecting stigmatized minorities. Prerequisite: Psych 100B. Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD BU : BA FA : SSP

L33 Psych 314 Behavior Modification and Self-management
Provides an overview of behavior modification and its applications for behavior change in various personal and social contexts. An important focus is on how behavioral tools can be used to enhance the personal change process leading to effective self-improvement. Prerequisite: Psych 100B. Enrollment limited to 15. Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA

L33 Psych 315 Introduction to Social Psychology
Introduction to the scientific study of individual behavior in a social context. Topics: person perception; stereotyping and prejudice; attitudes; memory; and political psychology, among other issues. Prerequisite: Psych 100B. Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L33 Psych 3195 Abnormal Child Psychology
This course familiarizes students with current perspectives on the nature, causes, assessment, treatment and prevention of child psychiatric disorders and related family dysfunction. Theoretical perspectives and research findings are discussed pertaining to anxiety, depression, conduct disorder, attention-deficit/hyperactivity disorder, autism, learning impairments and parent-child conflict. Prerequisite: Psych 100B. Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L33 Psych 321 Developmental Psychology
Focuses on research and theories pertaining to social development during infancy and childhood. That is, as they develop, how do children interact with, think about and learn from other people? Topics include: attachment, day care, social cognition, prejudice, aggression, prosocial behavior, morality, gender roles, peer relations and parenting. Prerequisite: Psych 100B. Credit 3 units. A&S : SS FA : SSP

L33 Psych 3221 Developmental Psychology II: Social Development
An examination of current research and theory in play, in development and education, from infancy through the early school years. Topics include play and the development of language, social skills, creativity and cognitive abilities. We also examine the uses of play in educational contexts, focusing on preschool and the early primary grades. Prerequisite: Psych 321 or Educ 304. Same as Educ 337. Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA

L33 Psych 3232 Play and Development
An examination of current research and theory in play, in development and education, from infancy through the early school years. Topics include play and the development of language, social skills, creativity and cognitive abilities. We also examine the uses of play in educational contexts, focusing on preschool and the early primary grades. Prerequisite: Psych 321 or Educ 304. Same as Educ 337. Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA

L33 Psych 3242 Introduction to African-American Psychology
Same as AFAS 3242
Credit 3 units. A&S : SS A&S : IQ, SSC

L33 Psych 325 Psychology of Adolescence
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisite</th>
<th>Credit Units</th>
<th>Course Codes</th>
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<tr>
<td>L33 Psych 326</td>
<td>Introduction to the Psychology of Aging</td>
<td>Study of the processes of aging in the individual in terms of their behavioral effects. Age changes in biological functions, sensation, perception, intelligence, learning, memory and creativity are studied to understand the capacities and potentials of the mature and older person. Limited to 20 students. Prerequisite: Psych 301.</td>
<td>Credit 3 units. A&amp;S : SS A&amp;S : IQ, SSC BU : BA</td>
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<tr>
<td>L33 Psych 329</td>
<td>The Psychology of Women</td>
<td>Examines the current status of research evidence regarding gender differences in human behavior and compares explanations of gender differences from several theoretical perspectives, including psychoanalytical theory, social learning theory, social/cultural perspectives, evolutionary theory and biological perspectives, and cognitive developmental theory. Discussion of patterns of public attitudes and beliefs about gender roles and gender differences and their impact on the study of gender issues. Prerequisite: Psych 100B.</td>
<td>Credit 3 units. A&amp;S : SS BU : BA FA : SSP</td>
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<tr>
<td>L33 Psych 3290</td>
<td>Psychology of Women</td>
<td>Same as WGS 329</td>
<td>Credit 3 units. A&amp;S : SS A&amp;S : IQ, SSC BU : BA</td>
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<tr>
<td>L33 Psych 330</td>
<td>Sensation and Perception</td>
<td>What’s involved in seeing and hearing? This course covers perception from the physical stimuli (light and sound) that impinge upon the sensory receptors through the higher-level percepts that the stimuli generate. Demonstrations and illusions are used as we learn about the anatomy and physiology of the sensory systems and study the brain mechanisms that are involved in vision and audition. Prerequisite: Psych 100B.</td>
<td>Credit 3 units. A&amp;S : NS A&amp;S : IQ, NSM BU : BA, SCI FA : NSM</td>
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<tr>
<td>L33 Psych 331</td>
<td>Introduction to the Psychology of Hearing</td>
<td>This course examines the perception of auditory stimuli. The focus is on the psychological response to acoustic events and the mechanism mediating those responses. Topics include basic acoustic concepts, pitch perception, localization and auditory stream segregation. Prerequisite: Psych 100B.</td>
<td>Credit 3 units. A&amp;S : SS FA : SSP</td>
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<tr>
<td>L33 Psych 335</td>
<td>The Science of Sleep</td>
<td>Sleep is a basic need for human survival. We sleep daily and yet there is so much unknown about how sleep works. Sleep is a science: a biological and behavioral science that impacts both psychological and physiological functioning. In this course you learn about a variety of topics crucial to the field of sleep medicine including: sleep changes across the lifespan, sleep hygiene, sleep deprivation, clinical sleep disorders and treatments. You gain understanding with what is known about sleep as well as how to integrate the importance of sleep into your daily life. Prerequisite: Psych 100B.</td>
<td>Credit 3 units. A&amp;S : SS A&amp;S : IQ, SSC</td>
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<td>L33 Psych 3401</td>
<td>Biological Psychology</td>
<td>An introduction to biological mechanisms underlying behavior. Topics include the physiology of nerve cells; anatomy of the nervous system; control of sensory and motor activity, arousal and sleep; motivation; and higher mental processes. Prerequisite: Psych 100B.</td>
<td>Credit 3 units. A&amp;S : NS A&amp;S : IQ, NSM BU : SCI FA : NSM</td>
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<td>L33 Psych 344</td>
<td>Principles of the Nervous System</td>
<td>This class examines how genetic influences impact various dimensions of human behavior, ranging from personality to clinical disorders. Topics covered include methods used to study genetic influence, how genetic predispositions interact with the environment, and ethical implications of genetic research in psychology. Prerequisite: Psych 100B.</td>
<td>Credit 3 units. A&amp;S : NS A&amp;S : IQ, NSM BU : SCI FA : NSM</td>
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<td>L33 Psych 345</td>
<td>Genes, Environment and Human Behavior</td>
<td>Explores relations between people and their physical and social environments. Topics include interactions between human behavior and toxins, habitat destruction/species extinction, exhaustion of fossil fuels, and climate change as well as environmental contributors to psychopathology. The course examines the influence of space on human behavior and the design of homes, work areas, educational settings and urban environments. Prerequisite: Psych 100B.</td>
<td>Credit 3 units. A&amp;S : SS A&amp;S : IQ, SSC BU : BA</td>
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<tr>
<td>L33 Psych 347</td>
<td>Environmental Psychology</td>
<td>Explores relations between people and their physical and social environments. Topics include interactions between human behavior and toxins, habitat destruction/species extinction, exhaustion of fossil fuels, and climate change as well as environmental contributors to psychopathology. The course examines the influence of space on human behavior and the design of homes, work areas, educational settings and urban environments. Prerequisite: Psych 100B.</td>
<td>Credit 3 units. A&amp;S : SS A&amp;S : IQ, SSC BU : BA</td>
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<td>L33 Psych 353</td>
<td>Psychology of Personality</td>
<td>Review of basic theoretical orientations to the understanding of personality and complex human behavior. Overview of related techniques, procedures and findings of personality assessment and personality research. Discussion of critical</td>
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issues in evaluation of personality theories. Prerequisite: Psych 100B. Credit 3 units.  

L33 Psych 354 Abnormal Psychology  
Survey of deviant and maladjusted behavior including neuroses and psychoses; consideration of biological, social and individual determinants of maladjustment. Cultural perspectives on mental health and illness. Diagnosis, etiology and treatment. Review of pertinent research. Prerequisite: Psych 100B. Credit 3 units.  

L33 Psych 355 Introduction to Forensic Psychology  
This course is an introduction to the interaction between psychology and the legal system. The contribution of psychology to such legal areas as family law, juvenile delinquency, criminal cases, law enforcement and correctional psychology is surveyed. Topics covered include domestic violence, child abuse, personal injury, eyewitness testimony, insanity, sex offenders and psychopaths. Legal standards regarding insanity, civil commitment and expert testimony are reviewed. We also focus on the emerging contributions of neuroscience to the field of forensic psychology. Prerequisite: Psych 100B. Credit 3 units.  

L33 Psych 356 Introduction to Clinical Psychology  
A survey of clinical psychology. Emphasis is placed on historical and recent developments in the field (e.g., managed care), as well as the consideration of the roles, functions and techniques of clinical psychologists including psychological testing and psychotherapy. Prerequisites: Psych 100B and either Psych 353 or Psych 354. Credit 3 units.  

L33 Psych 357 Language Acquisition  
This course examines the development of language skills in children, asking how children so rapidly learn their first language. Topics include: biological bases of language development; development of phonology, syntax and morphology; language development in atypical populations; childhood bilingualism; and development of written language skills. Prerequisite: Psych 100B or Ling 170D. Credit 3 units.  

L33 Psych 358W Language Acquisition  
This course examines the development of language skills in children, asking how children so rapidly learn their first language. Topics include: biological bases of language development; development of phonology, syntax and morphology; language development in atypical populations; childhood bilingualism; and development of written language skills. Prerequisites: Psych 100B and Ling 170D and junior or senior standing. Writing-intensive. Credit 3 units.  

L33 Psych 359 Cognitive Psychology  
Introduction to the study of thought processing from an information-processing approach. Emphasis on theoretical models grounded in empirical support. Topics include pattern recognition, attention, memory, reasoning, language processes, decision making and problem solving. Prerequisite: Psych 100B. Credit 3 units.  

L33 Psych 360 Cognitive Neuroscience  
A general introduction to the underlying principles and mechanisms of brain function that give rise to complex human cognitive behavior. Emphasis is placed on how emerging methods and approaches from both neuroscience and cognitive psychology have been integrated to yield new insights into the organization and structure of higher mental processes. Topics include perception, attention, memory, language and executive control. Prerequisite: Psych 100B. Credit 3 units.  

L33 Psych 361 Psychology of Learning  
Basic learning processes in animals, such as conditioning, reinforcement, punishment and constraints on learning. Comparisons and interactions between classical and operant conditioning. Consideration given to learning theorists and theories, along with applications from the laboratory to the “real world.” Prerequisite: Psych 100B. Credit 3 units.  

L33 Psych 361A Psychology of Learning: Laboratory  
This laboratory course is a supplement to the Psych 361 Psychology of Learning class. Students gain firsthand experience, via a virtual rat, of principles and procedures related to the acquisition and maintenance of behavior. Weekly lab meetings introduce Pavlovian and operant principles, which are then implemented as laboratory exercises with the virtual rat. Concurrent enrollment in Psych 361 required. Credit 1 unit.  

L33 Psych 362 Psychology of Creativity  
Same as L12 Educ 366. Same as Educ 366  
Credit 3 units.  

L33 Psych 363 Seminar in Positive Psychology  
Reviews the relatively recent development in the field known as “Positive Psychology.” Topics may include: happiness and life satisfaction, positive self-esteem, creativity, caring relationships,
love (passionate and otherwise), empathy, optimism, ambition, moral character development, attachment, compassion, forgiveness, helping, work ethics and successful aging. Designed to take a sampling of those aspects of psychology that emphasize the positive side of human nature. Prerequisites: Psych 100B and at least one 300-level course. Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L33 Psych 374 Drugs, Brain and Behavior
This course reviews information pertaining both to medications used to treat psychiatric disorders and to psychoactive drugs of abuse. By learning principles of pharmacology and mechanisms of action of these agents, students develop an enhanced knowledge of the brain mechanisms underlying abnormal human behavior. Prerequisites: Psych 100B and one of the following: Psych 354 or 3401 or 344. Credit 3 units. A&S : NS A&S : IQ, NSM BU : SCI

L33 Psych 380 Human Learning and Memory
A survey of issues related to the encoding, storage and retrieval of information in humans. Topics include memory improvement strategies, people with extraordinary memories, memory illusions and distortions, among other topics. Limited to 25 students. Prerequisite: Psych 100B. Credit 3 units. A&S : NS A&S : IQ, NSM BU : BA FA : NSM, SSP

L33 Psych 399 Living, Dying and Death: A Biopsychosocial Approach to Understanding the End of Life
This survey course examines dying and death from biological, psychological and social perspectives. Topics include theoretical and research approaches to studying dying and death; historical and cross-cultural attitudes; psychological understanding and coping with death over the life span; the process of dying and definitions of death; health care professionals and treatment approaches for the dying; assisted death and other ethical/legal issues, grief and bereavement, mass tragedy and public death, and planning for death. Prerequisite: Psych 100B. Credit 3 units. A&S : SS A&S : IQ, SSC

L33 Psych 4001 Introduction to Neuropsychology
Introduction to the field of brain-behavior relationships: the neurological basis of cognitive and psychological functions such as language, spatial ability, attention and memory. Selected pathological syndromes associated with brain dysfunction also presented. Limit: 20 junior and senior psychology majors, psychology graduate students and others with relevant backgrounds. Prerequisite: an introductory course in the neurosciences or one in biological psychology. Credit 3 units. A&S : NS FA : NSM

L33 Psych 4044 Topics in Cognitive Neuropsychology
Advances in the understanding of abilities such as memory, attention and language are discussed, with a focus on recent research that integrates the theoretical perspectives of cognitive psychology and neuropsychology. Emphasis on findings from investigations using neuroimaging techniques, psychophysiological techniques and patients with brain disorders. Prerequisite: Psych 100B. Credit 3 units. A&S : NS FA : NSM

L33 Psych 4046 Developmental Neuropsychology
Development of the brain and associated changes in cognitive abilities are discussed, with an emphasis on recent research that integrates the theoretical perspectives of cognitive psychology and neuropsychology. Discussion focuses on early development and disorders affecting the brain such as cerebral palsy, sickle cell disease and autism. Prerequisite: Psych 321, Psych 360, Psych 3604 or Psych 3401. Credit 3 units. A&S : NS, WI A&S : IQ, NSM, WI FA : NSM

L33 Psych 4047 History of Neuroscience
The study of the relationship between brain and behavior from trephination and head injuries in ancient people through ancient Egypt, Greece and Rome into the Renaissance and more modern times. Emphasis on higher brain functions. Prerequisite: a course in physiological psychology, neuropsychology or the nervous system, or permission of instructor. Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L33 Psych 4051 Conceptual Issues in Psychology
Behaviorism has been called a monumental triviality by some while cognitivism is seen by others as prescientific, indeed detrimental to the advancement of psychology. Examination of the theoretical and methodological issues dividing the behaviorists and cognitivists. Credit 3 units. A&S : SS FA : SSP

L33 Psych 4081 Topics in Psycholinguistics
Language is one of the most important things that people learn, and children are able to speak in complex sentences before they can tie their shoes. How do children master this seemingly impossible task? In this course, we cover theories and research on these issues. We focus on language development in children who are learning English as their first language, with special consideration given to vocabulary development. We also consider other populations, including bilingual children and children with language difficulties. Prerequisites: Psych 100B, completion of a course in developmental psychology, linguistics, and/or speech and hearing sciences, and junior or senior standing. Credit 3 units. A&S : SS, WI

L33 Psych 4082 Senior Seminar in Linguistics
This semester, the Senior Seminar in Linguistics surveys the writing systems of the world from both psychological and linguistic perspectives. Special attention is paid to how different writing systems represent the properties of words and to how different modes of representation affect the speed and accuracy with which writing systems are learned and used. This semester counts toward the senior capstone requirement in Linguistics or toward the Reading, Language and Language Acquisition supplemental concentration in Psychology. Prerequisites: Psych 100B or Ling 170D, and an upper-level course in linguistics or developmental or cognitive psychology; and junior, senior or graduate standing.

Credit 3 units. A&S : SS  A&S : IQ, SSC

L33 Psych 4085 Seminar: Human Memory
A seminar that explores the primary literature on the scientific study of human memory. Topics include retrieval processes, forgetting, distortions of memory and individual differences in memory. Prerequisite: Psych 360 Cognitive Psychology, Psych 380 Human Learning and Memory, or permission of instructor.

Credit 3 units. A&S : SS

L33 Psych 4099 Human Evolutionary Psychology
How did evolution by natural selection shape the way human beings think and behave? Does evolution explain human cooperation and friendship, human morality, reproductive decisions, and social interactions? What sex differences in cognition or behavior are caused by evolution? This course introduces the concepts and findings of evolutionary psychology, mostly through reading of primary sources — articles from psychology and biology journals — and discussion and presentation of empirical cases. Prerequisites: at least 6 units of Psychology level 300 or above, or Anthro 3383.

Credit 3 units. A&S : SS  A&S : IQ, SSC

L33 Psych 413 Contemporary Topics in Social Psychology: Intolerance and Prejudice
Consideration of selected contemporary topics in social psychology. Participation in a research project of appropriate scope. Prerequisite: Psych 315.

Credit 3 units. A&S : SS  A&S : IQ, SSC  FA : SSP

L33 Psych 4135 Human Behavior in Extreme Situations
This course familiarizes students with psychological theory and research that attempts to answer the question: What are the protective factors that help people who find themselves in an extreme situation respond constructively to the stress they must cope with? Extreme situations are characterized by conditions that force individuals and groups to adapt themselves involuntarily, entirely and with the greatest of speed. Readings are drawn from two sources (a) literature that describes extreme situations and human response to the trauma they cause (e.g., prisoner behavior in Nazi concentration camps, brainwashing of American soldiers during the Korean War, and response to a natural disaster and an airliner crash), and (b) research on potentially protective psychological variables such as coping and resilience. Prerequisites: junior or senior standing and 6 hours of advanced, home-based Psychology course work. Enrollment limited to 17.

Credit 3 units. A&S : SS  A&S : IQ, SSC

L33 Psych 4182 Perception, Thought and Action
This course focuses on current topics in visual perception, visual attention, eye movements and sensory-motor behavior. Readings consist of recent journal articles. Class meetings emphasize presentation and discussion of the material in the readings. Prerequisite: previous course work in Cognitive Psychology, Experimental Psychology or Perception.

Credit 3 units. A&S : NS  A&S : IQ, NSM  FA : NSM

L33 Psych 4215 Critical Issues in Child Psychopathology
Covers issues that are critical to the emergence and maintenance of child psychopathology. Topics include: attachment, genetics, psychological development, cognitive development, cultural influences, etc. Different models of child psychopathology are considered. Prerequisites: Psych 100B and Psych 354.

Credit 3 units. A&S : SS  A&S : FA : SSP

L33 Psych 4227 The Psychology of Close Relationships
This course examines close relationships from a scientific perspective. The course focuses on intimate relationships but also touches on friendships and family relationships. The objective of this course is to introduce you to the scientific perspective of close relationships. You learn how research psychologists apply the scientific method of data collection and analysis to investigate how people experience and think about relationships. We explore questions such as: Why are people attracted to some people but not others? How do relationships develop over time? How does each person’s personality influence the trajectory of a relationship? How do external factors (e.g., social norms, stress, life events) influence relationships? How do gender and sexual orientation influence people’s experiences in romantic relationships? Prerequisites: Psych 100B and Psych 301.

Credit 3 units. A&S : SS  A&S : FA : SSP

L33 Psych 4255 Special Topics in Clinical Psychology
An introduction to what clinical psychologists do, why they do it and where they do it. Reviews the history and development of clinical practice with special attention to psychological assessment, psychotherapy, theoretical orientations, settings in which psychologists practice and ethical issues. Written assignments in this writing-intensive course include a research
paper, a case study and a formal analysis of an ethical problem in clinical psychology. Prerequisite: Psych 354. Not open to students who have taken Psych 450 or Psych 357. Credit 3 units. A&S : SS, WI FA : SSP

L33 Psych 427 Social Gerontology
This course provides an introduction to aging and growing old, from an interdisciplinary perspective. Specific attention is paid to demographics, physical health and illness, mental health, interpersonal relations, work issues, living arrangements, ethics, and death and dying. Prerequisites: junior or senior standing and completion of 6 advanced units in Psychology. CBTL course. Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L33 Psych 4301 Contemporary Topics in Cognitive Development
Traditional topics in cognitive development, such as conservation, conceptual development and category formation, examined from both information-processing and Piagetian viewpoints. Prerequisite: Psych 321 or 360. Credit 3 units. A&S : SS, WI FA : SSP

L33 Psych 4302 Cognitive Psychology Applied to Education
This course is intended to cover topics in the cognitive psychology of human memory, conceptual learning and comprehension with special focus on areas, theory and research that have potential application to education. Thus, the course provides selective coverage of theoretical and empirical work in cognitive psychology that provides potential to inform and improve educational practice. The applicability of these themes are explicitly developed and evaluated through the primary research literature using educationally oriented experimental paradigms. The course is of interest and benefit to education majors and to psychology majors interested in cognitive psychology and its applications. Prerequisites: junior/senior status; 9 units in Psychology and Psych 100B or junior/senior status; 9 units in Education and Psych 100B. Credit 3 units. A&S : SS A&S : IQ, SSC

L33 Psych 4305 Psychological Science: Fact and Fiction
Skeptical analysis of psychological science as practiced and popularized in the media. Analysis of discrepancies between media and scientific claims regarding areas such as repressed memory, brain imaging, heritability and psychotherapy. Additional examination of scientific career demands such as peer review, journal publication and research funding. These topics are interwoven with a review of common errors in reasoning particularly with respect to probabilistic reasoning and the public misperception of the practice and principles of scientific psychology. Prerequisite: junior or senior standing and completion of 6 advanced units in psychology. Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI

L33 Psych 433 Psychology of Language
This course surveys current research and theory in psycholinguistics, covering the biological bases, cognitive bases and learning of language. We consider studies of normal children and adults, the performance of individuals with various types of language disorders, and computer simulations of language processes. Topics range from the perception and production of speech sounds to the management of conversations. Each student carries out an original research project on some aspect of psycholinguistics. Prerequisites: Ling 170D and Psych 100B. Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L33 Psych 4351 Reading and Reading Development
This seminar surveys current research on reading and spelling skills and their development. Students read and discuss journal articles that examine the cognitive and linguistic processes involved in reading, reading disorders and educational issues. Prerequisite: permission of instructor and previous course work in experimental psychology or psychology of language. Credit 3 units. A&S : SS A&S : IQ, SSC

L33 Psych 4361 Psychological Perspectives on the Self
Contemporary theories and research related to the self in social psychology. Emphasis on the self as a construct central to understanding important social phenomena. Topics include definitions and measurement of the self; and motivational implications of the self for impression management, ability appraisal and social inference. Prerequisite: Psych 315. Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI FA : SSP

L33 Psych 438 Acoustical Phonetics and Speech Perception
Credit 3 units.

L33 Psych 4408 Trauma and Memory
A thorough investigation of the effects of trauma on memory in both individuals and collective groups. Topics include flashbulb memories; forgetting and repression; post-traumatic stress and memory; and effects of trauma on individual and group identity. Prerequisites: Psych 100B and 6 units of advanced-level psychology or anthropology course work. Credit 3 units. A&S : SS A&S : IQ, SSC

L33 Psych 4411 Topics in Cognitive Neuroscience
How the brain organizes behavior, emphasizing higher functions such as perception, language, and attention. Course aims at integration of information from neurobiological approaches (e.g., single-unit recording, lesion-behavior experiments) and information-processing approaches (e.g., cognitive psychological models, connectionist models). Prerequisite: Psych 3401 or Psych 360 or Psych 3604. Credit 3 units. A&S : NS FA : NSM
L33 Psych 4413 Advanced Cognitive Neuroscience
An intensive, case-study based approach to the underlying principles and mechanisms of brain function that give rise to complex human cognitive behavior. Emphasis will be placed on understanding and evaluating cutting-edge neuroscience research that has yielded new insights into the organization and structure of higher mental processes. Students will develop critical thinking and writing skills via a strong class participation component and a writing intensive format. Topics include perception, attention, memory, language, emotion, and executive control. Writing Intensive. Declared Psychology majors will be given priority over others to enroll. PREREQ: Psych 100B and either Psych 3401 or Psy 344/Bio 3411 or Psych 3604. Credit 3 units. A&S: NS, WI A&S: IQ, NSM, WI

L33 Psych 4415 Cognitive Neuroscience of Language
This seminar examines research that uses cognitive neuroscience techniques to inform our understanding of language processing. Readings consist of research and review articles with a focus on studies using electrophysiological and neuroimaging methods. A variety of psycholinguistic topics are covered, including speech perception, semantic processing, language production, syntactic processing, metaphor and joke processing, and bilingualism. Prerequisites: Psych 360 or Psych 3604 or Psych 4604 or Psych 433, and completion of 6 additional units of psychology course work at the 300 level or higher. Not open to graduate students. Credit 3 units. A&S: SS, WI A&S: IQ, SSC, WI

L33 Psych 4418 Computational Modeling in Cognitive Neuroscience
Introduces the ideas and methods used in simulating cognitive and perceptual processes using computational models. The focus is on neural network mechanisms, which provide a bridge between behavioral and biological levels of analysis. The first half of the course introduces the basic computational and biological properties of individual neurons and neuronal networks, and the learning mechanisms that organize these networks. The second half of the course examines how these computational mechanisms can be used to explore a range of cognitive phenomena, including perception, attention, memory, language and higher-level cognition (i.e., executive control). Prerequisite: Psych 3604 Cognitive Neuroscience or permission of instructor. Credit 3 units. A&S: SS, WI A&S: IQ, SSC, WI

L33 Psych 4450 Functional Neuroimaging Methods
This course is intended for students wishing to become sophisticated producers or consumers of functional neuroimaging data. Emphasis is on extracting the most information from neuroimaging techniques toward the goal of answering psychologically motivated questions. A number of issues relating to neuroimaging methodology are covered, including technical principles; acquisition options; potential sources of artifact; experimental design; software tools; and analytical techniques. Class approach is hands-on, with students gaining experience in actually acquiring and working with neuroimaging data. Prerequisite: graduate standing or permission of instructor. Credit 3 units. A&S: SS A&S: IQ, SSC FA: SSP

L33 Psych 4495 Attitude Change and Persuasion
Overview of theory and research in the field of attitudes. Topics include: attitude formation and activation; the attitude-behavior relationship; and measuring attitudes, social influence, attitude change and persuasion techniques. Prerequisite: Psych 315. Credit 3 units. A&S: SS FA: SSP
and pathological features of personality as well as the role that personality may play with regard to the causes and treatment of other kinds of mental disorder. A laboratory component of the class focuses on the development of practical skills in conducting research interviews designed to elicit information about personality and social adjustment. Prerequisites: Psych 354, junior or senior standing, and permission of the instructor. Credit 3 units. A&S : SS A&S : IQ, SSC

L33 Psych 457 Biopsychosocial Aspects of Eating Disorders and Obesity
The aim of this seminar course is to examine the epidemiology, etiology, prevention and treatment of body image, eating disorders and obesity. An emphasis is placed on understanding the characteristic symptoms of excessive dieting, body image disturbance and binge eating, not only as formal psychiatric syndromes but as a representation of disregulated processes reflecting social-cultural, psychological and biological disturbances. Students also learn about the clinical characteristics, medical sequelae and physical aspects of eating disorders and obesity. Prerequisites: Psych 100B and junior/ senior standing plus 6 units of advanced psychology. Credit 3 units. A&S : SS A&S : IQ, SSC

L33 Psych 4591 The Development of Social Cognition
This course explores what is known about the development of social cognition. Our starting point is infants’ capacity to navigate the social world, for instance, detecting agents, identifying social partners and learning from those around us. We consider what happens when the human ability to reason about others breaks down (as with autism), and what this can teach us about typical development. Each week we cover one topic and a related set of readings. Class meetings are devoted to active discussion and debate about the content of the readings. Students are required to write a weekly reaction paper to the readings to promote class discussion and give an in-class presentation on a novel research topic at the end of the semester. Graduate students may have additional course requirements. Prerequisite: Psych 315 or 321 or 360. Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA

L33 Psych 461 Psychological Tests and Measurements
In what sense can abilities and traits be measured? The history of measurement in psychology is traced through abilities, especially general intelligence, objective personality tests and projective tests. Other topics: recent theories of the nature and organization of intelligence (Cattell and Horn, Sternberg, Fischer), contemporary objections to psychological measurement (S. J. Gould). Prerequisite: Psych 300. Credit 3 units. A&S : SS FA : SSP

L33 Psych 462 Psychology of Memory and Cognition
This course investigates how people create and remember their personal life histories, with an emphasis on empirical studies within the cognitive tradition. Possible topics include childhood amnesia, false memories, emotional memories, the role of motivation in remembering, and how personal events are represented in memory. Prerequisite: Psych 360 or Psych 301 or Psych 380. Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI FA : SSP

L33 Psych 4651 History and Modern Systems of Psychology
An introduction to the history of psychology. This course begins with a brief consideration of forces leading to development of psychology in the mid-1800s. It then examines the birth of modern psychology in Germany, and the schools of psychology that emerged early in the 20th century. Newer orientations and ideas are considered in the final segment of the course. We also consider the impact of psychology on American public life during the 20th century. Prerequisite: junior or senior standing and 6 units of advanced home-based Psychology courses or permission of the instructor. Credit 3 units. A&S : TH A&S : IQ, HUM FA : SSP

L33 Psych 4702 Current Debates in Psychology
In this seminar we debate issues of current controversy in psychology. Topics range from perception (Can subliminal messages affect behavior?) to development (Do children in daycare develop differently than children cared for at home?) to mental illness (Is road rage a real psychological illness?). Discussions are based on readings of primary research and review articles, and are augmented by written assignments. Prerequisite: completion of 6 units of advanced home-based Psychology courses. Credit 3 units. A&S : SS A&S : IQ, SSC

L33 Psych 473 Seminar: Contemporary Psychology
Critical analysis of theory and research on specific issues and topics in contemporary psychology. Prerequisites: junior or senior standing and 6 units of advanced home-based Psychology courses. Credit 3 units. A&S : SS FA : SSP

L33 Psych 4765 Biological Basis of the Major Mental Disorders
This course covers research on the biological basis of the major mental disorders, including schizophrenia and related disorders, unipolar and bipolar mood disorders, obsessive compulsive disorder, panic disorder, and alcohol and substance abuse. Emphasis is on examining the evidence of genetic, neurochemical, functional and structural abnormalities as
L33 Psych 488 The Cognitive Neuroscience of Film
To understand complex events in real life depends on perception, action and memory. To understand movies, people probably depend on similar psychological and neural mechanisms. This seminar uses results from psychology and neuroscience to try to better understand the experience of a movie viewer, and uses theory and practice to explore psychological hypotheses about perception. Prerequisite: Psych 360 or 3604 or 4604, or graduate standing in Psychology. Credit 3 units. A&S : NS A&S : IQ, NSM

L33 Psych 499 Behavioral Psychology Readings Group
This weekly journal-style readings class provides the opportunity to read and discuss seminal as well as current papers on the conceptual aspects of behavioral psychology and relevant research. Points of contact among behaviorism, cognitivism and neuroscience, and the natural lines of fracture, are examined. Prerequisite: permission of instructor. Credit 1 unit. A&S : SS A&S : IQ, SSC

L33 Psych 4971 Undergraduate Teaching
Limited opportunities for outstanding undergraduates to serve as teaching assistants for selected departmental courses. Application form and list of potential classes are available from Gary Massey, Administrative Officer, Psychology Department, room 223B. Prerequisites: permission of course instructor, departmental approval and junior/senior standing. Weekly meetings with coordinator required. Credit cannot be counted toward fulfilling the requirements for the major or minor in Psychology. Credit/no credit only. Credit 2 units. FA : SSP

L33 Psych 498 Study for Honors
Acceptance into the Honors Program is based on superior performance as evidenced by the student’s record in undergraduate course work and the written agreement (Petition for Permission to Enroll) of a member of the faculty of the department (or other approved supervisor) to supervise an Honors project. The student must complete 6 units of Honors work (3 units of Psych 498 and 3 units of Psych 499), submit an acceptable written thesis, and be recommended by the Department. Recommendation for an Honors degree is based on the evaluation of the written thesis and the student’s overall performance as an undergraduate. Students in the Honors Program meet regularly in the Honors Seminar to discuss their research and become acquainted with the work of the other students. Psych 498 is a writing-intensive course. All students must meet with Dr. Sommers prior to registering. Prerequisite: Psych 301 or equivalent and permission of instructor. Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI FA : SSP

L33 Psych 499 Study for Honors
Acceptance into the Honors Program is based on superior performance as evidenced by the student’s record in undergraduate course work and the written agreement (Petition for Permission to Enroll) of a member of the faculty of the department (or other approved supervisor) to supervise an Honors project. The student must complete 6 units of Honors work (3 units of Psych 498 and 3 units of Psych 499), submit an acceptable written thesis, and be recommended by the Department. Recommendation for an Honors degree is based on the evaluation of the written thesis and the student’s overall performance as an undergraduate. Students in the Honors Program meet regularly in the Honors Seminar to discuss their research and become acquainted with the work of the other students. Permission of instructor is required for this course. All students must meet with Dr. Sommers prior to registering. Prerequisite: Psych 301 or 3011. Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

Public Health
Please note: The Public Health Minor will be discontinued for students enrolling in the fall of 2012 and beyond. Students interested in Public Health should explore the Global Health and Environment minor track in Anthropology (p. 182).

The Minor in Public Health permits students to focus the undergraduate course of study on health-related issues at the population and community level. Students in public health develop a greater understanding of the various factors affecting population health in local, regional and global perspective. Three foundational core courses provide a common language and methodology for understanding the key issues and controversies in public health, while elective courses permit exposure to a variety of disciplinary perspectives that contribute to public health practice and problem solving. Studying public health is important because it provides students with a population-level perspective on health and wellness, and provides an opportunity to address key societal concerns such as health equity and social justice. A multidisciplinary approach insures that the student who completes the Minor in Public Health will be well-prepared to proceed to the graduate level in public health or any number of related fields. All students are eligible to participate in the Minor in Public Health, regardless of their major discipline.

Contact Person: Dr. Bradley Stoner
Phone: 314/935-5673
E-mail: bstoner@artsci.wustl.edu
Departmental website: http://publichealth.artsci.wustl.edu
There is no major in Public Health. Interested students should explore the Global Health and Environment (p. 180) track of the Anthropology major.

Please note: The Public Health Minor will be discontinued for students enrolling in the fall of 2012 and beyond. Students interested in Public Health should explore the Global Health and Environment (p. 182) minor track in Anthropology.

The Minor in Public Health

Units required: 15

Required courses: 9 units

PHealth 3283 Introduction to Public Health
PHealth 3284 Public Health Research and Practice
PHealth 4882 Anthropology and Public Health

Elective courses: 6 units

Select 6 units from the following:

PHealth 224 Infectious Diseases: Past, Present and Future
PHealth 233 Biomedical Ethics
PHealth 260 Topics in Health and Community
PHealth 303 Human Biology
PHealth 307 Human Variation
PHealth 310 History of Women's Health Care in America
PHealth 315 Introduction to Social Psychology
PHealth 316 Contemporary Women's Health
PHealth 3183 A History of Genetics in the 20th Century
PHealth 3195 Abnormal Child Psychology
PHealth 322 Biostatistics
PHealth 326 Introduction to the Psychology of Aging
PHealth 3262 Medicinal Botany
PHealth 333 Culture and Health
PHealth 343 Understanding the Evidence: Provocative Topics of Contemporary Women's Health and Reproduction
PHealth 347 Environmental Psychology
PHealth 348 Emerging Infectious Diseases
PHealth 352 Health Economics
PHealth 354 Abnormal Psychology: The Major Mental Disorders
PHealth 3551 The Welfare State and Social Policy in America
PHealth 358C Leeches to Lasers
PHealth 361 Culture and Environment
PHealth 3612 Population and Society
PHealth 3621 Anthropology of Human Birth
PHealth 365 Variations in Human Growth
PHealth 3672 Medicine, Healing and Experimentation in the Contours of Black History
PHealth 372 Behavioral Ecology
PHealth 3782 Medicine Among European Jews from the Middle Ages to the Modern Period
PHealth 4595 Developmental Plasticity and Human Health
PHealth 3874 International Public Health
PHealth 4003 Interrogating Health, Race and inequalities: Public Health, Medical Anthropology and History
PHealth 3876 Pharmaceutical Personhood
PHealth 402 Transnational Reproductive Health Issues: Meanings, Technologies, Practices
PHealth 406 Sexual Health and the City: A Community-Based Learning Course
PHealth 4127 Language and Medical Expertise
PHealth 4134 The AIDS Epidemic: Inequalities, Ethnography and Ethics
PHealth 4135 Tobacco: History, Culture, Science and Policy
(U69) UCollege Anthro 4135 Tobacco: Global Epidemic
PHealth 4215 Anthropology of Food
PHealth 4253 Researching Fertility, Mortality and Migration
PHealth 4254 The Anthropology of Maternal Death
PHealth 427 Social Gerontology
PHealth 451 Environmental Policy
PHealth 4557 Biopsychosocial Aspects of Eating Disorders and Obesity
PHealth 4834 Health, Healing and Ethics: Comparative Perspectives on Sickness and Society
PHealth 4883 Political Economy of Health
PHealth 4884 Anthropology of Sexually Transmitted Infections

Additional Requirements
For non-Anthropology majors, at least one elective course must be home-based outside the Anthropology Department. For Anthropology majors, both electives must be home-based outside Anthropology. Additional courses may be added as they become available in the curriculum. Students should register for elective courses under L58 (Public Health) in order for the courses to count toward the Public Health Minor. Courses taken for the Minor in Public Health may not be counted toward the requirements for any other major or minor in the College of Arts & Sciences. Study-abroad credits will be considered on a case-by-case basis, not to exceed 3 elective units toward the minor.

Public Health
L58 PHealth 224 Infectious Diseases: Past, Present and Future
Same as Biol 224
Credit 2 units. A&S : NS A&S : IQ, NSM

L58 PHealth 233 Biomedical Ethics
Same as Phil 233F
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH FA : SSP

L58 PHealth 260 Topics in Health and Community
Same as Anthro 260
Credit 1 unit. A&S : SS A&S : IQ, SSC

L58 PHealth 303 Human Biology
Same as Biol 303A
Credit 3 units. A&S : NS A&S : IQ, NSM BU : SCI FA : NSM

L58 PHealth 307 Human Variation
Same as Anthro 307A
Credit 3 units. A&S : NS, SD, QA A&S : IQ, NSM, AN, SD BU : SCI FA : NSM

L58 PHealth 310 History of Women’s Health Care in America
Same as WGSS 310
Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI BU : BA FA : SSP

L58 PHealth 315 Introduction to Social Psychology
Same as Psych 315
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L58 PHealth 316 Contemporary Women’s Health
Same as WGSS 316
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L58 PHealth 3183 A History of Genetics in the 20th Century
Same as Biol 3183
Credit 3 units. A&S : NS A&S : IQ, NSM

L58 PHealth 3195 Abnormal Child Psychology
Same as Psych 3195
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA

L58 PHealth 322 Biostatistics
Same as Math 322
Credit 3 units. A&S : NS A&S : IQ, NSM FA : NSM

L58 PHealth 326 Introduction to the Psychology of Aging
Same as Psych 326
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA

L58 PHealth 3262 Medicinal Botany
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>L58 PHealth 3263</td>
<td>Introduction to Public Health</td>
<td>3 units</td>
<td>A&amp;S : SS A&amp;S : IQ, SSC BU : SCI FA : SSP</td>
</tr>
<tr>
<td>L58 PHealth 3284</td>
<td>Public Health Research and Practice</td>
<td>3 units</td>
<td>A&amp;S : SS A&amp;S : IQ, SSC FA : SSP</td>
</tr>
<tr>
<td>L58 PHealth 333</td>
<td>Culture and Health</td>
<td>3 units</td>
<td>A&amp;S : SS A&amp;S : IQ, SSC BU : BA FA : SSP</td>
</tr>
<tr>
<td>L58 PHealth 343</td>
<td>Understanding the Evidence: Provocative Topics of Contemporary Women’s Health and Reproduction</td>
<td>3 units</td>
<td>A&amp;S : SS A&amp;S : IQ, SSC BU : ETH</td>
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<tr>
<td>L58 PHealth 347</td>
<td>Environmental Psychology</td>
<td>3 units</td>
<td>A&amp;S : SS A&amp;S : IQ, SSC</td>
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<tr>
<td>L58 PHealth 348</td>
<td>Emerging Infectious Diseases</td>
<td>2 units</td>
<td>A&amp;S : NS A&amp;S : IQ, NSM</td>
</tr>
<tr>
<td>L58 PHealth 352</td>
<td>Health Economics</td>
<td>3 units</td>
<td>A&amp;S : SS A&amp;S : IQ, SSC FA : SSP</td>
</tr>
<tr>
<td>L58 PHealth 354</td>
<td>Abnormal Psychology: The Major Mental Disorders</td>
<td>3 units</td>
<td>A&amp;S : SS A&amp;S : IQ, SSC BU : BA FA : SSP</td>
</tr>
<tr>
<td>L58 PHealth 3551</td>
<td>The Welfare State and Social Policy in America</td>
<td>3 units</td>
<td>A&amp;S : SS A&amp;S : IQ, SSC</td>
</tr>
<tr>
<td>L58 PHealth 361</td>
<td>Culture and Environment</td>
<td>3 units</td>
<td>A&amp;S : SS A&amp;S : IQ, SSC</td>
</tr>
<tr>
<td>L58 PHealth 3612</td>
<td>Population and Society</td>
<td>3 units</td>
<td>A&amp;S : SS A&amp;S : IQ, SSC BU : ETH</td>
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<tr>
<td>L58 PHealth 3621</td>
<td>Anthropology of Human Birth</td>
<td>3 units</td>
<td>A&amp;S : SS A&amp;S : IQ, SSC BU : ETH</td>
</tr>
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<td>L58 PHealth 3672</td>
<td>Medicine, Healing and Experimentation in the Contours of Black History</td>
<td>3 units</td>
<td>A&amp;S : TH, CD, SD A&amp;S : IQ, HUM HUM, LCD</td>
</tr>
<tr>
<td>L58 PHealth 3782</td>
<td>Before “The Clinic was born”: Medicine among European Jews from the Middle Ages to Modern Period</td>
<td>3 units</td>
<td>A&amp;S : TH A&amp;S : IQ, HUM</td>
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<td>L58 PHealth 3874</td>
<td>International Public Health</td>
<td>3 units</td>
<td>A&amp;S : SS A&amp;S : IQ, SSC</td>
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<td>L58 PHealth 3876</td>
<td>Pharmaceutical Personhood</td>
<td>3 units</td>
<td>A&amp;S : SS A&amp;S : IQ, SSC</td>
</tr>
<tr>
<td>L58 PHealth 4003</td>
<td>Interrogating Health, Race and Inequalities: Public Health, Medical Anthropology and History</td>
<td>3 units</td>
<td>A&amp;S : SS A&amp;S : IQ, SSC</td>
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</table>
Same as Anthro 4022
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD, SD
BU : BA

L58 PHealth 4033 Culture, Illness and Healing in Asia
Same as Anthro 4033
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD

L58 PHealth 406 Sexual Health and the City: A Community-Based Learning Course
Same as AFAS 406
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD

L58 PHealth 4127 Language and Medical Expertise
Same as Anthro 4127
Credit 3 units. A&S : SS A&S : IQ, SSC

L58 PHealth 4134 The AIDS Epidemic: Inequalities, Ethnography and Ethics
Same as Anthro 4134
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD

L58 PHealth 4135 Tobacco: History, Culture, Science and Policy
Same as Anthro 4135
Credit 3 units. A&S : SS A&S : IQ, SSC

L58 PHealth 4215 Anthropology of Food
Same as Anthro 4215
Credit 3 units. A&S : SS A&S : IQ, SSC

L58 PHealth 4232 Researching Fertility, Mortality and Migration
Same as Anthro 4232
Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI

L58 PHealth 4254 The Anthropology of Maternal Death
Same as Anthro 4254
Credit 3 units. A&S : SS A&S : IQ, SSC

L58 PHealth 427 Social Gerontology
Same as Psych 427
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L58 PHealth 451 Environmental Policy

Same as Econ 451
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA, ETH FA : SSP

L58 PHealth 4557 Biopsychosocial Aspects of Eating Disorders and Obesity
Same as Psych 4557
Credit 3 units. A&S : SS A&S : IQ, SSC

L58 PHealth 4595 Developmental Plasticity and Human Health
Same as Anthro 4595
Credit 3 units. A&S : NS A&S : IQ, NSM

L58 PHealth 4596 Biomarkers: Measuring Population Health, Reproductive and Social Endocrinology
Same as Anthro 4596
Credit 3 units. A&S : NS A&S : IQ, NSM

L58 PHealth 4834 Health, Healing and Ethics: Comparative Perspectives on Sickness and Society
Same as Anthro 4834
Credit 3 units. A&S : SS A&S : IQ, SSC

L58 PHealth 4882 Anthropology and Public Health
Same as Anthro 4882
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

L58 PHealth 4883 Political Economy of Health
Same as Anthro 4883
Credit 3 units. A&S : SS A&S : IQ, SSC FA : SSP

Religious Studies

The study of religion, in all of its many cultural and historical manifestations, entails a study of the most fundamental values, as well as some of the most deep-seated conflicts found in individuals and in larger communities, societies and cultures. The study of religion and religions offers students an opportunity to explore, in an informed, critical and empathetic manner, many of the most pressing questions about the human condition. Given the multicultural and interdisciplinary nature of religious studies as a field, it also offers students a means to greatly expand their cultural and intellectual horizons and to acquire a deeper understanding of the reality of global human diversity.

Religious Studies at Washington University is a program that brings together faculty and courses from various disciplines in
the humanities and social sciences to engage in the academic study of major religious traditions of the world. The religious studies program offers a wide range of courses from introductory surveys to advanced seminars. Some of these courses are devoted to the historical development of one or more of the major religious traditions of the world, including Judaism, Christianity, Islam, Hinduism, Buddhism and East Asian religions. Others focus on particular texts such as the Hebrew Bible, the New Testament, the Qur’an or Buddhist scriptures. Still others are more comparative in nature, tackling broader issues such as religion and science; religion and literature; or religion, sexuality and gender. Students are encouraged and indeed required to gain an exposure to more than one religious tradition.

Contact Person: Sarah O'Donnell, Administrative Assistant
Phone: 314/935-8677
E-mail: relst@artsci.wustl.edu
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Director
Daniel Bornstein  
Stella K. Darrow Professor of Catholic Studies  
PhD, University of Chicago  
(History, Religious Studies)

Endowed Professors
John R. Bowen  
Dunbar–Van Cleve Professor  
PhD, University of Chicago  
(Anthropology)

Pascal Boyer  
Henry Luce Professor of Collective and Individual Memory  
PhD, University of Paris–Nanterre  
(Anthropology, Psychology)

Wayne Fields  
Lynne Cooper Harvey Distinguished Professor of English and American Culture Studies  
PhD, University of Chicago  
(English, American Culture Studies)

Marie Griffith  
John C. Danforth Distinguished Professor in the Humanities  
PhD, Harvard University  
(Danforth Center on Religion and Politics, Religious Studies)

Hillel J. Kieval  
Gloria M. Goldstein Professor of Jewish History and Thought  
PhD, Harvard University  
(History; Jewish, Islamic and Near Eastern Languages and Cultures; Religious Studies)

Leigh Eric Schmidt  
Edward Mallinckrodt Distinguished University Professor  
PhD, Princeton University  
(Danforth Center on Religion and Politics, Religious Studies)

Professors
Beata Grant  
PhD, Stanford University  
(East Asian Languages and Cultures, Religious Studies)

Robert D. Lamberton  
PhD, Yale University  
(Classics)

David Lawton  
PhD, University of York  
(English)

George M. Pepe  
PhD, Princeton University  
(Classics)

Associate Professors
Pamela Barmash  
PhD, Harvard University  
(Jewish, Islamic and Near Eastern Languages and Cultures; Religious Studies)

Eric Brown  
PhD, University of Chicago  
(Philosophy)

Geoff Childs  
PhD, Indiana University  
(Anthropology)

Martin Jacobs  
PhD, Habilitation, Free University of Berlin  
(Jewish, Islamic and Near Eastern Languages and Cultures; Religious Studies)

Christine Johnson  
PhD, Johns Hopkins University  
(History)

Stephanie Kirk  
PhD, New York University  
(Romance Languages and Literatures; Women, Gender and Sexuality Studies)

Rebecca Lester  
PhD, University of California–San Diego  
(Anthropology)

Nancy Reynolds  
PhD, Stanford University  
(History)

Gillian Russell  
PhD, Princeton University  
(Philosophy)
The Major in Religious Studies

Total units required: 30 units, of these 24 units must be in courses at the 300 level or above. The selection of courses should be guided by the following requirements.

Required courses: 6 units
- Re St 204 Thinking About Religion
- Re St 368 Theories and Methods in the Study of Religion

Senior Capstone Experience (3 units): In their senior year, all Religious Studies majors (with the exception of those students who have qualified for and elected to write an honors thesis) are required to take Re St 479 Senior Seminar in Religious Studies. The topic of this seminar varies from year to year.

Elective courses: (21 units; 18 must be 300 level or above): All majors must take at least seven courses chosen from among the offerings in Religious Studies. Those courses will be selected to achieve both breadth and depth of knowledge in the field.

To foster BREADTH OF KNOWLEDGE, the electives must include one course in four of the areas that the program supports. Those areas are: Judaism, Christianity, Islam, Buddhism, East Asian religions, South Asian religions, indigenous religious traditions, and religions of the ancient Mediterranean world.

To foster DEPTH OF KNOWLEDGE, the electives must include a concentration of three courses in one religious tradition or a set of closely related traditions (see list above) and a secondary concentration of two courses in another tradition or set of traditions. As an alternative, students may petition to create a thematic concentration, which must be approved by their adviser and the program director. Examples of such thematic concentrations include (but are not limited to) "Magic and Mysticism," "Religion and Politics," and "Gender and Religion."

Note: Any one course can count toward both the depth and breadth requirements.

For models illustrating some possible combinations of depth and breadth see the Religious Studies website.

Additional Information

Senior Honors: Qualified majors are encouraged to apply for Senior Honors before the end of the junior year. Students wishing to pursue this option need to meet the minimum honors requirements stated in this Bulletin and satisfactorily complete, during the senior year, Re St 498 Independent Work for Senior Honors I (fall) and Re St 499 Independent Work for Senior Honors II (spring), to be taken in addition to all other departmental requirements.

Transfer Credit: A maximum of 6 units of course work completed at another university, whether in the United States or abroad, may be applied toward the major. Credit will be awarded only to those courses that have been approved by the Religious Studies program.

The Minor in Religious Studies

Units required: 18 units, 12 of which must be at the 300 level or above.

Required courses: (6 units)
- Re St 204 Thinking About Religion
- Re St 368 Theories and Methods in the Study of Religion

Elective courses (12 units): All the remaining courses may be chosen according to individual interest. Students are reminded, however, that at least three of the four elective courses must be at the 300 level or above.

Michael Sherberg
PhD, University of California–Los Angeles
(Romance Languages and Literatures)

Assistant Professors

Roshan Abraham
PhD, University of Pennsylvania
(Classics, Religious Studies)

Catherine Adcock
PhD, University of Chicago
(History, Religious Studies)

Pauline Lee
PhD, Stanford University
(East Asian Languages and Cultures, Religious Studies)

Ian R. MacMullen
PhD, Harvard University
(Political Science)

Adjunct Associate Professor

Robert Wiltenburg
PhD, University of Rochester
(English)

Professors Emeriti

Carl W. Conrad
PhD, Harvard University
(Classics)

Robert E. Morrell
PhD, Stanford University
(East Asian Languages and Cultures)

James F. Poag
PhD, University of Illinois
(Germanic Languages and Literatures)
Additional Information

Students may transfer 3 credit units from another institution to count toward the Religious Studies minor with the approval of the adviser and the program director.

Religious Studies

L23 Re St 116 Freshman Seminar: Magicians and Witches in Greco-Roman Literature
Same as Classics 116
Credit 3 units.  A&S : TH  A&S : IQ, HUM  EN : H

L23 Re St 180 Freshman Seminar in Religious Studies
This course is for freshman only. Topics vary from semester to semester.
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : ETH  FA : SSP

L23 Re St 204 Thinking About Religion
Everyone agrees that religion is vitally important, but people rarely agree about what religion is. This course introduces students to the questions posed about religion, and the methods by which they are answered. Beginning with the central question — What is religion? — we ask: How has religion served political power? How does the experience of religion create or change perceptions of reality? How does religious practice maintain or subvert gender roles? How does commemoration of the past shape communities in the present? How are religious identities formed, and how do they change? What is religious art? How does something become sacred? We explore these and other questions using case studies drawn from a range of sources that represent different regions, traditions and scholarly approaches.
Credit 3 units.  A&S : IQ, HUM  EN : H

L23 Re St 207 Scriptures and Cultural Traditions
Same as Hum 209
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD  BU : ETH

L23 Re St 208F History, Text and Identity: Introduction to Jewish Civilization
Same as JNE 208F
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : ETH, IS  FA : SSP

L23 Re St 210C Introduction to Islamic Civilization
Same as JNE 210C
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD  BU : ETH, IS  FA : SSP

L23 Re St 2503 Freshman Seminar in History: Nation and Religion in Russia
Same as History 2503
Credit 3 units.  A&S : TH, CD

L23 Re St 2590 Freshman Seminar: From the “City on a Hill” to 9/11: Religion and Social Justice in America
Same as History 2590
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD

L23 Re St 300 Introduction to the Hebrew Bible/Old Testament
A survey of the Hebrew Bible (Old Testament) examined in the historical and cultural context of the ancient Near East. Traditional Jewish and Christian interpretation of the Bible is discussed. No knowledge of Hebrew required; no prerequisites.
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : ETH, HUM  FA : SSP

L23 Re St 3011 Intermediate Greek: The New Testament
Same as Greek 301
Credit 3 units.  A&S : LA  A&S : IQ, LCD, LS  BU : HUM

L23 Re St 3012 Biblical Law and the Origins of Western Justice
Same as JNE 3012
Credit 3 units.  A&S : TH, CD, SD  A&S : IQ, HUM, LCD

L23 Re St 301T Historical Methods — Transregional History
Same as History 301T
Credit 3 units.  A&S : TH

L23 Re St 303 The Taoist Tradition
This course offers an introduction to the ethical aspects of the Taoist tradition through the study of a select number of literary and philosophical texts ranging from ca. 300 BCE through the present day. We explore questions regarding the relationship between nature and culture, conceptions of the self, and ideas about the good life.
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD  BU : ETH

L23 Re St 3031 Christianity in the Modern World
Survey of Christianity since the Reformation. Focus on the divisions in Christianity, its responses to modern science, the rise of capitalism, and European expansion into Africa, Asia and the Americas. Attention to ecumenism and the contemporary status of Christianity in the world. Use of original documents.
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : ETH
L23 Re St 3062 Islam, Culture and Society in West Africa
Same as AFAS 3062
Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD

L23 Re St 307F Introduction to the New Testament
What can be known — from a historical perspective — about the life and teachings of Jesus and his earliest followers? How did Jesus see himself and how did his followers see him? How did the lives, teachings and deaths of Jesus and his followers come to form the heart of a new movement? If Jesus and the apostles were all Jews, how did Christianity emerge as a distinct “religion”? This course investigates these questions through a focus on the earliest sources for Jesus and his first followers, including and extending beyond the canonical books of the Christian New Testament. Our approach in this course is historical and literary, rather than theological or confessional: we ask what Jesus, his first followers, and their Jewish and “pagan” contemporaries did and believed, and we try to catch glimpses of the worlds in which they lived and the cultures that they took for granted.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : SSP

L23 Re St 3082 From the Temple to the Talmud: The Emergence of Rabbinic Judaism
This course offers a survey of the historical, literary, social and conceptual development of Rabbinic Judaism from its emergence in late antiquity to the early Middle Ages. The goal of the course is to study Rabbinic Judaism as a dynamic phenomenon — as a constantly developing religious system. Among the topics explored are: How did Judaism evolve from a sacrificial cult to a text-based religion? How did the “Rabbis” emerge as a movement after the destruction of the Second Temple and how could they replace the old priestly elite? How did Rabbinic Judaism develop in its two centers of origin, Palestine (the Land of Israel) and Babylonia (Iraq), to become the dominant form of Judaism under the rule of Islam? How did Jewish ritual and liturgy develop under Rabbinic influence? How were the Rabbis organized and was there diversity within the group? What was the Rabbis’ view of women? How did they perceive non-Rabbinic Jews and non-Jews? As Rabbinic Literature is used as the main source to answer these questions, the course provides an introduction to the Mishnah, the Palestinian and Babylonian Talmuds, and the Midrash collections — a literature that defines the character of Judaism down to our own times. All texts are read in translation.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : SSP

L23 Re St 3091 The Problem of Evil
The question of how God can allow evil to occur to the righteous or innocent people has been a perennial dilemma in religion and philosophy. We study the classic statement of the problem in the biblical book of Job, the ancient Near Eastern literature on which Job is based, and traditional Jewish and Christian interpretation of Job. We study the major approaches to the problem of evil in Western philosophical and religious thought.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH

L23 Re St 3092 Confucian Thought: The Sage and Society: Writing-Intensive Seminar
This course offers an introduction to the ethical dimensions of Confucianism through a study of a select number of religio-philosophical texts ranging from ca. 500 BCE through the present day. We begin with a study of Confucianism as a commentarial tradition on the classical text of the Analects. We then turn to the theme of self-cultivation and examine three contrasting ideas put forth on the subject: self-cultivation through learning the classics, through mystical intuition, and through a study of history. In the third part, we explore the role of Confucianism in addressing contemporary ethical issues such as ones regarding government, abortion, the environment, human rights, feminism and intellectual property.
Credit 3 units. A&S : TH, WI A&S : IQ, HUM, WI

L23 Re St 3093 American Holidays, Rituals and Celebrations
Same as AMCS 3105
Credit 3 units. A&S : IQ, HUM EN : H

L23 Re St 311 Buddhist Traditions
This course examines the historical development of Buddhism from its origins in South Asia in the 6th to 5th century BCE, through the transmission of the teachings and practices to East Asia, Southeast Asia and Tibet, to contemporary transformations of the tradition in the modern West. In the first third of the classical texts from the Daoist, Confucian, Mohist and Legalist traditions, and follow arguments where the thinkers expand upon, dispute and respond to each other in regard to questions that are still important to us today. We explore issues such as notions of the self, conceptions of the greater cosmos, the role of rituals, ideas about human nature, and the subjects of freedom and duty. Motivating the course is the underlying question: What is the good life?.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

L23 Re St 3101 The Problem of Evil
The question of how God can allow evil to occur to the righteous or innocent people has been a perennial dilemma in religion and philosophy. We study the classic statement of the problem in the biblical book of Job, the ancient Near Eastern literature on which Job is based, and traditional Jewish and Christian interpretation of Job. We study the major approaches to the problem of evil in Western philosophical and religious thought.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH

L23 Re St 3105 American Holidays, Rituals and Celebrations
Same as AMCS 3105
Credit 3 units. A&S : IQ, HUM EN : H

L23 Re St 3111 Buddhist Traditions
This course examines the historical development of Buddhism from its origins in South Asia in the 6th to 5th century BCE, through the transmission of the teachings and practices to East Asia, Southeast Asia and Tibet, to contemporary transformations of the tradition in the modern West. In the first third of the
course, we focus on the biographical and ritual expressions of
the historical Buddha’s life story, the foundational teachings
attributed to the Buddha, and the formation and development
of the Buddhist community. In the second third, we examine
the rise of the Mahayana, the development of the Mahayana
pantheon and rituals, and the spread of Mahayana in East Asia.
In the final third, we explore the Theravada tradition in Sri Lanka
and Thailand, then Tantric Buddhism in India, Tibet and East
Asia. We close the course with an overview of Buddhism in the
modern West.

Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : ETH

L23 Re St 312 South Asian Traditions
In this course, we take a considered look at the diverse
religious traditions that have shaped and enriched life on
the Indian subcontinent and beyond. India, Pakistan, Nepal,
Bangladesh and Sri Lanka are home to Hindu, Islamic, Buddhist,
Jain, Christian and Sikh traditions of learning and practice,
among others. This course provides an in-depth survey of the
traditions of South Asia, while attending to the borrowings and
contestations that have blurred and defined the boundaries
between traditions over time. We explore the central teachings,
practices and debates of these traditions as we explore
mythology, poetry and narrative; ritual and performance; social
relations and political life at selected moments in the history of
South Asia.

Credit 3 units.  A&S : TH, CD

L23 Re St 3122 Race, Caste, Conversion: Social Movements
in South Asia
Same as History 3122
Credit 3 units.  A&S : TH, CD, SD

L23 Re St 313C Islamic History 622–1200
Same as History 313C
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : IS  FA : SSP

L23 Re St 314C Islamic History 1200–1800
Same as History 314C
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD  BU : IS
FA : SSP

L23 Re St 3192 Modern South Asia
Same as History 3192
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD  BU : HUM, IS
FA : SSP

L23 Re St 3221 Topics in Italian Studies: The Jewish
Experience in Italy, 1850–1945
Same as Ital 3221
Credit 3 units.  A&S : TH  A&S : IQ, HUM, LCD

L23 Re St 3262 The Early Medieval World 300–1000
Same as History 3262
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD  BU : IS
FA : SSP

L23 Re St 3263 The High Middle Ages: 1000–1500
Same as History 3263
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD  BU : IS
FA : SSP

L23 Re St 3277 Philosophy of Religion
Same as Phil 327
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L23 Re St 3293 Religion and Society
We will take a broad and practice-oriented view of ‘religion’,
including uttering spells, sacrificing to a god, healing through
spirit possession, as well as praying and reciting scripture. We
will consider religious practices in small-scale societies as well
as those characteristic of forms of Judaism, Islam, Christianity,
and other broadly-based religions. We give special attention to
the ways religions shape politics, law, war, as well as everyday
life in modern societies.

Same as Anthro 3293
Credit 3 units.  A&S : SS  A&S : IQ, SSC  BU : ETH

L23 Re St 3301 Religion and Science
This course explores the relationships between religion and
the natural sciences from an historical perspective, focusing on
developments in the West from the 17th century to the present,
with special emphasis on Galileo, Darwin and contemporary
issues raised by cosmology and evolutionary biology. Topics
include the Bible and science, natural theology, and the viability
of religious belief in the context of 20th-century science.

Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : ETH

L23 Re St 3313 Women and Islam
Same as Anthro 3313
Credit 3 units.  A&S : SS, CD  A&S : IQ, SSC, LCD  BU : BA
FA : SSP

L23 Re St 334C Crusade, Disputation and Coexistence:
Jews in Christian Europe
Same as History 334C

659
L23 Re St 3350 Out of the Shtetl: Jews in Central and Eastern Europe Between Empire, State and Nation
Same as History 3350
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD  BU : ETH, HUM, IS  FA : SSP

L23 Re St 335C Becoming “Modern”: Emancipation, Anti-Semitism and Nationalism in Modern Jewish History
Same as History 335C
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD  BU : ETH, HUM  FA : SSP

L23 Re St 336C History of Jews in Islamic Lands
Same as History 336C
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM  FA : SSP

L23 Re St 338 Pilgrims and Pilgrimage
This course is an exploration of some of the different manifestations and meanings of religiously motivated travel in various religious traditions, both East and West. While we look briefly at the history of pilgrimage in the premodern world, our primary focus is on pilgrimage in modern times. Our reading materials include primary sources, especially firsthand accounts and/or film documentaries by people who have participated in pilgrimages to places such as Varanasi, Bodhgaya, Mecca, Jerusalem and even Graceland. We also read secondary scholarly literature on pilgrimage by scholars from a wide range disciplines, including history, anthropology, art history and political science. Just a few of the questions we explore are: What motivates people to undertake pilgrimages? Is the nature of this motivation different today than what it was in the past? What are some of the various ritual, social, temporal and spatial elements and stages involved in pilgrimage? Why do some religious people vehemently oppose this kind of religious travel? What explains the continued popularity of pilgrimage today? Do online “virtual” pilgrimages perform the same function as actual physical travel? What is it that differentiates pilgrimage from other kinds of travel?.
Credit 3 units.  A&S : TH

L23 Re St 3411 The Jewish People in America
Same as JNE 341
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM

L23 Re St 3412 Children and Childhood in World Religions
Same as CFH 341

L23 Re St 3421 Childhood, Culture and Religion in Medieval Europe
Same as CFH 342
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD

L23 Re St 3422 Art of the Islamic World
Same as Art-Arch 3422
Credit 3 units.  A&S : TH  A&S : IQ, HUM, LCD

L23 Re St 343C Europe in the Age of the Reformation
Same as History 343C
Credit 3 units.  A&S : TH, CD, SD  A&S : IQ, HUM, LCD  BU : BA, HUM  FA : SSP

L23 Re St 346 Topics in East Asian Religions
This course explores one of the various topics in East Asian Religion.
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L23 Re St 348 Hindu Traditions
What exactly is Hinduism? Many have remarked on the overwhelming variety of Hindu traditions: the plethora of gods, the richness and range of mythological traditions, the great variety of festivals. In this course, we examine the diversity of Hindu traditions from a number of perspectives. We reflect on what this diversity means — How can we define Hinduism? Who is a Hindu? What have people understood Hinduism to be? We familiarize ourselves with key concepts, ceremonies, and narratives (from the Vedas to the Ramayana, from sacrifice to marriage) through the eyes of men and women, upper and lower castes, on the Indian subcontinent and around the world. We also learn how issues of social and gender equality have been debated in the language of Hindu traditions, thereby building a foundation for understanding the gender struggles, class conflict and sectarian strife in modern India.
Credit 3 units.  A&S : TH, CD, SD  A&S : IQ, HUM, LCD  BU : ETH

L23 Re St 3480 Medieval Jewish Travelogues, Chronicles and Biographies
Same as BHBR 348
Credit 3 units.  A&S : TH  A&S : IQ, HUM, LCD, LS

L23 Re St 3510 Cultures of the Middle Ages: Death and Dying in Medieval Europe
Same as Med-Ren 351
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD
L23 Re St 3528 Introduction to Early Medieval Art and Architecture
Same as Art-Arch 3528
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L23 Re St 356C Ancient Philosophy
Same as Phil 347C
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH FA : SSP

L23 Re St 357 The Holocaust in the Sephardic World
Same as IAS 357
Credit 3 units. A&S : TH, CD, SD A&S : IQ, HUM, LCD

L23 Re St 3585 Islam, Music, Muslim Media
Same as Music 3585
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L23 Re St 365F The Bible as Literature
Same as E Lit 365F
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH FA : Lit

L23 Re St 366 Approaches to the Qur’an
The place of the Qur’an in Islamic religion and society. Equal emphasis on text — the Qur’an’s history, contents and literary features — and context — the place of the Qur’an in everyday life, its oral recitation, artistic uses and scholarly interpretation. Knowledge of Arabic not required.
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : ETH

L23 Re St 367 Religious Themes in Contemporary Literature
Same as E Lit 367
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH FA : Lit

Hindu, Islamic and other South Asian traditions were recast in the molds of natural science, social science and world religion. Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : ETH

L23 Re St 368 Theories and Methods in the Study of Religion
What is religion? In this course, we explore how religious ritual may help to clarify the nature and function of religion. We first consider some “classic” theories of religion and ritual, such as those of James Frazer, Sigmund Freud, Emile Durkheim, Mircea Eliade, Max Weber, E. E. Evans-Pritchard and Clifford Geertz. We also consider some more recent theories of ritual and its relationship to religion (such as those of Victor Turner and Maurice Bloch). Alongside and in light of these theoretical writings, we look at specific instances of ritual practice from various cultures and periods. Note: This course is required for Religious Studies majors and minors. It is recommended that this course be taken after completion of Re St 202 and Re St 203 or Re St 204.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH

L23 Re St 374C Kings, Priests, Prophets and Rabbis: The Jews in the Ancient World
Same as JNE 301C
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : BA, HUM FA : SSP

L23 Re St 3750 In the Beginning: Creation Myths of the Biblical World
Same as JNE 3751
Credit 3 units. A&S : TH, CD, WI A&S : IQ, HUM, LCD

L23 Re St 380 Topics in Religious Studies
The topic for this course varies.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH FA : SSP

L23 Re St 382 Topics in Christian Thought
The topic covered in this course varies.
Credit 3 units. A&S : TH A&S : IQ, HUM BU : ETH FA : SSP

L23 Re St 3831 Magicians, Healers and Holy Men
Same as Classics 3831
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM

L23 Re St 385D Topics in Biblical Hebrew Texts
Same as BHBR 385D
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, LS BU : HUM

L23 Re St 386 Topics in Jewish Studies
Same as JNE 3582
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD

L23 Re St 38C8 Religion and Politics in South Asia: Writing-Intensive Seminar
Same as History 38C8
Credit 3 units.  A&S : TH, CD, WI  A&S : IQ, HUM, LCD

L23 Re St 390 Lyrics of Mystical Love, East and West
Same as Comp Lit 390
Credit 3 units.  A&S : TH, CD, WI  A&S : IQ, HUM, LCD  FA : Lit

L23 Re St 392 South Asian Traditions in Practice: Ritual, Spectacle, Self
What is ritual, what do rituals mean, how do rituals work? In this course we explore different perspectives on how ritual practice can be effective: How do ritual performances express or reconcile core cultural values? How do forms of worship produce, reinforce or alter relationships of kinship, hierarchy or power? How are regimens of practice employed for making the self? We explore these questions through detailed study of forms of practice in Hindu, Islamic, Jain and other South Asian traditions: public processions; dramatic performance; domestic rites; meditation and worship; diet and bodily discipline. Course aims: to deepen our understandings of religion, society and politics in general, and of South Asian culture and history in particular. No prerequisites; prior course work in Re St 203 or Re St 3670 recommended.
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD  BU : ETH

L23 Re St 393 Medieval Christianity
This course surveys the historical development of Christian doctrine, ecclesiastical organization and religious practice between the 5th century and the 15th, with an emphasis on the interaction of religion, culture, politics and society. Topics covered include the Christianization of Europe, monasticism, the liturgy, sacramental theology and practice, the Gregorian reform, religious architecture, the mendicant orders and the attack on heresy, lay devotions, the papal monarchy, schism and conciliarism, and the reform movements of the 15th century.
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : BA

L23 Re St 3962 Religion and American Society, 1890 to the Present
This course explores religious life in the United States. We focus our study on groups and movements that highlight distinctive ways of being both “religious” and “American,” including the Americanization of global religions in the U.S. context. Major themes include religious encounter and conflict; secularization, resurgent traditionalism, and new religious establishments; experimentalism, eclecticism and so-called “spiritual” countercultures; the relationship between religious change and broader social and political currents (including clashes over race, class, gender and sexuality); and the challenges of religious multiplicity in the U.S. In the class, students: (1) acquire knowledge of the disparate religions practiced in North America during the 20th century and beyond; (2) examine some of the chief conflicts as well as alliances between religion and the American social order in a global context; and (3) develop interpretive tools for understanding religion’s present and enduring role in the U.S. and the world.
Credit 3 units.  A&S : TH  A&S : IQ, HUM  EN : H

L23 Re St 39T8 Sufism: Mystics in Islamic History: Writing-Intensive Seminar
This course is designed as a social and intellectual history of Sufism in all its major aspects. The course begins with a survey of Sufism’s formative period from the 9th to the 12th centuries CE, examining the emergence of key Sufi doctrines and practices as well as the formation of the first Sufi communities around accomplished masters. Then, the course traces the rise to social prominence of the Sufi mode of piety during and after the 12th century in the form of Sufi orders as well as the reaction of nonconformist Sufis to such increasing social success. The course will also consider the critique of Sufism by modernist Muslims and radical Islamists alike, as a mode of piety out of tune with “modern” science and rationality as well as Sufi responses to such critique.
Same as History 39T8
Credit 3 units.  A&S : TH, CD, WI  A&S : IQ, HUM, LCD  BU : HUM

L23 Re St 4020 Jerusalem, The Holy City
Same as JNE 4020
Credit 5 units.  A&S : TH, CD, SD

L23 Re St 403 Topics in East Asian Religion and Thought
Topics in East Asian Religions is a course for advanced undergraduate and graduate students on specific themes and methodological issues in East Asian religions.
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM

L23 Re St 4041 Islam and Politics
Same as Anthro 4041
Credit 3 units.  A&S : SS, CD  A&S : IQ, SSC, LCD  BU : IS  FA : SSP

L23 Re St 4042 Islam Across Cultures
Same as Anthro 4042
Credit 3 units.  A&S : SS, CD  A&S : IQ, SSC, LCD  FA : SSP
L23 Re St 405 Diaspora in Jewish and Islamic Experience
Same as JNE 405
Credit 4 units. A&S : TH A&S : IQ, HUM

L23 Re St 4060 Convivencia or Reconquista? Muslims, Jews and Christians in Medieval Iberia
Same as JNE 4060
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L23 Re St 4070 Judaism and Islam in Comparative Perspective
Same as JNE 4070
Credit 3 units. A&S : TH A&S : IQ, HUM

L23 Re St 4088 Nuns
Nuns — women vowed to a shared life of poverty, chastity and obedience in a cloistered community — were central figures in medieval and early modern religion and society. This course explores life in the convent, with the distinctive culture that developed among communities of women, and the complex relations between the world of the cloister and the world outside the cloister. We look at how female celibacy served social and political as well as religious interests. We read works by nuns, both willing and unwilling, and works about nuns: nuns behaving well, and nuns behaving scandalously badly; nuns embracing their heavenly spouse, and nuns putting on plays; nuns possessed by the devil, and nuns managing their possessions; nuns as enraptured visionaries, and nuns grappling with the mundane realities of life in a cloistered community.
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD

L23 Re St 4099 Beyond Geography: The Meaning of Place in the Near East
Same as JNE 4099
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L23 Re St 4101 Medieval English Literature II
Same as E Lit 4101
Credit 3 units. A&S : TH A&S : IQ, HUM

L23 Re St 4111 Topics in Christianity: Women and Religion in Medieval Europe
This course explores the religious experience of women in medieval Europe and attempts a gendered analysis of the Christian Middle Ages. It examines the religious experience of women in a variety of settings, from household to convent. Readings include modern studies of women and religion in medieval Europe, as well as medieval texts produced by, for and about women.
Credit 3 units. A&S : TH A&S : IQ, HUM

L23 Re St 4122 Islamic Theology
This course explores major themes of early Islamic theology as developed by the Mutazilite, Ash'arite and Maturidi schools. Some attention also is paid to defunct theological systems, the traces of which have remained in the heresiographical literature. Most readings are in primary sources in English translation, though the students also are introduced to some secondary literature on various themes. Some comparative theology with reference to the Judeo-Christian tradition is a regular feature of class discussion. Topics include (but are not limited to) debates over the createdness of the Qur’an; predestination and foreknowledge; God’s attributes; the nature of language; the nature of the human soul; and creation and afterlife.
Credit 3 units. A&S : TH A&S : IQ, HUM FA : SSP

L23 Re St 4121 American Religion, Politics and Culture: Historical Foundations
This research-oriented seminar involves in-depth historiographical investigation of leading scholarship at the busy intersections of American religion, politics and culture. The first semester places the emphasis on historical foundations and is tilted toward that academic literature. Some sessions include a visiting scholar engaged in cutting-edge research — a feature that allows seminar members to work with important scholars from beyond the university. Possible topics include: church-state relations, religion and foreign policy, religion and civil rights, religion and the science wars, the rise of the Religious Right, and the role of religion in national elections. The seminar is taught under the auspices of the John C. Danforth Center on Religion and Politics and is offered in two complementary parts (though enrollment in either one of the two is certainly possible). Its ambition is to build up a community of inquirers engaged in the core questions that animate the Danforth Center. Prerequisite: advanced undergraduate or graduate standing in AMCS, History or Religious Studies or permission of instructor.
Credit 3 units. A&S : TH A&S : IQ, HUM

L23 Re St 4122 American Religion, Politics and Culture: Commentary from Alexis de Tocqueville to Contemporary Pundits
This research-oriented seminar involves in-depth historiographical investigation of leading scholarship at the busy intersections of American religion, politics and culture. The second semester focuses on classic and contemporary commentaries on the American religious and political scene from Alexis de Tocqueville through today’s leading pundits. Some sessions include a visiting scholar engaged in cutting-edge research — a feature that allows seminar members to work with important scholars from beyond the university. Possible
We discuss how Zen's conception of its history is related to its teachings, practices and literature of Zen Buddhism in China. This course is designed as an exploration of the history, civilizations (Chinese, Japanese or Korean) is recommended. Credit 3 units. A&S : TH A&S : IQ, HUM

L23 Re St 432 Early Christianity and Classical Culture
This course explores the tangled, sometimes conflictual, but always fascinating relations between early Christianity and the classical world through which it spread. Topics discussed include: the Pauline epistles in relation to Greco-Roman letter writing; the gospels and pagan biographical traditions; the apocryphal Acts of the Apostles and the ancient novel; and the relationship between miracle and magic in regard to Jesus and pagan holy men. Our aim is to understand the multicultural, cosmopolitan world that gave rise to Christianity and its earliest literature. Credit 3 units. A&S : TH A&S : IQ, HUM

L23 Re St 431 Topics in Islam
Critical examination of special topics or figures in the history of Islam. May be repeated for credit. Prerequisite: junior standing. Same as JNE 445 Credit 3 units. A&S : TH BU : IS FA : SSP

L23 Re St 418 Gender and Sexuality in East Asian Religions
In this course we explore some of the primary gender ideals and realities, images and self-representations in the religions of China, Japan and Korea, with a discussion of Confucianism but primary emphasis on East Asian Buddhism (esp. Zen and Pure Land), Daoism, Shinto and popular religious traditions such as Shamanism. Selected reading and discussion materials include scriptural texts; poetry, fiction and drama (in English translation); painting and archeological evidence; films and videos; and secondary scholarly and ethnographic studies. Prerequisite: at least one introductory course in East Asian religions or civilizations (Chinese, Japanese or Korean) is recommended. Credit 3 units. A&S : TH, CD

L23 Re St 415 Topics in Judaism
Same as JNE 415
Credit 3 units. A&S : TH

L23 Re St 414 The Mystical Tradition in Judaism
What is Jewish “mysticism”? What is its relationship to the category of “religion”? Is Jewish mysticism just one form of a general phenomenon common to a variety of religious traditions or is it a specific interpretation of biblical, rabbinic and other Jewish traditions? Taking the above questions as a starting point, this course aims at a systematic and historically contextualized analysis of a broad range of Jewish texts that are commonly classified as “mystical.” (All primary texts are read in translation.) Within a broad historical time frame reaching from late antiquity up to the turn of the 19th century, the topics discussed include: classical rabbinic literature and its relationship to early esoteric teachings; the alphabetical mysticism of the Book of Creation; traditions of heavenly ascent (Hekhalot Literature) and magical power; the emergence of classical Kabbalah in medieval France and Spain, and the composition of its central text, the Zohar (“Book of Splendor”); Isaac Luria and the further development of Kabbalah in Ottoman Palestine and beyond; Sabbatai Tzvi’s messianic movement between Judaism and Islam; the Hasidic communities in Eastern Europe and the phenomenon of mystical leadership. At the same time, we explore such overarching themes as: the interplay of esoteric exegesis of the Bible and visionary experiences; the place of traditional Jewish law (halakhah) within mystical thought and identity as a special tradition within Mahayana Buddhism, as well as its basic teachings on the primacy of enlightenment, the role of practice, the nature of the mind, and the limitations of language. We also look at Zen Buddhism and its relation to the arts, including poetry and painting, especially in East Asia. Finally, we briefly explore the response of Zen teachers and practitioners to questions of war, the environment and other contemporary issues. Open to seniors and graduate students. Prerequisite: Re St 311 Buddhist Traditions or instructor’s permission. Credit 3 units. A&S : TH A&S : IQ, HUM EN : H

L23 Re St 4141 Gender, Religion, Medicine and Science
Same as WGSS 414
Credit 3 units. A&S : TH A&S : IQ, HUM

L23 Re St 4140 Topics in Rabbinic Texts
Same as BHBR 440
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

L23 Re St 414 The Mystical Tradition in Judaism
This course is designed as an exploration of the history, teachings, practices and literature of Zen Buddhism in China (Chan), Korea (Seon), Japan (Zen) and the United States. We discuss how Zen’s conception of its history is related to its Identities as a special tradition within Mahayana Buddhism, as well as its basic teachings on the primacy of enlightenment, the role of practice, the nature of the mind, and the limitations of language. We also look at Zen Buddhism and its relation to the arts, including poetry and painting, especially in East Asia. Finally, we briefly explore the response of Zen teachers and practitioners to questions of war, the environment and other contemporary issues. Open to seniors and graduate students. Prerequisite: Re St 311 Buddhist Traditions or instructor’s permission. Credit 3 units. A&S : TH A&S : IQ, HUM

L23 Re St 413 Topics in Islam
Critical examination of special topics or figures in the history of Islam. May be repeated for credit. Prerequisite: junior standing. Same as JNE 445
Credit 3 units. A&S : TH BU : IS FA : SSP

L23 Re St 411 Gender, Religion, Medicine and Science
Same as WGSS 414
Credit 3 units. A&S : TH A&S : IQ, HUM

L23 Re St 415 Topics in Judaism
Same as JNE 415
Credit 3 units. A&S : TH

L23 Re St 414 Gender and Sexuality in East Asian Religions
In this course we explore some of the primary gender ideals and realities, images and self-representations in the religions of China, Japan and Korea, with a discussion of Confucianism but primary emphasis on East Asian Buddhism (esp. Zen and Pure Land), Daoism, Shinto and popular religious traditions such as Shamanism. Selected reading and discussion materials include scriptural texts; poetry, fiction and drama (in English translation); painting and archeological evidence; films and videos; and secondary scholarly and ethnographic studies. Prerequisite: at least one introductory course in East Asian religions or civilizations (Chinese, Japanese or Korean) is recommended. Credit 3 units. A&S : TH, CD, SD A&S : IQ, HUM, SD

L23 Re St 425 Zen Buddhism
This course is designed as an exploration of the history, teachings, practices and literature of Zen Buddhism in China (Chan), Korea (Seon), Japan (Zen) and the United States. We discuss how Zen’s conception of its history is related to its Identities as a special tradition within Mahayana Buddhism, as well as its basic teachings on the primacy of enlightenment, the role of practice, the nature of the mind, and the limitations of language. We also look at Zen Buddhism and its relation to the arts, including poetry and painting, especially in East Asia. Finally, we briefly explore the response of Zen teachers and practitioners to questions of war, the environment and other contemporary issues. Open to seniors and graduate students. Prerequisite: Re St 311 Buddhist Traditions or instructor’s permission. Credit 3 units. A&S : TH A&S : IQ, HUM
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Prerequisites</th>
<th>Credits</th>
<th>Notes</th>
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<tbody>
<tr>
<td>L23 Re St 4491</td>
<td>American Unbelief from the Enlightenment to the New Atheism</td>
<td>This seminar examines American freethinkers, secularists, humanists and atheists from Tom Paine and Ernestine Rose through Madalyn Murray O’Hair and Sam Harris. Topics emphasized include: church-state relations, social radicalism and women’s rights, secular versus Christian imaginings of the nation, and the recent flourishing of the new atheists and religious “Nones.”.</td>
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<tr>
<td>L23 Re St 471</td>
<td>Topics in Religious Studies</td>
<td>The topic for this course varies.</td>
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<tr>
<td>L23 Re St 4711</td>
<td>Topics in Religious Studies: Gender and Religion in China</td>
<td>In this course, we explore the images, roles and experience of women in Chinese religions: Confucianism, Daoism, Buddhism and so-called “popular” religion. Topics discussed include: gender concepts, norms and roles in each religious tradition; notions of femininity and attitudes toward the female body; biographies of women in Confucian, Daoist and Buddhist literature; female goddesses and deities; and the place of the Buddhist and Daoist nun and laywoman in Chinese society. All readings are in English or in English translation. Prerequisite: senior/graduate standing. Students with no previous background in Chinese religion, literature or culture need instructor’s permission before enrolling.</td>
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<tr>
<td>L23 Re St 479</td>
<td>Senior Seminar in Religious Studies</td>
<td>The topic for this seminar differs every year. Previous topics have included Pilgrimage and Sacred Space in Antiquity; Religion in a Global Context; and Engendering Religion. The seminar is offered every spring semester and is required of all Religious Studies majors, with the exception of those writing Honor’s thesis. The class also is open, with the permission of the instructor, to other advanced undergraduates with previous course work in Religious Studies.</td>
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<tr>
<td>L23 Re St 480</td>
<td>Topics in Buddhist Traditions</td>
<td>The topic for this course varies.</td>
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<tr>
<td>L23 Re St 4811</td>
<td>Reading Seminar in Religion and Chinese Literature</td>
<td>Same as Chinese 481</td>
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<tr>
<td>L23 Re St 486</td>
<td>Europe’s “Jewish Question”: Emancipation, Anti-Semitism and Jewish-Christian Confrontation</td>
<td>Same as History 4942</td>
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<tr>
<td>L23 Re St 490</td>
<td>Topics in Islamic Thought</td>
<td>The topic covered varies.</td>
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<tr>
<td>L23 Re St 4901</td>
<td>Topics in Islamic Thought: Proseminar in Methods and Approaches in Islamic Studies</td>
<td>Same as JNE 4901</td>
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<tr>
<td>L23 Re St 4941</td>
<td>Advanced Seminar in History: Religion and Society in Modern Europe, 1750–1930</td>
<td>Same as History 4994</td>
<td>4</td>
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<tr>
<td>L23 Re St 4965</td>
<td>Advanced Seminar in History: Magic, Heresy and Witchcraft in the Middle Ages: 350–1550</td>
<td>Same as History 4965</td>
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<tr>
<td>L23 Re St 498</td>
<td>Independent Work for Senior Honors I</td>
<td>Investigation of a topic, chosen in conjunction with a faculty adviser, on which the student prepares a paper and is examined. Students take Re St 498 in the fall semester and Re St 499 in the spring semester. Prerequisites: admission to the Honors program, and permission of the program director and the major adviser.</td>
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<tr>
<td>L23 Re St 499</td>
<td>Independent Work for Senior Honors II</td>
<td>Investigation of a topic, chosen in conjunction with a faculty adviser, on which the student prepares a paper and is examined. Students take Re St 498 in the fall semester and Re St 499 in the spring semester. Prerequisites: admission to the Honor's</td>
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program, and permission of the program director and the major adviser.
Credit 3 units. FA : SSP

L23 Re St 4993 Advanced Seminar: Women and Religion in Medieval Europe
Same as History 4993
Credit 4 units. A&S : TH A&S : IQ, HUM

L23 Re St 4994 Advanced Seminar in History: The Inquisition in Europe, Asia and Latin America, 1200–1700
Same as History 4941
Credit 4 units. A&S : TH A&S : IQ, HUM FA : SSP

L23 Re St 4998 Advanced Seminar in History: Heresy and War
Same as History 4998
Credit 4 units. A&S : TH A&S : IQ, HUM

L23 Re St 49JK Advance Seminar in History: Blood and Sacred Bodies: Ritual Murder and Host Desecration Accusations
Same as History 49JK
Credit 4 units. A&S : TH, CD A&S : IQ, HUM, LCD

Romance Languages and Literatures
Romance Languages and Literatures offers vibrant programs in French, Italian, Portuguese and Spanish. Our language classes have long been popular with undergraduates, including those interested in international travel and those who anticipate a global dimension to their future careers. All of our classes focus on culture writ large: we study great texts and we do so with an eye to gender roles, traditions, communities, individual freedom, social obligations and many other topics of critical importance today. We offer concentrations in French, Italian and Spanish, as well as Applied Linguistics and introductory Portuguese.

Our undergraduate programs in French, Italian and Spanish include a compelling series of language, literature, culture and civilization courses that introduce students to the global Hispanic, Francophone and Italophone communities. The curriculum affords students the opportunity to become fluent in a foreign language, enrich their historical and cultural understanding, and acquaint themselves with influential intellectual, literary and artistic traditions. Students also benefit from linguistic and cultural immersion opportunities through our many summer, semester and year-long study abroad programs.

These programs offer unique possibilities to combine foreign language training with other interests, including participating in business internships in Paris; pursuing fieldwork in Camaroon; studying art history in Italy, literature in Madrid, or Andean culture in Ecuador. These experiences lead to a variety of career paths, including international law, international business, medicine, journalism and graduate studies in political science, international relations, history, anthropology, art history, comparative literature, French and film studies. In order to prepare our students to take full advantage of such opportunities, our faculty provide an innovative range of courses that combine the study of literature with contemporaneous developments in philosophy, science, music, art and theory.

For undergraduates interested in cross-language study, we offer two programs. First, students may elect to major in Romance Languages and Literatures. This major requires advanced course work in French, Italian and Spanish, with one of the three languages as the focus of primary emphasis. Second, they may minor in Applied Linguistics, studying the theoretical, empirical and practical foundations of teaching and learning languages. The minor is available to all majors on campus but is particularly suited to language majors.

Contact:
Phone: 314/935-5175
E-mail: rll@artsci.wustl.edu
Departmental website: http://rll.wustl.edu/

Chair
Harriet A. Stone
PhD, Brown University

Endowed Professors
Mabel Moraña
William H. Gass Professor in Arts & Sciences; Director of Latin American Studies Program, International and Area Studies PhD, University of Minnesota
Elżbieta Sklodowska
Randolph Family Professor in Arts & Sciences PhD, Washington University

Professors
Pascal Ifri
PhD, Brown University
Stamos Metzidakis
PhD, Columbia University
Joseph Schraibman
PhD, University of Illinois at Urbana–Champaign
Akiko Tsuchiya
PhD, Cornell University
Colette H. Winn
If you are a prospective major, you should consult with the director of Undergraduate Language Studies of the language you have chosen as early as possible.

For the French major, please see the French (p. 389) page.

For the Italian major, please see the Italian (p. 494) page.

For the Spanish major, please see the Spanish (p. 674) page.

### The Major in Romance Languages and Literatures

Like our other majors, the Romance languages major requires a writing-intensive course and a capstone. Further details are available on the department’s website at http://rll.wustl.edu.
Total units required: A minimum of 42 units at the 300- and 400-level, distributed among French, Italian and Spanish.

Required courses:

- Language I: courses through the 400 level, including 307, 308, two literature surveys (French 325 and 326, or Italian 323 and 324, or two among Spanish 330, 335, or 336), and two 400-level courses (in Italian, two literature courses; in French, two literature courses or one literature course and French 411; in Spanish, either two literature courses or one language and one linguistics course).

- Language II: courses through the 400 level, including 307, 308, at least two literature surveys (French 325 and 326, or Italian 323 and 324, or two among Spanish 330, 335 or 336), and one 400-level course (in Italian and French, a literature course; in Spanish, either literature or linguistics).

- Language III: courses through and including one literature survey (307, 308, plus, depending on the language, French 325 or 326; Italian 323 or 324; Spanish 330, 335 or 336).

- One WI (writing-intensive) course either in Spanish or Italian, or via French 411 (fall only).

- A capstone experience, either by completing Latin honors or by completing a senior undergraduate seminar in your junior or senior year with a grade of B+ or better. We encourage you to think about doing an honors thesis, perhaps combining French and Spanish. The 6 units of 495 (honors) would be above and beyond the requirements listed above for each language.

You will need to take these classes for a grade (not pass/fail) and earn a B– or better, with a B average overall, per departmental requirements of all majors.

You will need approval from directors of Undergraduate Studies for Italian, French and Spanish for this major.

Additional Information

If you plan to teach or pursue graduate study, you should consider taking a second foreign language, as well as linguistics courses. In all departmental courses for the major the student must receive a grade of B– or above. Each student's progress toward achieving the objectives of the major will be assessed on a regular basis and by a variety of means. More information is available in the departmental mission statement.

Spanish Honors in Linguistics: To qualify for Spanish Honors in linguistics in the major by thesis, you must complete linguistic research and prepare and orally defend an honors thesis, which is judged by an honors faculty committee. The honors thesis in linguistics may include scientific experiments conducted in Spanish. The written thesis will include several drafts, all of which will be written in Spanish.

Study Abroad: You are encouraged to participate in a study abroad program. Programs are available in France, Italy, Spain, Ecuador, Mexico and Chile.

Senior Honors: You are encouraged to work toward Latin Honors (cum laude, magna, summa). To qualify for Latin Honors in the major by thesis, you must complete special literary research and prepare and orally defend an honors thesis, which is judged by an honors faculty committee. To qualify for Latin Honors by course work, you must complete four literature courses at the 400 level, including two in literature before 1800, and present two critical essays written for those courses to be judged by an honors faculty committee. Recommendations for honors are based on your performance and the quality of the thesis or critical essays, plus your cumulative grade point average.

For the Minor in French, see the French (p. 390) page.
For the Minor in Italian, see the Italian (p. 494) page.
For the Minor in Spanish, see the Spanish (p. 674) page.

The Minor in Applied Linguistics

Units required: 18

Required courses:

- Ling 314 Literacies, Schools and Communities
- Ling 466 Second-Language Acquisition
- Span 469 Reading and Writing in a Second Language

Elective courses:

At least two of the following:

- Span 417 Spanish Phonetics, Phonology and Dialectology
- Span 467 Grammar and Vocabulary Acquisition
- Ling 312 Phonetics
- Psych 433 Psychology of Language

At least one of the following:

- AFAS 210 The Linguistic Legacy of the African Slave Trade in Interdisciplinary Perspective
- Anthro 4122 Language and Gender
- Anthro 215B Language, Culture and Society
- Educ 4315 Culture, Language and the Education of Black Students

Topics courses may be substituted for electives with approval, such as:

- Educ 453B Sociology of Education
- Educ 4211 New Media Literacy and Popular Culture in Education

Additional Information

This minor is composed of 18 credits that focus on the theoretical, empirical and practical foundations of teaching and...
learning second or foreign languages. All participating students must have a declared primary major.

Romance Languages and Literatures

L78 RoLit 495 Honors
To be eligible for Latin Honors, a student must have maintained a 3.5 average through the sixth semester and must be accepted for candidacy by the department or area committee concerned. The student must register in such courses as the department or area committee may recommend; complete satisfactorily a significant project appropriate to the nature of the discipline; and pass such written or oral examinations as the department or area committee may set. Upon completion of the Honors Program, students may be awarded the A.B. degree cum laude, magna cum laude or summa cum laude through achievement of cumulative averages through the eighth semester of 3.5, 3.65 and 3.8, respectively, and recommendation of the department or area committee to the College Committee on Honors. Based in part on the evaluation of the senior project. Recommendation for Latin Honors ultimately depends upon the student’s attitude toward learning as demonstrated by genuine understanding and high scholarly attainment. Upon acceptance to do a Senior Honors thesis, the student should enroll for three credits of French/Ital/Span 495 (Honors Tutorial) for fall semester of the senior year, to be followed by another 3 credits of RoLit 495 in the major language for spring. The grade for the fall semester (3 credits) is based on the thesis director’s evaluation of the first significant piece of the thesis (chapter or introduction) and also on the student’s diligence in organizing and mastering the materials to date, including regular discussions with the professor. The grade for the spring term reflects the quality of the student’s completed thesis and the oral examination, as well as the student’s discussions about the thesis with his/her director throughout the spring term. If the GPA of a student enrolled in the Honors thesis program drops below 3.5 during the senior year, the student may, with the concurrence of his/her thesis director, elect to have the 3 or 6 credits of RoLit 495 changed to an equivalent number of Independent Study credits, and may complete the project as an independent study project. However, students may only do a total of 6 credits of Independent Study toward the B.A. Students unable either to finish the thesis project or an independent study project do not receive degree credit for their work. With regard to the planning of honors topics, students should bear in mind that most theses are written on literary problems and require methods of research appropriate to literary studies. Some faculty may also be willing to direct theses that focus on cultural studies and other areas of investigation related to literary studies. However, the department does not sponsor Honors theses in other disciplines (for example, economics or business, which have different methods of research). Credit 3 units.

French
For French courses, see the French (p. 390) page of this Bulletin.

Italian
For Italian courses, see the Italian (p. 494) page of this Bulletin.

Portuguese
For Portuguese courses, see the Portuguese (p. 632) page of this Bulletin.

Spanish
For Spanish courses, see the Spanish (p. 675) page of this Bulletin.

Russian Studies
Students interested in the Russian language and the cultures and social and political histories of Russia and other nations of the former Soviet Union can choose from a wide array of courses in several departments and pursue a minor in Russian Studies. The college offers elementary through advanced language courses and opportunities to acquire further mastery with study abroad; surveys of Russian literature and history from medieval times to the present; and courses that research specific periods or topics in depth, often from interdisciplinary perspectives.

A minor in Russian Language and Literature is administered through the International and Area Studies Program, which also offers a minor in Russian Studies/International and Area Studies. Students also are encouraged to consider majors in International Studies, European Studies, Comparative Literature and History, all of which can be pursued with a focus on Russia and the former Soviet Union.

Contact Person:     Nicole Svobodny
Phone:              314/935-7682
E-mail:             nsvobodn@artsci.wustl.edu
Departmental website:  http://russian.artsci.wustl.edu/

Endowed Professor

James V. Wertsch
Marshall S. Snow Professor in Arts & Sciences
PhD, University of Chicago
(Anthropology, IAS)

Associate Professors

Max J. Okenfuss
PhD, Harvard University
(History)

Peter Schmelz
Students interested in Russian Studies are encouraged to consider majors in European Studies (p. 365), Comparative Literature (p. 273) and History (p. 418), all of which can be pursued with a focus on Russia and the former Soviet Union. Additionally, a minor in Russian Language and Literature is administered through the International and Area Studies Program, which also offers a minor in Russian Studies/International and Area Studies. There is no major in Russian Studies.

The Minor in Russian Studies/International and Area Studies

The minor in Russian Studies is part of the Program in International and Area Studies.

Total units required: 18 graded credits

Requirements:

- Russ 215C Introduction to Russian Civilization (3 credits)
- A non-European cultural area (or civilization) course (3 credits)
- At least 12 credits of advanced (300-plus) course work drawn from at least two different disciplines, all focused on Russia, as determined in consultation with the adviser.

Regulations:

- All minor course work must be completed with a grade of C+ or higher.
- No more than 3 credits may be from independent study or research.

The Minor in Russian Language and Literature

Total units required: 18 graded credits

Requirements:

- Russ 211D Intermediate Russian
- Russ 212D Intermediate Russian
- Russ 322D Third-Year Russian
- Russ 324D Third-Year Russian II
- One 300 or 400-level course in Russian Literature

Regulations:

- Students who place into Third-Year Russian must complete a minimum of 18 units of 300 or 400-level language or literature courses.
- No more than 6 credits may be from study abroad, to be determined in consultation with your adviser.
- All advanced units must be unique to the Russian Language and Literature minor (i.e. not counted toward any other major or minor).

Additional Information

This pertains to both Russian minors.

Study Abroad: You are strongly encouraged to participate in one of the Washington University study abroad programs in St. Petersburg, Russia. Semester options include both language and area studies programs. While the summer program is language-focused only, there are programs available for students at any language level, including beginning. The university’s programs in St. Petersburg are conducted under the auspices of Council for International Educational Exchange (CIEE), the longest running such program in Russia. Financial aid may be available for these programs through both Washington University and CIEE.

Russian

L39 Russ 101D Elementary Russian
Interactive multimedia course designed to emphasize spoken language; includes the very latest video materials geared
toward situations in contemporary post-Soviet Russian life. Also provides thorough understanding of fundamental grammar and develops reading and writing skills. Five class hours per week, plus an additional hour for conversation, review and testing. Credit 5 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L39 Russ 102D Elementary Russian
Continuation of 101D. Interactive multimedia course designed to emphasize spoken language; includes the very latest video materials geared toward situations in contemporary Russian life. Also provides thorough understanding of fundamental grammar and develops reading and writing skills. Five class hours per week, plus an additional hour for conversation, review and testing. Credit 5 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L39 Russ 211D Intermediate Russian
Designed to solidify students' command of Russian grammar and advance conversational, reading and writing skills. Includes video materials produced in Russia and conveying an up-to-the-minute picture of contemporary Russian life. Credit 4 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L39 Russ 212D Intermediate Russian
Continuation of 211D, completes comprehensive review of Russian grammar and further advances conversational, reading, writing and listening skills. Revised textbook with new audio and video materials that convey an up-to-the-minute picture of contemporary Russian life. Credit 4 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L39 Russ 215C Introduction to Russian Civilization
This course provides an overview of the main currents and developments in Russian culture and the arts from the earliest records to the present day. Exploring literary texts, film, music, architecture, the visual arts and popular culture, we discuss the self-identity of a people neither European nor Asian. Topics include the introduction of Orthodox Christianity, the "Tatar yoke," reactions to the "Europeanization" of Russia, Soviet propaganda and post-Soviet everyday life. Does the Russian Federation of today represent a complete break with the past or a reemergence of certain cultural constants? Knowledge of Russian language not required. Freshmen welcome. Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : HUM, IS FA : SSP

L39 Russ 322D Third-Year Russian
Designed to develop students' abilities in the contemporary spoken language. Conversational practice is combined with a review of grammatical concepts. Students also work with newspapers, read literary texts and write compositions. Prerequisite: Russ 212D or equivalent. Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L39 Russ 324D Third-Year Russian
Designed to develop students' abilities in the contemporary spoken language. Conversational practice is combined with a review of grammatical concepts. Students also work with newspapers, read literary texts and write compositions. Prerequisite: Russ 322D or equivalent. Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L39 Russ 350C The 19th-Century Russian Novel (WI)
The 19th-century "realistic" novel elevated Russian literature to world literary significance. In this course we do close readings of three major Russian novels: Alexander Pushkin's *Eugene Onegin*, Fyodor Dostoevsky's *Crime and Punishment*, and Lev Tolstoy's *Anna Karenina*. While we consider a variety of formal and thematic concerns, special emphasis is placed on the social context and on questions of Russian cultural identity. Readings and discussions are supplemented by critical articles and film. This is a Writing-Intensive course: workshops are required. All readings are in English translation. No prerequisites. Credit 3 units. A&S : TH, SD, WI A&S : IQ, HUM, LCD, SD, WI BU : HUM FA : Lit

L39 Russ 356 20th-Century Russian History
Same as History 356C Credit 3 units. A&S : TH A&S : IQ, HUM BU : IS FA : SSP

L39 Russ 3560 Russia and the West
Same as Hum 3560 Credit 3 units. A&S : TH A&S : IQ, HUM

L39 Russ 363 Russian Literature and Opera: Transpositions and Transgressions
Same as IAS 363 Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD

L39 Russ 375 Topics in Russian Culture
Same as IAS 3750 Credit 3 units. A&S : TH, CD, WI A&S : IQ, HUM, LCD, WI

L39 Russ 3880 The Russian Revolution
Same as History 38R8 Credit 3 units. A&S : TH, WI A&S : IQ, HUM, WI BU : IS

L39 Russ 3990 To Russian and Return: Travel, Literature and History
Same as History 39X9
L39 Russ 404 Fourth-Year Russian
Further develops students' abilities in all spheres of the language: speaking, listening, reading, writing. Vocabulary building, conversation practice and student compositions based on materials from the Russian mass media, contemporary films and readings in modern Russian literature. Prerequisite: three years of college Russian or equivalent.
Credit 3 units. A&S : TH, WI

L39 Russ 405 Advanced Russian II
Further develops students' abilities in all spheres of the language: speaking, listening, reading, writing. Vocabulary building, conversation practice and student compositions based on materials from the Russian mass media, contemporary films and readings in modern Russian literature. Prerequisite: three years of college Russian or equivalent.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS

L39 Russ 431 Russia Today and Yesterday: Cultural Perspectives (in Russian)
On the basis of contemporary literature, official media, popular songs and films, the course examines the ever-changing culture of the Russian people and society during the pre- and post-perestroika periods. Class discussions, lectures and student presentations. Prerequisite: three years of college Russian or the equivalent.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : IS FA : AH, Lit

L39 Russ 432 Russia Today and Yesterday (in Russian)
Readings of 19th and 20th-century Russian writers, as well as other literary and non-literary texts. Refinement and expansion of Russian communication skills (speaking, listening, writing, reading). Class discussions, student presentations, compositions. Prerequisite: Russ 431 or the equivalent.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : IS FA : AH, Lit

L39 Russ 4442 The Jewish Experience in Eastern Europe
Same as History 4442
Credit 3 units. A&S : TH, CD FA : SSP

L39 Russ 448 Russian History to the 18th Century
Same as History 448C
Credit 3 units. A&S : TH A&S : IQ, HUM BU : HUM FA : SSP

L39 Russ 4480 Russian Intellectual History
Same as History 4480

L39 Russ 449 Imperial Russia
Same as History 449C
Credit 3 units. A&S : TH A&S : IQ, HUM BU : IS

Russian Studies

L83 Russ St 101D Elementary Russian
Same as Russ 101D
Credit 5 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L83 Russ St 102D Elementary Russian
Same as Russ 102D
Credit 5 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L83 Russ St 211D Intermediate Russian
Same as Russ 211D
Credit 4 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L83 Russ St 212D Intermediate Russian
Same as Russ 212D
Credit 4 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L83 Russ St 215C Introduction to Russian Civilization
Same as Russ 215C
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : HUM, IS FA : SSP

L83 Russ St 322 Third-Year Russian
Same as Russ 322D
Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L83 Russ St 324 Third-Year Russian
Same as Russ 324D
Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L83 Russ St 3350 Out of the Shtetl: Jews in Central and Eastern Europe Between Empire, State and Nation
Same as History 3350
Credit 3 units. A&S : TH A&S : IQ, HUM

L83 Russ St 3371 Modern Eurasia: Afghanistan and Central Asia
Same as History 3371
Arts & Sciences

Credit 3 units.  A&S : TH  A&S : IQ, HUM

L83 Russ St 350C The 19th-Century Russian Novel
Same as Russ 350C
Credit 3 units.  A&S : TH, SD, WI  A&S : IQ, HUM, LCD, SD, WI  BU : HUM  FA : Lit

L83 Russ St 3560 Russia and the West
Same as Hum 3560
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L83 Russ St 356C 20th-Century Russian History
Same as History 356C
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : IS  FA : SSP

L83 Russ St 363 Russian Literature and Opera: Transpositions and Transgressions
Same as IAS 363
Credit 3 units.  A&S : TH, CD  A&S : IQ, HUM, LCD

L83 Russ St 364 Anarchism: History, Theory and Praxis
Same as IAS 364
Credit 3 units.  A&S : SS  A&S : IQ, SSC

L83 Russ St 366 Russia and the West
Same as Hum 366
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L83 Russ St 367 Russian Literature and Empire
Same as IAS 367
Credit 3 units.  A&S : TH, CD, SD  A&S : IQ, HUM, LCD

L83 Russ St 374 Russian Literature and Empire
Same as IAS 374
Credit 3 units.  A&S : TH, CD, SD  A&S : IQ, HUM, LCD

L83 Russ St 375 Topics in Russian Culture
Same as IAS 3750
Credit 3 units.  A&S : TH, CD, WI  A&S : IQ, HUM, LCD

L83 Russ St 377 Ancient Eurasia and the New Silk Roads
Same as Anthro 3775
Credit 3 units.  A&S : SS, CD, SD  A&S : IQ, SSC, LCD, SD  EN : S

L83 Russ St 380 The Russian Revolution
Same as History 38R8
Credit 3 units.  A&S : TH, WI  A&S : IQ, HUM, WI  BU : IS

L83 Russ St 39X9 To Russia and Return: Travel, Literature and History: Writing-Intensive Seminar
Same as History 39X9
Credit 3 units.  A&S : TH, WI

L83 Russ St 402 The Meaning of National Security in the 21st Century
Same as IAS 402
Credit 3 units.  A&S : SS  A&S : IQ, SSC

L83 Russ St 404 Fourth-Year Russian
Same as Russ 404
Credit 3 units.  A&S : LA  A&S : IQ, LCD, LS

L83 Russ St 405 Advanced Russian II
Same as Russ 405
Credit 3 units.  A&S : LA  A&S : IQ, LCD, LS

L83 Russ St 431 Russia Today and Yesterday: Cultural Perspectives (in Russian)
Same as Russ 431
Credit 3 units.  A&S : LA  A&S : IQ, LCD, LS  BU : IS  FA : AH, Lit

L83 Russ St 432 Russia Today and Yesterday (in Russian)
Same as Russ 432
Credit 3 units.  A&S : LA  A&S : IQ, LCD, LS  FA : Lit

L83 Russ St 4442 The Jewish Experience in Eastern Europe
Same as History 4442
Credit 3 units.  A&S : TH, CD  FA : SSP

L83 Russ St 4480 Russian Intellectual History
Same as History 4480
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : IS

L83 Russ St 448C Russian History to the 18th Century
Same as History 448C
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM  FA : SSP

L83 Russ St 449C Imperial Russia
Same as History 449C
Credit 3 units.  A&S : TH  A&S : IQ, HUM  FA : SSP

L83 Russ St 49EM Advanced Seminar in History: the Collapse of Communism
Same as History 49EM
Credit 4 units.  A&S : CD  A&S : IQ, HUM, LCD  EN : H
## Spanish

Speaking Spanish is the key to unlocking the cultures, traditions and experiences of 20 different countries throughout the world. From the medieval knights and Don Quixote through the modern novels by prize-winning authors and the world of film, the Spanish faculty at the Department of Romance Languages and Literatures guides Spanish students into the unexpected territories of Europe and Latin America, territories that are as rich geographically as they are culturally. Students who minor and major in Spanish graduate with top-notch communication skills. Our students speak Spanish and they speak culture, which are valuable professional skills today. The exponential growth of the Spanish-speaking population in the United States, the constant presence of Latin America at the top of America’s political and business agenda, and the continued lure of Spain as a gateway to Europe and parts of Africa, makes speaking Spanish and the ability to interpret the cultures of Spanish-speaking countries two of the most profitable and enjoyable skills that one can acquire.

Study Abroad opportunities complement our courses in St. Louis, including Freshman Focus programs in Argentina and Cuba; summer programs in Mexico, Ecuador and Spain; and semester programs in Chile and Spain. In addition, our Spanish program is linked to volunteer opportunities with the Latino community in St. Louis. For more information on the Spanish major and minor see [http://rll.wustl.edu/spanish/undergrad](http://rll.wustl.edu/spanish/undergrad).

**Contact Person:** Helene Abrams  
**Phone:** 314/935-5173  
**E-mail:** hcabrams@wustl.edu  
**Departmental website:** [http://rll.wustl.edu](http://rll.wustl.edu)

For a list of affiliated faculty, please see the Department of Romance Languages and Literatures faculty (p. 666) page.

### The Major in Spanish

**Total units required:** 30 units (27 units for second majors).

**Required courses:**

In Spanish, you are required to complete a minimum of 30 units in advanced courses, of which 21 must be taken in residence; 3 units may be taken outside the department with permission of your major adviser. (To complete a double major, you are required to complete 27 units.)

You are required to complete Span 307D, 308D, three literature surveys (Spanish 334C, 335C, 336C, 3332, 3334, 3352), and a culture or linguistics survey (either Spanish 380 or 370, respectively), plus 6 additional units in literature at the 400 level.

All primary majors must complete a capstone experience by achieving a B+ or better in one of the 400-level seminars.

### Additional Information

**Study Abroad:** You are encouraged to participate in a study abroad program. Programs are available in Chile, Ecuador, Mexico and Spain.

**Senior Honors:** You are encouraged to work toward Latin Honors ([cum laude](http://www.claude.com), [magna](http://www.magna.com), [summa](http://www.summa.com)). To qualify for Latin Honors in the major by thesis, you must complete special literary research and prepare and orally defend an honors thesis, which is judged by an honors faculty committee. To qualify for Latin Honors by course work, you must complete four literature courses at the 400 level, including two in literature before 1800, and present two critical essays written for those courses to be judged by an honors faculty committee. Recommendations for honors are based on your performance and the quality of the thesis or critical essays, plus your cumulative grade point average.

**Spanish Honors in Linguistics:** To qualify for Spanish Honors in linguistics in the major by thesis, you must complete linguistic research and prepare and orally defend an honors thesis, which is judged by an honors faculty committee. The honors thesis in linguistics may include scientific experiments conducted in Spanish. The written thesis will include several drafts, all of which will be written in Spanish.

**Transfer Credits:** 21 of the 30 units required for the major must be taken in residence. Non-WU courses may count toward the major with departmental permission.

### The Minor in Spanish

**Units required:** 18

**Required courses:**

- Span 307D Spanish Level 4: Grammar and Composition 1
- Span 308D Spanish Level 4: Grammar and Composition 2

Any two of the following courses:

- Span 3334 Medieval Iberia: A World with Many Faces, Through Its Texts and Other Cultural Artifacts
- Span 3332 Early Modern Spanish Texts: Whose Golden Age Do They Represent?
- Span 334C Spanish Literature II
- Span 335C Spanish-American Literature I
- Span 336C Spanish-American Literature II

Students have the option of taking one of these two courses:

- Span 370 Introduction to Hispanic Linguistics
- Span 380 Surveys of Hispanic Cultures

**Elective courses:** Any two of the following courses:

- Span 301 Oral Communication I
Span 321 Oral Communication II
Span 311 Hispanic Culture and Civilization I
Span 312 Topics in Hispanic Culture and Civilization II
Span 350 Undergraduate Seminar in Spanish Literature and Culture
Span 351 Business Spanish
Span 353 Medical Spanish
Any other advanced-level Spanish course offerings either at the 300 or 400 level.

Spanish

L38 Span 101D Spanish Level 1
Beginning language program stressing rapid acquisition of communicative ability. In addition to four hours of master class, students must enroll for two hours of additional practice and do one hour of assessed independent learning activities with multimedia resources.
Credit 5 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L38 Span 102D Spanish Level 2
Beginning language program stressing rapid acquisition of communicative ability. In addition to four hours of master class, students must enroll for two hours of additional practice and do one hour of assessed independent learning activities with multimedia resources. Prerequisite: Span 101D or placement by examination.
Credit 5 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L38 Span 201D Spanish Level 3: Intermediate Spanish
An accelerated intermediate-level grammar review taught by a team of instructors in a MWF grammar class and a T/TH literature/composition class. Reviews basic and some advanced skills intensively with increased emphasis upon reading, writing, culture and vocabulary learning. Prerequisite: Span 102D or placement by examination. Students must register for both a T/TH and a MWF class.
Credit 5 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

L38 Span 223 Intermediate Spanish Conversation and Culture
Practice of spoken Spanish and expansion of vocabulary in a wide range of topics. Discussion and role play based on short readings, music and film. Use of the World Wide Web for up-to-date news and culture. Oral presentations and limited writing. Prerequisite: 201D or equivalent. Concurrent enrollment in Span 307D recommended.
Credit 3 units. A&S : LA A&S : IQ, LCD EN : H

L38 Span 245 Women’s Fiction in Contemporary Spain
This course focuses on selected novels and short stories by 20th-century women writers in Spain, beginning with those writing during the post-Civil War years (1939–1975) and ending with the new generation of women writers who emerged after the end of the Franco dictatorship (post-1975). Discussions center on both political and aesthetic issues in the contexts of post-war and post-Franco Spain, including the effects of political repression and censorship; representations of gender and sexuality; and literature’s relationship to feminist and nationalist movements in Spain. When relevant, other cultural media, such as film and music, are used in conjunction with our reading and analysis of literary texts. The course is taught in English.
Credit 3 units. A&S : TH BU : IS FA : Lit

L38 Span 246 Freshman Seminar: Latin-American Women in History and Culture: Icons and Idols
In English. This class takes an in-depth look at various iconic female figures in the history of Latin America, examining their (self-) representation in history, literature, art and other cultural manifestations. We examine their lives, writings and art to learn more about the historical and cultural moment they lived in; how this moment shaped their lives and how they, in turn, shaped their historical moment. We aim to draw the larger conclusions of how women in history, despite hostile circumstances, have managed to forge political, cultural and artistic identities and make an impact on the world around them. We study these women in a chronological fashion, showing how society’s attitudes changed toward women and how, in some ways, paradoxically, stayed the same. The women we study are all very different in terms of identity, historical period, and sociocultural background but all are similar in terms of their desire to overcome convention and resist repression — sometimes with very tragic results. Figures we study include La Malinche, Sor Juana Inés de la Cruz, Manuela Saenz, Delmira Agustini, Frida Kahlo, Eva Perón, the Mothers of the Plaza de Mayo, Rigoberta Menchú and Ingrid Betancourt. Prerequisite: concurrent registration in individually appropriate level of Spanish language course is required.
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, LCD, SD BU : IS

L38 Span 247 Freshman Seminar: Latin-American Nomads and Travelers
Same as WGSS 247. Taught in English. Small group seminar devoted to readings and study of other texts such as films, paintings, etc., active discussion, writing. Topics vary; interdisciplinary focus.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD BU : ETH

L38 Span 251 Latin-American Nomads and Travelers
Rites of passage and trespassing representing Latin-American immigrants, nomads and travelers in narrative and film. This course is designed to map the multicultural context of travel, nomadism, displacement and immigration while studying narrative texts (Before Night Falls; Heading South, Looking North; Life on the Hyphen; Translated Woman: Crossing the
**L38 Span 209 Undergraduate Independent Study**
Prerequisites: Span 201D and permission of the department.
Credit -3 unit.

**L38 Span 301 Oral Communication I**
Practice of spoken Spanish and expansion of vocabulary in a wide range of topics. Discussion and role-play based on short readings, music and film. Use of the Web for up-to-date news and culture. Oral presentations and limited writing. Prerequisite: 201D or equivalent. Concurrent enrollment in Span 307D recommended.
Credit 3 units. A&S : LA A&S : IQ, LCD BU : IS

**L38 Span 307D Spanish Level 4: Grammar and Composition I**
Through a free and practical review of Spanish grammar and syntax, this course allows students to refine their handling of written and spoken Spanish. Emphasis on the understanding and use of the fine points of the language. Activities include oral reports, compositions, class discussions, group projects and the study of selections of literary and nonliterary materials. Prerequisite: Span 201D or placement by examination.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

**L38 Span 308D Spanish Level 4: Grammar and Composition II**
In-depth study of the process of writing, designed to prepare the Spanish major to write literary analysis. Literary texts studied as examples of writing styles. Regular compositions. Prerequisite: Span 307D or placement by examination.
Credit 3 units. A&S : LA A&S : IQ, LCD, LS BU : HUM, IS

**L38 Span 310 Advanced Intermediate Spanish in Spain**
Continued study of Spanish grammar and syntax at Washington University’s Madrid Carlos III University Program. A course designed for non-native speakers of Spanish, to refine communicative abilities in all four skills. Prerequisite: placement by exam at Carlos III.
Credit -4 unit.

**L38 Span 311 Hispanic Culture and Civilization I**
Study of aspects of the political, social and cultural life of contemporary Spain and Portugal and their historical development. Class discussion; readings with compositions. Conducted in Spanish. May be repeated for credit. Prerequisite: Span 201D.
Credit 3 units. A&S : TH CD A&S : IQ, HUM, LCD BU : BA FA : SSP

**L38 Span 312 Topics in Hispanic Culture and Civilization II**
Study of aspects of the political, social and cultural life of contemporary Latin America and their historical development. Class discussion; readings with compositions. Conducted in Spanish. Prerequisite: Span 201D or placement by examination.
Credit 3 units. A&S : TH CD BU : BA FA : SSP

**L38 Span 313 Chilean Contemporary Culture**
This two-week course provides a panoramic view of Chilean contemporary culture, focusing on the years from 1988 to the present. We examine the representation of current issues in literature, the arts and the media, and study topics such as governmental institutions, the constitution of 1980, the economy, the role of the Catholic Church, public policy concerning culture, etc. The course meets three hours a day, and there are several guest lecturers. Conducted in Spanish. Requirements: two short papers, short reports in class of the news or a cultural activity students have attended, and participation in class discussions. Course includes an all-day cultural excursion on Saturday, which features a visit to one of Neruda’s houses, a history museum, etc.
Credit 3 units. A&S : TH CD BU : BA FA : SSP

**L38 Span 317 Advanced Spanish Language in Chile/Spain**
Continued study of Spanish grammar and syntax at Washington University's program in Chile or Spain. A course designed for non-native speakers of Spanish to refine mastery of difficult uses and structures in all four skills. Prerequisite: placement by exam or program director.
Credit -4 unit.

**L38 Span 3181 Spanish Culture and Civilization**
This course is intended to acquaint students with important aspects of Spanish culture, including history, civilization, society, politics and the arts, dating from the first invasions of the Peninsula to the present. Students gain an awareness of the ethnic, cultural and aesthetic diversity of Spain as a country of multiple autonomous regions, by working with written texts and other media and by visits to various locations. The broader aim of the course is to enable students to engage with and to analyze Spanish culture from an intellectually critical perspective and knowledge of its sociohistorical distinctiveness. Requirements include active participation within all classes and excursions, presentations, and various written assignments. This course is taught in Madrid, as part of the Washington University Carlos III Program. Conducted in Spanish.
**L38 Span 321 Oral Communication II**
Designed to offer students with advanced skills in Spanish an opportunity to refine their ability to discuss a variety of topics. Various media (film, television and newspapers) are used as a basis for debate on cultural topics pertaining to the Spanish-speaking world. Oral presentations and limited writing. Prerequisites: Span 301 and 307D or multiple 300-level courses. Credit 3 units. A&S : TH A&S : IQ, LCD BU : IS FA : SSP

**L38 Span 322 Advanced Conversation in Spain**
Designed to offer students with advanced skills in Spanish an opportunity to refine their ability to discuss a variety of topics. Various media such as films, television, newspapers and other modes of communication are used for oral presentations and some writing. Prerequisite: Span 301, 307D or 308D, or multiple 300-level courses. Credit 3 units. A&S : LA A&S : IQ, LCD BU : IS

**L38 Span 325 Exploration, Traveling and the Double Gaze: Mapping Geography and Identity in Colonial Spanish America**
In this course we examine the geographical, cultural and ideological mapping as described in the travel/exploration chronicles of the 16th, 17th and 18th centuries. We focus on the Southern hemisphere (Peru) as well as the Northern Frontier (Mexico, New Mexico, La Florida, Colorado) while reading narrative texts such as Columbus’ Diario, Cabeza de Vaca’s Naufragios, Inca Garcilaso de la Vega’s The Florida of the Inca, Francisco Vásquez de Coronado’s Narratives of the Coronado Expedition, and Alonso Carrillo de la Vandera’s El Lazarillo de Ciegos Caminantes (Guide for Travelers in 18th-Century Southern Spain). We use art work and historical maps for our study of the cultural and ideological representations of alterity and of the geography of the colonial empire. In English. Credit 3 units. A&S : TH FA : SSP

**L38 Span 331 Hispanic Art/Arte Hispano**
This course focuses on the most important movements, artistic expressions and representatives of the art history of Latin America and Spain. From the folk naïve art of traditional indigenous weaving and tapestry — depicting daily life and harvest — to the “arpilleras,” or designs on burlap, expressing the suffering of contemporary indigenous women under Latin America’s military dictatorships, to the feminist and surrealist self-reconstruction portraits of Mexican artist Frida Kahlo. From the medieval paintings of religious Spain, to the criticism of the Spanish nobility by Diego Velázquez, the Spanish Civil War of “Guernica” by Pablo Picasso, to the Surrealism of Salvador Dalí and Antonio Gaudí. From the “corridos songs” of the Mexican Revolution to the Spanish flamenco talking about the displacement and suffering of Gypsies in Spain. The students visit the Saint Louis Art Museum and talk to some local Hispanic artists. Prerequisite: Span 308D or Span 321. May be used for elective credit in the Spanish major or minor. In Spanish. Credit 3 units. A&S : TH A&S : IQ, LCD BU : IS FA : AH

**L38 Span 3321 Spanish Film Studies in Spain**
An introduction to contemporary Spanish film taught at Washington University’s program in Spain. Prerequisite: approval of Washington University’s program director. Credit 3 units. BU : IS FA : AH

**L38 Span 3331 Spanish Literature I in Chile/Spain**
Introductory survey of Spanish literature from its beginnings in the Middle Ages to the baroque period at Washington University’s program in Chile or Spain. Prerequisite: Span 308D or the equivalent. Credit 3 units. FA : Lit

**L38 Span 3332 Early Modern Spanish Texts: Whose Golden Age Do They Represent?**
This course studies a series of work from 16th- and 17th-century Spain canonized by later readers as classics of national Spanish literature, that daringly experiment with the literary genres of their period to incorporate discourses from daily life, thereby revealing the decadence of imperial Spain and questioning the representation of this period as a “Golden Age.” Includes the Lazarillo de Tormes, El Abencerraje, Fuenteovejuna, La Vida es Sueño, El Medico de Su Honra, and short narratives by Cervantes and María de Zayas. Prerequisites: Span 307D; concurrent enrollment in Span 308D is recommended. In Spanish. Credit 3 units. A&S : TH A&S : IQ, LCD BU : IS

**L38 Span 3334 Medieval Iberia: A World with Many Faces, Through Its Texts and Other Cultural Artifacts**
This course offers a panoramic vision of the medieval literature of the Iberian Peninsula, from its beginnings until the end of the Middle Ages (11th to 15th Centuries). We read student modernized and annotated versions of some of the most famous works of this period, originally written in Castilian: lyric and epic poetry, ballads, miracles and exemplary stories, and the first act of Celestina. This selection includes works written by Christian, hispano-arabic and hispano-hebrew authors, and also some works originally written in other languages of the Peninsula (Arabic, Hebrew, Portuguese and Latin), that were translated into Castilian during the Middle Ages and are now considered part of the corpus of Castilian literature, because they significantly influenced Castilian authors of this and later periods. We also use music, art, images of old manuscripts and books, and secondary readings that help us better understand the cultural
context of this period. Our discussion of the texts include topics such as the relations among the three main Cultures of the Peninsula: Arabic, Jewish and Christian, the role of the Christian Church in medieval society, the situation of minority and women, the presence of oral tradition in written texts, and the creation and spread of manuscripts and early printed books. Prerequisite: Span 307D; concurrent registration in Span 308D recommended. Credit 3 units. A&S : TH, CD, SD  A&S : IQ, HUM, LCD, SD, LS  BU : HUM

L38 Span 3341 Spanish Literature II in Chile/Spain
An introduction to key texts from Spanish literature in the 19th and 20th centuries at Washington University’s program in Chile or Spain. Prerequisite: Span 308D or the equivalent. Credit 3 units. FA : Lit

L38 Span 334C Spanish Literature II
An introduction to key texts from Spanish literature and culture in the 19th, 20th and 21st centuries in their specific historical contexts. Topics may include encounters between Arabs, Christians and Jews in the Iberian peninsula; issues of gender and sexuality; the modern city; discourses of nationalism; the Spanish Civil War; the Francoist dictatorship; transition to democracy; and contemporary challenges in an increasingly multicultural and multiracial society. Prerequisites: Span 307D; concurrent registration in Span 308D is recommended. In Spanish. Credit 3 units. A&S : TH, CD  A&S : IQ, HUM, LCD, LS  BU : IS  FA : Lit

L38 Span 3351 Spanish-American Literature I in Chile/Spain
A survey of major figures and literary trends in Spanish America from 1492 to Modernismo (1880); at Washington University’s program in Chile or Spain. Prerequisite: Span 308D or the equivalent. Credit 3 units. FA : Lit

L38 Span 3352 Spanish-American Literature of the Long 19th Century: From Empire to Nation
This survey examines the changing roles of literature and its creators during the period that saw the end of the powerful Spanish empire and the emergence of the political framework of independent nations we are familiar with today. Students are introduced to prominent themes such as independence writing, the experience of race in literature, romanticism, civilization vs. barbarism, the gaucho epic, and 19th-century fiction. Lectures and class discussions of the readings; exams, papers and short reports. Prerequisites: Span 307D; concurrent registration in Span 308D is recommended. In Spanish. Credit 3 units. A&S : TH  A&S : IQ, HUM, LCD, LS

L38 Span 335C Spanish-American Literature I
A survey of major figures and literary trends in Spanish America from 1492 to Modernismo (1880). Emphasis on the writings of either Colón or Columbus, Cortés, Bernal Diaz, Las Casas, Inca Garcilaso de la Vega; and Aztec reactions to the Conquest in the early period and on Sor Juana in colonial times. After the period of independence from Spain (1810–1824), the focus is on the literary representation of the making of the new nations and cultural autonomy. Readings include chapters of a picaresque novel, the representation of dictatorship, civilization vs. barbarism, the gaucho epic, and 19th-century fiction. Lectures and class discussions of the readings; exams, papers and short reports. Prerequisites: Span 307D; concurrent registration in Span 308D is recommended. In Spanish. Credit 3 units. A&S : TH, CD  A&S : IQ, HUM, LCD, LS  BU : IS  FA : Lit

L38 Span 3361 Spanish-American Literature II in Chile/Spain
A survey of major Spanish-American literary works from the end of the 19th century to the contemporary period at Washington University’s program in Chile or Spain. Prerequisite: Span 308D or the equivalent. Credit 3 units. FA : Lit

L38 Span 336C Spanish-American Literature II
A survey of major Latin-American literary works focusing on canonical works of the 20th and 21st centuries in their cultural and historical contexts. The course includes discussions of major literary movements such as the avant-garde, the Boom and the post-Boom. Other topics may include the literary and cultural responses to revolution, dictatorship and the evolving definitions of Latin America. Authors may include Quiroga, Neruda, Guíllén, Vallejo, Borges, Cortázar, Rulfo, Carpentier, García Márquez, Poniatowska, Fuentes, Ferré and others. Prerequisites: Span 307D; concurrent registration in Span 308D is recommended. Credit 3 units. A&S : TH, CD  A&S : IQ, HUM, LCD, LS  BU : IS  FA : Lit

L38 Span 337C The Chilean Short Story
In this course we trace the trajectory of the short story in Chile in the 20th century with special attention to such literary movements as realism, naturalism, vanguardism, surrealism and the new narrative, including the literature written during the dictatorship. The course tries to determine what specifically can be expressed about national identity through narrative, and is informed by historical, political and sociological analyses. The course includes several field trips to related sites and guest lectures by major Chilean writers and critics. Class requirements include a short essay, a long final essay and a final exam. This course is taught in Santiago, Chile, as part of the Washington University Chile Program. Conducted in Spanish. Credit 3 units. A&S : TH  FA : Lit
L38 Span 340 Nationalism in Action: The Spanish-American War
We study nationalism as it was in evidence in the Spanish-American War in the United States and in Spain as an outgrowth of each country’s history. We shall read periodicals of the period and study caricatures and other artistic expressions, as well as writings by authors such as Stephen Crane, Galdós, Mark Twain, Fernando Ortiz, Ivan Musicant and others. Cuba, Puerto Rico and the Philippines are included in the scope of the course. Students are expected to present a book report orally and to write it formally; in addition, a term paper of about 15 pages on a topic chosen in consultation with the instructor serves as a final project. The course is conducted in English although students able to read other languages, may do some of the readings in the original. May count as elective credit for the major if work is done in Spanish. Enrollment limited to 15 students. Credit 3 units. A&S : TH FA : Lit

L38 Span 349 “Don Quixote” in Translation
Because Cervantes’ masterpiece is considered to be the first modern novel, it is absolutely essential to any understanding of literature as a whole. By way of a close textual reading, this course focuses on all the ways Don Quixote recapitulates almost the entire Western tradition and how it anticipates so many of the later developments of the novel. Course conducted in English. Credit 3 units. A&S : TH FA : SSP

L38 Span 350 Undergraduate Seminar in Spanish Literature and Culture
Taught in Spanish. Topics vary. Can be repeated for credit. This course can be counted as one of the three surveys required to obtain a Spanish major. Prerequisite: Span 307D; concurrent registration in Span 308D is recommended. Credit 3 units. A&S : TH A&S : IQ, HUM, LCD FA : Lit

L38 Span 3501 Latin-American Women Writers in Translation
Study of major 20th-century women writers in English translation. We read poems, plays, essays and short fiction by authors such as Agustini, Ocampo, Mistral, Bombal, Gambaro, Ferré, Valenzuela and others. Class conducted in English. Spanish majors do the readings and papers in Spanish. Enrollment limit 25. Credit 3 units. A&S : TH FA : Lit

L38 Span 3502 Spanish-American Short Novel

L38 Span 3503 Fiction, Crime and Enigma: Clues to Detective Narrative from the Americas
Ever since the detective story took readers by storm during the last decades of the 19th century, the genre of detective fiction has continued to flourish while undergoing numerous transformations. Latin-American literature is well known for the alternative re-readings of the crime fiction canon by well-established writers who broke canonical rules of classical and hard-boiled detective narrative and both parodied and politicized the genre through endless experimentation. In this course, we focus on the intersection of action and enigma, clues and patterns of a crime, the unraveling of a puzzle and the solution of a mystery in narratives by Poe, Borges, Chandler, Hammett, Valenzuela, Piglia, García Márquez and others, as well as in selected films based on their works. In English. Credit 3 units. A&S : TH FA : Lit

L38 Span 3504 The Spanish Short Story During the Past 50 Years
An explosion of storytellers: the rise and fall and rebirth of a genre. This course reviews a half century of short fiction in Spain, emphasizing the works written since 1970. We focus on the most significant, representative movements in relation to their historical and social contexts. Writers studied include Camilo José Cela, Miguel Delibes, Ignacio Aldecoa, Ana María Matute, Carmen Martín Gaite, Juan Benet, José María Merino, Luis Mateo Díez, Esther Tusquets, Cristina Fernández Cubas, Soledad Puértolas, Javier Marías, António Muñoz Molina and Marina Mayoral. Prerequisites: Span 307D; concurrent registration in Span 308D is recommended. Paper, mid-term and final exams. In Spanish. Credit 3 units. A&S : TH FA : Lit

L38 Span 3505 Borges in Translation
Comprehensive study of Borges’ major works. Analysis of basic themes, philosophical implications and structural elements present in Borges’ poetry, essays and short stories. We also study a number of film adaptations of Borges’ work, as well as a number of texts by writers he has influenced. Credit 3 units. A&S : TH FA : Lit

L38 Span 3506 Women Writers of Early Modern Spain
This course analyzes early modern women’s writings (both secular and religious) by considering sociohistoric context, genre studies (autobiography, convent narratives, short prose fiction, poetry and theater) and feminist criticism. Critical approaches included consider issues of self-representation and subjectivity; performance; mysticism; life writing; feminist and lesbian utopias; cross-dressing; the body and spirituality; and the role of the Inquisition and confessors in the collaborative process of confessional writing. Class conducted in English. Spanish majors do the readings and papers in Spanish. Credit 3 units. A&S : TH
L38 Span 351 Business Spanish
Study of language and structures used in conducting business in the Hispanic world. We use actual materials from various businesses — advertising, marketing, real estate, accounting. Particular stress on speaking and writing. Prerequisite: Span 308D or permission of instructor. Credit 3 units. A&S : LA A&S : IQ, LCD BU : IS

L38 Span 353 Medical Spanish
Designed for future medical professionals, this course provides students with a complete vocabulary and cultural sensitivity necessary for treating Spanish-speaking patients. While the main focus is oral/aural, written exams, varied reading and some research are required. Volunteer work recommended for enrolled students. Advanced students are given priority. Prerequisite: Span 307D. Credit 3 units. A&S : LA A&S : IQ, LCD BU : IS

L38 Span 354 A View from the Southern Cone: Perspectives on Art, Literature and Culture
This course deals with current issues of cultural, social, political and literary importance related to the Southern Cone. We study selected texts from Argentina, Chile and Uruguay as well as contemporary films and drama productions. This course seeks to determine what specifically can be expressed about national identity, globalization and the environment as these countries face the 21st century. Course requirements include four short essays and a final exam. This course is taught in Santiago, Chile, as part of the Washington University Chile Program. May be repeated for credit. Conducted in Spanish. Credit 3 units. A&S : TH A&S : IQ, HUM, LCD BU : ETH

L38 Span 360 Literature Topics Course in Spain
Taught through the Humanidades program of Carlos III University. Topics vary each semester. May be repeated for credit. Prerequisite: approval of Washington University’s Madrid Program director and Carlos III. Credit 3 units. A&S : TH A&S : IQ, HUM, LCD BU : ETH

L38 Span 3601 Cultural Studies Topics Course in Spain
Taught through the Humanidades program of Carlos III University. Topics vary each semester. May be repeated for credit. Prerequisite: approval of Washington University’s Madrid Program director and Carlos III. Credit 3 units. A&S : TH, WI A&S : IQ, HUM, LCD

L38 Span 370 Introduction to Hispanic Linguistics
An introduction to the scientific study of the Spanish language, this course focuses on each of the major linguistic subsystems, including the sound system (phonetics and phonology), word formation (morphology), formation of phrases and sentences (syntax) and the use of the language to convey meaning (semantics and pragmatics). At each level of analysis, selected comparisons are made between Spanish and English and between Spanish and other languages. The course also examines different historical, regional and social varieties of Spanish and situations of Spanish in contact with other languages. Credit 3 units. A&S : LA A&S : IQ, LCD

L38 Span 380 Surveys of Hispanic Cultures
This course surveys cultures in specific contexts (Latin America and Spain) and in different historical periods, from the Middle Ages to the present. The course provides students with critical and methodological tools in order to carry out an articulate and informed cultural analysis. Prerequisites: Span 307D; concurrent registration in Span 308D is recommended. In Spanish. Topics vary from semester to semester. See section description for current offering. Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD BU : ETH

L38 Span 400 Intensive Translation for Graduate Students I
The first part of a two-semester course sequence in reading and translating Spanish. For graduate students in the humanities and social and natural sciences. Nongraduate students may enroll with permission of the department. Must be followed by Span 401. Credit 3 units. A&S : LA A&S : IQ

L38 Span 401 Intensive Translation for Graduate Students II
Continuation of Span 400. For graduate students in the humanities and social and natural sciences. Prerequisite: Span 400. Credit for Span 400 is contingent on completion of Span 401. Credit 3 units. A&S : LA A&S : IQ, LCD

L38 Span 405W Major Seminar
An undergraduate seminar. Topics vary. This is a writing-intensive course, which requires a minimum of three papers of approximately four to five pages in length, with rewrites; 50 percent of the grade must come from written work. Prerequisite: Span 307D and Span 308D and at least two 300-level literature courses taught in Spanish. In Spanish. Credit 3 units. A&S : TH, WI A&S : IQ, HUM, LCD, WI

L38 Span 406 The Spanish Symbiosis: Christians, Moors and Jews
This course explores the contributions of Christians, Muslims and Jews in the Spanish peninsula, which led to what historians have called a convivencia (the peaceful and productive coexistence of these groups in medieval Spain), albeit an arrangement that was often troubled and tested. Among the topics studied are the Visigothic kingdom, the “Golden Age” of...
L38 Span 407 Seminar in Spain: Cultural Encounters
The Spanish, Latinos and non-Hispanic North American vis-a-vis "the Other." Designed to study the historical and ideological bases of attitudes and mutual perceptions that inform these three cultures' understanding of each other. Analysis of literary and extra-literary representations of the three identities in question teach students to think critically about the cultural, religious and political foundations of intercultural perceptions. Washington University students' experiences living in Spain provide a context for them to examine their own attitudes about "Hispanidad," as well as to learn about their own cultures (American, "Latino") as they are understood from abroad. Study of theoretical concepts of identity, ethnicity, minority, gender, culture and intercultural communication enables students to participate in practical discussions based on observation and experience with an objective, critical understanding of how they perceive and are perceived by others. Fulfills 400-level literature course requirement for the Spanish major. Prerequisites: Span 307D, Span 308D and two 300-level literature surveys or the equivalent in Spanish. Course taught in Madrid, Spain, through the Washington University Madrid Program. Credit 3 units. A&S : TH

L38 Span 408 Topics in Medieval Literature and Culture
This is a writing-intensive course that requires a minimum of three papers of approximately four to five pages in length, with rewrites; 50 percent of the grade must come from written work. Prerequisites: Span 307D and Span 308D and at least two 300-level literature courses taught in Spanish. In Spanish. Credit 3 units. A&S : TH

L38 Span 411 Advanced Grammar and Syntax
This course presents a detailed study of Spanish syntax. Special attention is given to synchronic and diachronic variation as well as Spanish/English contrasts of particular interest to language learners and teachers. Prerequisites: 6 units of 300-level Spanish, or permission of instructor. Credit 3 units. A&S : LA A&S : IQ, LCD

L38 Span 411 Advanced Grammar and Syntax in Spain
Detailed study of contemporary Spanish syntax. Special attention to fine points of grammar and syntax necessary for communication at the advanced level, taught at Washington University's Carlos III Program in Madrid. Prerequisite: placement by exam. Credit -4 unit.

L38 Span 412 Bilingual Advanced Grammar and Syntax in Spain
Detailed study of contemporary Spanish syntax for bilingual students, taught at Washington University's Carlos III Program in Madrid. Prerequisite: placement by exam or program director. Credit 3 units.

L38 Span 413 Linguistics and Language Learning
The course, taught in English, provides a critical survey of various components involved in the relationship between linguistics and language learning. The course emphasizes the language learner and explores dimensions of second-language acquisition. The course begins with an examination of linguistic theories and then highlights the influence of linguistic theories on L2 acquisition research. The course then moves to an exploration of research on language and the brain. With this foundation, the course covers both internal and external factors related to language acquisition, such as language aptitude, age, gender, memory, prior knowledge, etc. In summary, theoretical and research dimensions of both linguistics and language learning are treated. This course counts as a requirement for the Graduate Certificate in Language Instruction and for the undergraduate Minor in Applied Linguistics. Prerequisite: Ling 170 is recommended but not required. Credit 3 units. A&S : LA A&S : IQ, SSC FA : SSP

L38 Span 414 Introduction to Hispanic Linguistics
An introduction to the scientific study of the Spanish language, this course focuses on each of the major linguistic subsystems, including the sound system (phonetics and phonology), word formation (morphology), formation of phrases and sentences (syntax), and the use of the language to convey meaning (semantics and pragmatics). At each level of analysis, selected comparisons are made between Spanish and English and between Spanish and other languages. The course also examines different historical, regional and social varieties of Spanish and situations of Spanish in contact with other languages. Preceptorial for undergraduates only. Credit 3 units. A&S : LA A&S : IQ, LCD

L38 Span 416 Spanish Phonetics, Phonology and Dialectology
This course, conducted in Spanish, explores the linguistic varieties of the 21 Spanish-speaking countries from both a historical and a synchronic perspective. The course begins with...
a traditional look at Spanish phonetics and phonology, with all students memorizing and using the International Phonetic Alphabet. Course readings and discussions extend beyond the descriptive and include a search for the sources of language variation within the Spanish-speaking world. Particular attention is devoted to language contact and bilingualism. Students read in areas such as history, sociolinguistics, dialectology and sociology, as well as traditional linguistic studies, in designing their projects concerning phonetics, phonology and dialect diversification.

Credit 3 units. A&S : LA A&S : IQ, LCD BU : IS

L38 Span 419 Feminist Literary and Cultural Theory
Same as WGSS 419

Credit 3 units. A&S : TH A&S : IQ, HUM

L38 Span 420 Captivity and Its Consequences: Horror, Desire and Nostalgia in Colonial Narratives
The objective of this course is to examine the formation and evolution of narratives of captivity in Latin American texts and their visual representations from the first indigenous and European contacts to the end of the colonial period. Prerequisite: Span 307D, Span 308D and at least two 300-level courses taught in Spanish; in Spanish.

Credit 3 units. A&S : TH

L38 Span 421 Argentinean Literature
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

L38 Span 4211 Spanish-American Literature of the Colonial Period
A selective survey of the literature of the three centuries between the first encounters of the European and American Indian cultures and independence from Spain. Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates only; in Spanish.

Credit 3 units. A&S : TH, CD FA : Lit

L38 Span 423 Trotaconventos, Celestina & Co.: Go-Between, Love, Witchcraft and Other Related Subjects
In this course we study how the literary figure known as the “go-between” evolved in Spanish literature, from its origins in Roman literature, the Cantigas and the Exempla, to its culmination in the Libro de Buen Amor and the T ragicomedia de Calisto y Melibea, also called Celestina. We also read a selection of texts that were influenced by Celestina and examine how their authors recreated Celestina’s characters and theme. Our analysis of the go-between leads us to a series of reflections about various related subjects, including the literary representation of love, the uses of language and magic as instruments of manipulation and power, and the ethical problems associated with such uses. Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. Preceptorial for undergraduates only; in Spanish.

Credit 3 units. A&S : TH

L38 Span 424 Latin-American Literature and Theory: Reading the State, Culture and Desire
In this course, we pair literary and theoretical texts in order to hone a way of reading in which theory and literature are mutually informative, provocative and inspiring. The idea of these loose groupings is not to prescribe a particular relationship between given literary and theoretical texts but rather is a way to begin negotiating the necessarily multiple relationships of theory and literature. These pairings come to seem more artificial over the course of the semester as we trace a network of relations that begins to look more and more like the Borsesian map that covered up the entire territory it described. The object of the course is, thus, not to define or prioritize a particular set of relations but rather to practice a way of reading literature theoretically and theory literally, by which the strengths of both are allowed to come to the forefront in their complexity. Thematically, the course has several nuclei: the triangulation of State, culture and art (Piglia/Foucault, Burman/Agamben); a psychoanalytic approach to art as desire (Lispector/Lacan/Cixous); and finally, a third nucleus about which the first two commingle completely: “post-State,” proliferating desire, libidinal economies wherein the State is anarchonism and failure (Arlt/Deleuze; Sorín/Virilio/Sitrin, Sassen; Bolaño/Zizek). Readings may include: Piglia, Foucault, Agamben, Arlt, Deleuze, Virilio, Sassen, Borges, Benjamin, Bolaño, Zizek, Lispector, Lacan, Cixous, as well as the films Garaje Olímpo and Historias Mínimas. Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates only; in Spanish.

Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

L38 Span 4241 Topics in American Literature: Religious Transformations in the Early Modern Americas
Same as E Lit 424

Credit 3 units. A&S : TH A&S : IQ, HUM FA : Lit

L38 Span 425 Humanism, Magic and Rhetoric in 15th-Century Castilian Literature
This course offers a panoramic view of 15th-century Castilian literature. We study a selection of texts produced both in the Castilian court and in some centers of higher learning, especially the University of Salamanca. The secondary readings help us to better understand the cultural context of the time and deepen our knowledge of four subjects that were highly present in the minds of 15th-century authors: humanism, rhetoric, love and magic. Because some of the texts selected for this course were written by (or have been attributed to) “converso” authors, we also examine the phenomenon of “converso” literature.
L38 Span 4261 The Erotics of Violence in Latin America
The course is based on a combined analysis of theories on violence, nation and urban spaces, and the study of literary texts pertaining to the Latin-American post-Boom. Some of the authors be studied are Ricardo Piglia, Fernando Vallejo, Jorge Franco, Roberto Bolaño, Mario Mendoza, Laura Restrepo, Evelio Rosero, Santiago Roncagliolo, Alonso Cueto, Martin Kohan, Guillermo Arriaga, Daniel Alarcón, Paulo Lins, etc. The course is conducted in Spanish and focuses on the interconnections between sexuality, violence and political issues, and on the discursive strategies used for the representation of collective subjectivities and social conflict in Latin-American societies.
Credit 3 units. A&S : TH, SD  FA : AH

L38 Span 4281 Creative Difference: Reclaiming Spanish-American “Traditional” Novel
This course focuses on a selection of aesthetically and socially representative 19th- and early 20th-century Spanish-American novels. Integrating a wide range of sources (critical essays, paintings, film), we explore abolitionist issues in Sab (Cuba), the reinvention of Amerindian legacies in Aves Sin Nido (Peru), and the different facets of modernization and nation-building in Los de Abajo (Mexico) and La Voragine (Colombia). You should finish the course with a broader knowledge of Spanish-American literary history, a deeper understanding of textual representations of gender, class and multiethnic identities, and a sharper awareness of your potential as a reader and critic. Significant selections of pertinent criticism and theory are required of graduate students. Prerequisites: Span 307D and Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates; in Spanish.
Credit 3 units. A&S : TH, SD  FA : Lit

L38 Span 4282 Voice into Print: The Art of Storytelling in Spanish-American Short Story
The short story has been a central part of the extraordinary originality and vitality of Spanish-American writing and it enjoys great popularity among scholars and the general public alike. Integrating a wide range of sources (critical essays, paintings, film), this course brings together the best examples of the genre that span over a hundred years of the history of Spanish-American literature and exemplify a variety of themes and forms: from the ordinary to the fantastic, from the realist to the imaginative. Special emphasis is placed on the questioning of such binary oppositions in the most recent writings, particularly from the Caribbean, promoting the syncretic or “transculturated” forms of expression. Students familiar with the works of Quiroga, Borges, Rulfo, Cortázar, Ferré and Valenzuela are delighted to discover many vibrant new voices, including Peri Rossi, Sommers and Moyano, or to explore the lesser-known terrain of minority writings. Significant selections of pertinent criticism and theory are required of graduate students. Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates only; in Spanish.
Credit 3 units. A&S : TH, CD  FA : AH

L38 Span 4291 The Politics and Poetics of Spanish-American New Novel
When Spanish-American writers gained acclaim in the world literary scene in the so-called “Boom” of the 1960s, their spectacular success was often linked with the so-called magical realism that draws upon the oral and written tradition of both European and regional heritage (African, Amerindian) and shapes them to forge a uniquely Latin-American poetics. Through theoretically informed approach, this course offers an overview of the most acclaimed Spanish-American novels published between 1950 and 1970, with special attention given to the divergent cultural legacies and political uses of “magical realism.” Specific notions of New World/Old World, modernization/tradition, nation building/otherness are explored in novels such as: Los Pasos Perdidos by Carpenter (Cuba), Pedro Paramo by Rulfo (Mexico), La Ciudad y Los Perros by Vargas Llosa (Peru), Los Recuerdos del Porvenir by Garro (Mexico), La Traicion de Rita Hayworth by Puig (Argentina), and Cien Años de Soledad by García Márquez (Colombia). Significant selections of pertinent criticism and theory are required of graduate students. Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates only; in Spanish.
Credit 3 units. A&S : TH, CD  FA : Lit

L38 Span 430 Latin-American Essay
Study of the principal movements and outstanding figures in the Spanish-American essay from the colonial period to the present.
L38 Span 4301 Print and Power in 19th-Century Latin America
Open to advanced undergraduate and graduate students, this seminar covers one of the most fascinating periods in Latin-American history and cultural production, spanning from the eve of the wars for independence to the eve of the Mexican Revolution (1800–1910). Several reasons make this period and the connections between print media or print culture and power worthwhile. This long century was the most war-torn in the region’s history. Not only did writers engage issues of war on what was almost a daily basis, but war generated a wealth of new modes of literature. Debates on the slave trade and abolition also occurred during the 1800s, and largely in writing. And while places such as Lima, Peru and Mexico City were established printing centers during the Iberian occupation of the Americas, true printing revolutions were not widespread until during and after the wars for independence. One of the results to emerge during the first third of the century was that writing and print media gave legitimacy to incipient republican states, wedding print to power in new ways. And by the end of the century, educators and state bureaucrats teamed up to push for public primary education and literacy as components of progressive, “civilized” nations. Add to this the visual technologies and an overall surge in new forms of symbolic communication through print, and it is easy to see why this period offers such a rich backdrop for observing how print and power fit into the landscape we now know as Latin America. We pay special attention to themes including writing as a legitimizing force, writing and nation building, and the intersection of print with war, race, identity formation, modernity and ideologies. Readings include archival materials, wartime and popular poetry, novels by authors such as Jorge Isaacs and Ignacio Altamirano, writings by Simon Bolivar and Domingo Sarmiento, and modernist poetry and prose. Historical and theoretical selections guide our analysis of primary sources. Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates only; in Spanish. Credit 3 units. A&S : TH A&S : IQ, HUM, LCD FA : Lit

L38 Span 434 The 19th-Century Spanish Novel
Survey of the major figures of Latin-American poetry from the colonial period to modernism. Poets studied include Sor Juana, Caviedes, Avellaneda, Marti, Dario, Silva, Najera. Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates only; in Spanish.

L38 Span 435 Mediterranean Cultural Studies
This course is a cultural studies seminar for advanced undergraduate and graduate students. Taking a Mediterranean perspective as a background (and we certainly spend some time discussing what such a perspective entails), we investigate the different historical, political and cultural crossings that have been taking place and are taking place at the Iberian Peninsula. Rather than a historical or chronological survey, the different sections of the course focus on the questions and conflicts that arise in these different Mediterranean encounters. These appear articulated in a series of texts that include literature, film, historical documents, song and art. Even though we mainly concentrate on texts from the second part of the 20th century, the historical background, particularly regarding the Arab and Sephardic presence in Spain, is highlighted throughout the semester. The interdisciplinary approach of this course allows students to explore human and Mediterranean geography, analyze different genres, and, finally, discuss present problems and debates from a historical perspective. Some of the issues addressed include: the question of a Mediterranean perspective,
Arab and Sephardic Spain, the Mediterranean during the Spanish Civil War and World War II, old and new migrations, sexuality, globalization, and tourism. Course requirements include short papers at the end of every section and a final paper for undergraduate students, a presentation on a related topic, and a research paper for graduate students. Prerequisites: Span 307D, Span 308D and at least two 300-level courses taught in Spanish. One-hour preceptorial for undergraduates only; in Spanish.

Credit 3 units.

L38 Span 436 Spanish-American Fiction: 1970 to the Present
Study of Spanish-American narrative from the early 1970s to the present. Includes novels by writers both established before the 1970s (Vargas Llosa, García Márquez, Fuentes) and writers associated with the newest novelistic trends (Eltit, Fuguet, Martínez, Paz, Valenzuela). Prerequisite: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates only; in Spanish.

Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

L38 Span 4361 Latin-American Prose Fiction: 1975 to Present
Study of Latin-American narrative from the late 1970s to the present includes both recent novels of writers established before the 1970s (Vargas Llosa, García Márquez, Fuentes) and younger writers associated with the post-“Boom” phenomenon. Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates only; in Spanish.

Credit 3 units. A&S : TH FA : Lit

L38 Span 442 Literature and Revolution
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

L38 Span 4471 Spanish-American Women Writers I
A study of women’s writing from the turn of the century to 1970. Readings include novels, short stories, poetry, essays and autobiographical texts. Prerequisites: Span 307D, Span 308D and at least two 300-level literature course taught in Spanish. One-hour preceptorial for undergraduates only; in Spanish.

Credit 3 units. A&S : TH, SD FA : Lit

L38 Span 4472 Spanish-American Women Writers II
A study of contemporary women’s writing from 1970 to the present within a feminist theoretical framework. Topics include the construction of gender, female subjectivity, love and power, women and politics, literary strategies, etc. Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates only; in Spanish.

Credit 3 units. A&S : TH A&S : IQ, HUM, LCD FA : Lit

L38 Span 450 Special Topics in Hispanic Literature and Culture
Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates only; in Spanish. May be repeated for credit.

Credit 3 units. A&S : TH A&S : IQ, HUM, LCD FA : Lit

L38 Span 4502 Latin-American Narrative in Film
Analysis and discussion of a select group of films, focusing on their literary origins or their peculiar elaboration of critical conflicts in contemporary Latin-American society. Films by Littin, Puenzo, Lombardi, Skarmeta, Solanas, Gutiérrez Alea, Lilienthal and others. Novels by Vargas Llosa, Carpentier, Amado, Puig, Skarmeta and Soriano. Course conducted in English. Does not fulfill 400-level literature requirement.

Credit 3 units. A&S : TH FA : AH

L38 Span 4503 Latin-American Film: Argentine Cinema
This course examines the development of cinema in Argentina, from the earliest attempts to codify a particularly Argentine perspective in Tango musicals to the present day. We explore the relationships between both film and nation building and film and revolution. We also study the role of cinema in national memory, using the cinema of the post-dictatorship as a case study. We read widely in film, cultural and political theory to enrich our study of the various films under consideration. Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. Conducted in Spanish.

Credit 3 units. A&S : TH A&S : IQ, HUM, LCD BU : IS FA : AH

L38 Span 450C Advanced Seminar Abroad in Spanish and Latin-American Literature
Credit 3 units.

L38 Span 451 Medieval Spanish Literature
Study of the development of the principal literary traditions of medieval Spain, emphasizing major genres, themes and styles. Consideration of various critical approaches and responses to medieval texts. Lectures, papers and class reports. Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses. One-hour preceptorial for undergraduates; in Spanish.

Credit 3 units. A&S : TH A&S : IQ, HUM, LCD FA : Lit

L38 Span 453 Survey of 18th-Century Latin-American Narrative
Exploring new ways of thinking; scientific observation and traveling; historiography; and the organization of knowledge. Analysis and discussion of a variety of 18th-century Latin-American narratives such as conventual writing by women, memoirs, travel, scientific writing and newspaper articles, to understand how that century's attempts to compile, question, seek, build and reform came about. The narratives are regarded in their historical context and in a dialogue with some of the most recent literary studies about 18th-century Latin America.  

Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates.  

Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

L38 Span 455 History of the Language  
A study of the evolution of Spanish and its dialects from Latin to contemporary usage. Knowledge of Latin helpful but not required. Prerequisites: Span 307D, 308D.  

Credit 3 units. A&S : LA

L38 Span 456 Romance Philology  
Same as French 456  

Credit 3 units. A&S : LA

L38 Span 4570 Gender and Modernity in Latin America  
This course does not satisfy the 400-level seminar requirement for undergraduate Spanish majors.  

Same as IAS 457  

Credit 3 units. A&S : TH A&S : IQ, HUM

L38 Span 4571 Exemplarity, the Writing of History and the Beginnings of Chivalry in Medieval Spain  
This course is devoted to the study of exemplarity, historical discourse and chivalric fiction in medieval Iberia. It begins with an introductory selection of 13th-century texts that prepares the students to better understand the development of Castillian identity, as shown in a selection of historical chronicles, and in some of the most canonical texts of the 15th century, such as El Libro del Conde Lucanor, El Libro de Buen Amor and El Libro del Caballero Zifar.  

Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

L38 Span 458 Gender, Politics and Writing in Women’s Fiction of the Post-Franco Era  
This course focuses on the narrative fiction of Spanish women of the post-Franco era: those who began to publish shortly after Franco's death and continue to write into the new century (Esther Tusquets, Cristina Fernández Cubas, Rosa Montero, Carmen Riera and Adelaida García Morales), as well as the more recent crop of writers who emerged on the literary scene in the past decade (Núria Amat, Lucía Etxebarria and Espido Freire). We consider the works of these women within their cultural, historical and political contexts, addressing issues such as the representation of gender and sexuality; the cultural impact of feminism, nationalism and globalization; and the influence of the publishing industry and the market on literary production. Whenever available, film adaptations of these literary works are used in conjunction with the readings. Prerequisites: Span 307D, Span 308D and at least two 300-level courses taught in Spanish. One hour preceptorial for undergraduates only; in Spanish.  

Credit 3 units. A&S : TH

L38 Span 459 16th- and 17th-Century Drama  
Study of early modern Spain's highly influential and innovative Comedias, from Lope de Vega's creation of new popular forms for public Corrales to the spectacles of court theater for elite audiences in the generation that followed. Includes study of selected plays, as both texts and performances. Prerequisites: Span 307D, Span 308D and at least two 300-level courses taught in Spanish. One-hour preceptorial for undergraduates; in Spanish.  

Credit 3 units. A&S : TH A&S : IQ, HUM, LCD BU : HUM FA : Lit

L38 Span 460 Cervantes: “Don Quixote”  
Study of the famous work that launched the novel, giving voice to surprisingly different forms of experience and identity as it narrates the life of a crazed reader who attempts to rewrite his own history by becoming a knight errant. Includes Parts 1 and 2 of Cervantes' Don Quixote, a range of critical readings, and the use of visual media that reflect how this work has in subsequent centuries entered popular culture. Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates; in Spanish.  

Credit 3 units. A&S : TH A&S : IQ, HUM, LCD FA : Lit

L38 Span 461 The Golden Age Novelas  
A detailed study of the novela, or novella, genre in 17th-century Spain, including selected novelas ejemplares by Cervantes and selected novelas amorosas and Desengaños Amorosos
by María de Zayas. The course considers the problem of exemplarity, the representation of transgression or deviancy, literary tradition and sociohistorical context in these works. Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates; in Spanish.
Credit 3 units. A&S : TH  FA : Lit

L38 Span 462 16th- and 17th-Century Prose
Reading of works that are groundbreaking in the formal development of Golden Age Spanish literature and in the representation of ideas concerning national and individual identity during the imperial period. To include Diálogo de la lenqua, Lazarillo de Torres, Diana and selected works by Guevara, Cervantes, Quevedo and Zayas. Seminar discussions and research paper. Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates; in Spanish.
Credit 3 units. A&S : TH  A&S : IQ, HUM, LCD  FA : Lit

L38 Span 463 16th- and 17th-Century Poetry
Classical Spanish poetry during the Renaissance and the baroque periods. Poets range from the Marques de Santillana and García de la Vega to Luis de Gongora, San Juan de la Cruz and Francisco de Quevedo. Movements and trends explored include the tradition of courtly love, culteranismo, Spanish mysticism and conceptismo. Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates; in Spanish.
Credit 3 units. A&S : TH  A&S : IQ, HUM, LCD  FA : Lit

L38 Span 464 Self-Representation and Picaresque Fiction in Early Modern Spain
This course investigates self-representation through the figure of the picaro and fictional autobiography in the representative works of the Spanish picaresque genre (Lazarillo, Guzman de Alfarache and El Buscon). We also examine the figure of the Picara in novels with female protagonists such as La Lozana Andaluza and La Picara Justina (as well as a short story by María de Zayas) and consider the relation of the picara to women's roles in Spanish fiction and culture. This course considers aspects of gender, ethnicity, class and desire in the sociohistorical context of picaresque fiction as well as narratological approaches to these texts. Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates; in Spanish.
Credit 3 units. A&S : TH  FA : Lit

L38 Span 465 The Spanish Trickster
A study of Spain's major picaresque novels in the Golden Age in the context of early modern Europe. Translations of works such as the Lazarillo and El Buscon, as well as selected foreign imitations and parodies of the Spanish picaresque from the 17th and 18th centuries. Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. Does not fulfill the 400-level literature requirement for the Spanish major but is applicable to other credit required for the major. One-hour preceptorial for undergraduates; in Spanish.
Credit 3 units. A&S : TH  FA : Lit

L38 Span 466 Second-Language Acquisition
Same as Ling 466
Credit 3 units. A&S : LA  A&S : IQ, HUM

L38 Span 467 Grammar and Vocabulary Acquisition
This course examines theoretical and instructional implications of research on grammar and vocabulary acquisition. Topics include making form-meaning connections during language learning; developmental stages; the role of input and input processing; explicit and implicit methods of grammar instruction; pertinent factors in vocabulary acquisition, such as a learning context and processing resource allocation; and comparisons of incidental and direct vocabulary instruction techniques. Major theories of language acquisition (e.g., nativism, emergentism) are critically examined in light of the research presented, and research findings are applied to instructional practices.
Credit 3 units. A&S : LA  A&S : IQ, LCD  BU : BA

L38 Span 468 “Don Quixote”
A close reading of the English translation of Cervantes’ masterpiece, with special attention given to the European literary context. Conducted in English.
Credit 3 units. A&S : TH  FA : Lit

L38 Span 471 Borges
Comprehensive study of Borges’ major works. Analysis of basic themes, philosophical implications, and structural elements present in Borges’ poetry, essays and short stories. Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates; in Spanish.
Credit 3 units. A&S : TH  A&S : IQ, HUM, LCD  FA : Lit

L38 Span 472 19th-Century Novel
Departing from writings on realism by both 19th-century European writers and more contemporary literary theorists, the course carries out a critical reappraisal of the notion of “realism” in the 19th-century Spanish novel. Texts to be covered include selected works of Benito Pérez Galdós, Leopoldo Alas (Clarin), and Emilia Pardo Bazán that represent different periods of their literary trajectory. Daily readings and discussions focus on issues such as: the “reality effect”; the poetics of detail; naturalism in the Spanish context; the aesthetics of beginnings and endings; gender and consumption; fin-de-siècle crisis of
L38 Span 473 Romanticism
The origins of romanticism as a movement explored before reading and analyzing key works by the main Spanish romantic writers: Cadalso, El Duque de Rivas, Espronceda, Larra, Mesonero Romanos, Becquer, Campoamor and Zorilla. Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates; in Spanish.
Credit 3 units. A&S : TH FA : Lit

L38 Span 474 Mexican Film in the Age of NAFTA (1990–2010)
Starting in the 1990s, as NAFTA came into effect, Mexico revitalized its film industry and managed to produce not only a somewhat sustainable market within the country, but also a set of recognized figures in acting (Salma Hayek, Gael García, Diego Luna), directing (Guillermo del Toro, Alfonso Cuarón, Alejandro González Iñárritu), and moviemaking in general (Emmanuel Lubezki, Rodrigo Prieto and others). This course explores the underlying processes that allowed for such a rebirth. The main focus of the course is to understand the contradictory impact of neoliberalism in film, understanding neoliberalism as the economic doctrine of unbridled free markets, and its social and cultural consequences. Paradoxically, neoliberalism allowed the industry to become financially and aesthetically viable, while becoming inaccessible to the lower classes in Mexico. The course mostly develops four of these processes: (1) the undermining of nationalism as the main topic, (2) the displacement of the target audience from the working classes, both rural and urban, to the urban middle class; (3) the transformation of political cinema from the leftist films of the ’70s to the conservative ideologies of neoliberal politics and the intersection of Mexican film to the global market of so-called “art house cinema” Students compare films that have reached an international market with those viewed only within Mexico. In addition, students are introduced to critical approaches that allow them to appreciate these movies in the context of film aesthetics, social identities and the relationship between film and economic development. Movies are shown outside of class in Spanish with English subtitles. The class is conducted in English. Written course work may be pursued in English or Spanish. No prerequisite.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

L38 Span 475 The Other in Contemporary Spanish Fiction
An examination of the various manifestations of “the other” in works of Delibes, Perez Reverte, Matute, Goytisolo, Riera, Atxaga. Aspects studied include history, culture, religion, language and gender. Ancillary readings treat theoretical as well as critical issues. Two or three short papers (two to three pages) and a longer paper with specific installments and revisions due during the semester (undergraduates, 15 pages; graduates, 20 pages.) Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates only; in Spanish.
Credit 3 units. A&S : TH

L38 Span 479 Generation of 1898: Theater and Poetry
Analysis of works by Azorín, Unamuno, Baroja, Maetzu and Valle-Inclán. Various approaches to each work encouraged, and the theory of “generations” questioned. Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates; in Spanish.
Credit 3 units. A&S : TH

L38 Span 480 The Generation of ’98
An analysis of the Spanish-American War, the warring parties, and particularly of the literature it created in Spain by authors such as Unamuno, Machado, Valle-Inclán, Azorín and Baroja, The “desastre” led to introspective analysies of philosophy, education, and history. It attempted to rediscover the Hispanic ethos, to re-create its landscape poetically, and to become European without losing its Spanish roots. Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates; in Spanish.
Credit 3 units. A&S : TH FA : Lit

L38 Span 481 Modern Drama
Readings from 19th- and 20th-century playwrights such as Zorrilla, Benavente, Valle-Inclán, Lorca, Buero-Vallejo. Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates; in Spanish.
Credit 3 units. A&S : TH FA : Lit

L38 Span 482 Topics in 19th-Century Spanish Cultural Studies
Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates; in Spanish.
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD

L38 Span 486 20th-Century Novel
A study of the novel in 20th-century Spain, focusing on the contemporary period. Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates; in Spanish.
Credit 3 units. A&S : TH  A&S : IQ, HUM, LCD  FA : Lit

L38 Span 487 Discourses on Gender in 19th- and 20th-Century Spain
This course focuses on discourses on gender, from the late 19th century to the present in the context of feminism in Spain. We explore the social, political and cultural role of Spanish women (writers) within their specific historical contexts, with a special attention to their struggle to construct a new female subjectivity through their writings. To this end, their narrative fiction (novels, short stories) are read in conjunction with nonfiction writings (essays, journalism, etc.). Authors studied include 19th-century proto-feminists such as Emilia Pardo Bazán and Concepción Arenal; early 20th-century writers such as Carmen de Burgos, Margarita Nelken, and other female activists of the Republican period; and women writers of the post-War and post-Franco eras. Prerequisites: Span 307D and Span 308D and at least two 300-level courses taught in Spanish. One-hour preceptorial for undergraduate students; in Spanish.
Credit 3 units. A&S : TH, SD  A&S : IQ, HUM, LCD  SD

L38 Span 488 Narrating Mexico City
The city has been one of the central topics of modern Mexican literature. Ever since the emergence of the modern capital at the end of the 19th century, urban culture became one of the central concerns of Mexican and Latin-American intellectuals across the continent. With the emergence of the megalopolis and the new centrality of questions of violence, postmodernity and urban experience, Mexican literature and film have contributed, in the past 20 years, new ways to approach, discuss and narrate the city. This class seeks to tackle different meanings of Mexico City in the cultural discourse of Mexico, by exploring novels (Carlos Fuentes, José Emilio Pacheco, Juan Villoro), poems (Manuel Mapes Arce, Vicente Quirarte, Fabio Morábito), urban chronicles (Carlos Monsiváis, Elena Poniatowska, José Joaquín Blanco) and films (Amores Perros, Todo El Poder, Vivir Mata). Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates only; in Spanish.
Credit 3 units. A&S : TH  A&S : IQ, HUM, LCD

L38 Span 489 Cities of the Past Future: Literary Institutions & Peripheral Modernity in the Latin-Amer. Avant-Garde
This class proposes a study of the Latin-American avant garde as a phenomenon of "peripheral modernity" and as a critique of the "institution literature" developed by 19th century and modernista liberalisms. This reading, rather than merely proposing a one-by-one reading of canonic texts, seeks to engage the avant-garde as a global cultural phenomenon with impact in literature, art, society and ideology. To achieve this, the class focuses on four regional contexts of the avant garde. First, we visit post-Revolutionary Mexico, to understand the way in which the avant-garde redefined notions of literature in Latin America by carefully analyzing the stakes of groups such as the estridentistas or the contemporaneos. Second, we analyze the reinvention of Buenos Aires as a literary city in the 1920s and 1930s to understand the impact of "peripheral modernity" in the constitution of the avant-garde as a specifically Latin-American phenomenon. Third, we discuss the impact of the semana de arte moderno of Sao Paulo, to understand how the idea of "antropophagia" created an articulation of the avant-garde with debates of cultural identity and transculturation. Finally, we go to the Andes to understand how avant-garde phenomena dealt with the questions of "divergent modernities." Authors discussed include Arqueles Vela, Manuel Maples Arce, Jorge Cuesta, Xavier Villaurrutia, Jorge Luis Borges, Oliverio Girondo, Roberto Arlt, Mario de Andrade, Oswaldo de Andrade, Manuel Bandeira, César Vallejo, Pablo Palacio, César Moro and José Carlos Mariátegui. Scholarship includes Peter Bürger, Matei Calinescu, Renato Poggioli, Rubén Gallo, Pedro Angel Palou, Beatriz Sarlo, Fernando Rosenberg, Haroldo de Campos, William Rowe and Roland Forgues. Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates; in Spanish.
Credit 3 units. A&S : TH  A&S : IQ, HUM, LCD

L38 Span 490 Spanish Women's Fiction on the Edge of the Millennium
The course focuses on the narrative fiction of Spanish women of the post-Franco era: those who began to publish shortly after Franco's death and continue to write into the new century (Cristina Fernandez Cubas, Rosa Montero, Soledad Puertolas and Carme Riera), as well as the more recent crop of writers who emerged on the literary scene in the past decade (Nuria Amat, Lucia Etxebarria, Belén Gopegui). We consider not only the aesthetic innovations of these writers, but also their preoccupation with the following sociopolitical and cultural issues: connections between gender, sexuality and writing; their response to feminist literary criticism and politics; and their relationship to the market and consumer society in the context of globalization. Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates; in Spanish.
Credit 3 units. A&S : TH, SD  FA : Lit

L38 Span 491 18th- to 19th-Century Literature
Readings in various genres covering significant figures and works in neoclassicism, romanticism and realism.
Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates; in Spanish.
Credit 3 units. A&S : TH  FA : Lit
L38 Span 4921 The Avant-Garde in Spain: Poetry/Visual Art/ Cinema
This course examines the development of the avant-garde in Spain during the two decades prior to the Spanish Civil War (1936–1939) from an interdisciplinary perspective, including poetry, the visual arts and cinema. We first study the development of the historical avant-garde through a study of four key avant-garde movements either developed by Spanish artists or taking place in Spain: Cubismo (Pablo Picasso, Juan Gris), Creacionismo (Vicente Huidobro, Gerardo Diego), Ultraismo (Gomez de la Serna, Cansinos-Assens, Pedro Salinas), and Surrealismo (Luis Bunuel, Salvador Dali, Rafael Alberti, Luis Cernuda, Federico Garcia Lorca and Joan Miro). We then analyze different connections with the historical avant-garde traceable in the work of a later generation of experimental Spanish poets and artists working under the strict censorship existing during Franco’s fascist dictatorship, such as Jose Val del Omar, Joan Brossa, Antoni Tapiés, Jose Angel Valente, Pere Gimferrer, Jose Miguel Ullan and Jose Luis Guerin. We also incorporate in our discussion theoretical writings by various critics including Ortega y Gasset, Peter Burger, C. Brian Morris and Roman Gubern. Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates only; in Spanish. Credit 3 units. A&S : LA A&S : IQ, LCD

L38 Span 494 20th-Century Poetry
Examination of 20th-century Spanish poetry from Machado and Juan Ramon Jimenez to the Generation of ’27 and younger poets. Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates only; in Spanish. Credit 3 units. A&S : TH FA : Lit

L38 Span 495 Honors
Students who meet the requirements work closely with a member of the faculty on an individual basis on a project of mutual interest. Emphasis on a tutorial on a regular basis. Prerequisite: permission of Director of Undergraduate Studies. Preregistration not permitted. Credit -3 unit. A&S : TH

L38 Span 4951 Honors
Students who meet the requirements work closely with a member of the faculty on an individual basis on a project of mutual interest. Emphasis on a tutorial on a regular basis. Prerequisite: permission of Director of Undergraduate Studies. Preregistration not permitted. Pass/fail. Credit 3 units. A&S : TH

L38 Span 498 Contemporary Spanish Novel
A study of modern novels by established authors, such as Benet, Goytisolo and Martin Gaite, and new figures such as Landero, Millas and Puertolas. Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates; in Spanish. Credit 3 units. A&S : TH FA : Comp

L38 Span 499 Contemporary Spanish Novel II: 1965 to Present
A study of modern novels by established authors, such as Benet, Goytisolo and Martin Gaite, and new figures such as Landero, Millas and Puertolas. Prerequisites: Span 307D, Span 308D and at least two 300-level literature courses taught in Spanish. One-hour preceptorial for undergraduates; in Spanish. Credit 3 units. A&S : TH FA : Lit

Speech and Hearing
The minor in Speech and Hearing Sciences is offered by the Program in Audiology and Communication Sciences (PACS) in the School of Medicine and is designed for students interested in exploring topics related to human communication. Course work provides an overview of the fields of hearing, deafness, language and speech, with opportunities to explore related topics in more depth. This minor is especially valuable for students in fields such as psychology, education, philosophy–neuroscience–psychology (PNP) and linguistics, but has broad applicability for many fields of study. Course work completed as part of this minor can also be used to fulfill prerequisites for graduate studies in audiology, deaf education and speech-language pathology.

Contact Person: William W. Clark
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Program Director
William W. Clark
Professor of Audiology and Communication Sciences, Professor of Otolaryngology, Professor of Education
PhD, University of Michigan

Director of Audiology Studies
L. Maureen Valente
Associate Professor of Audiology and Communication Sciences, Associate Professor of Otolaryngology
PhD, Washington University

Director of Deaf Education Studies
Heather Hayes
There is no major in this area. The minor in Speech and Hearing Sciences is offered by the Program in Audiology and Communication Sciences at Washington University School of Medicine. The program also offers graduate programs in the fields of audiology, deaf education, and speech and hearing sciences, leading to the following degrees: Doctor of Audiology (AuD), Master of Science in Deaf Education (MSDE), Doctor of Philosophy (PhD)—Speech and Hearing Sciences.

The Minor in Speech and Hearing

Total units required: 15

Required courses:

Educ 234 Introduction to Speech and Hearing Disorders

Elective courses:

At least four of the following, totaling at least 12 units:

- PACS 401 Anatomy and Physiology of Speech and Hearing
- PACS 421 Introduction to Electroacoustics
- PACS 422 Basic Acoustic Measures
- PACS 433 Acoustical Phonetics and Speech Perception
- PACS 434 Normal Language Development
- PACS 436 Introduction to Manual Communication
- Educ 408 Education and Psychology of Exceptional Children
- Psych 433 Psychology of Language
- Ling 170D Introduction to Linguistics
- Ling 312 Phonetics

Additional Information

This minor is composed of a minimum of 15 hours that focus on the study of speech, language and hearing. Of these, at least 9 units must be at the 300 level or above. Courses to count toward the minor must be approved in advance by the minor adviser, and one or more elective courses must come from M89 PACS. Additional courses not listed may be allowed, with advance approval of the minor adviser, based on student’s individual area(s) of interest.

Speech and Hearing Sciences course work is offered by the Program in Audiology and Communication Sciences at Washington University School of Medicine. Please visit the website at http://pacs.wustl.edu or contact via email at pacs@wusm.wustl.edu or call 314/747-0104 with questions about courses and programs.

Urban Studies

The interdisciplinary major in Urban Studies is ideal for students drawn to serious examination of the profound issues confronting urban/metropolitan America. Urban Studies seeks to prepare students, indeed our nation’s future leaders, for the challenge of solving these issues. We seek to prepare students to research and investigate issues concerned with evolving patterns of metropolitanism and the necessity for central city reconstruction; problems associated with regentrification, urban sprawl and affordable housing; crises confronting newly emerging immigrant communities and the social cleavages of urban marginalized communities; unemployment and underemployment; law and justice; HIV/AIDS and issues of public health; the economic underdevelopment of poor communities; race and inequality; the paradox of declining welfare rolls amidst escalating poverty rates; underperforming urban schools; and the in-migration and out-migration of the city and its schools, among others. All available social indices suggest that such domestic issues in our central cities will only increase in significance in the years ahead.

The fact that many of the aforementioned issues are deeply embedded in cities of the world makes Urban Studies not just focused on domestic cities, but global cities as well.

Urban Studies is a standalone major. The students presently in the program are jointly pursuing study in Urban Studies and in prelaw, premedicine, political science, educational studies, environmental studies, economics, international and area studies, philosophy—neuroscience—psychology, architecture and comparative arts, among others. Our purpose is to prepare students to critically engage the social, political and economic dilemmas facing our cities, both domestically and internationally, with intellectual rigor, integrity, sensitivity and compassion.

The program draws faculty and course work from the various academic units including, but not limited to, Arts & Sciences, the George Warren Brown School of Social Work, the School of Law, the College of Architecture and the Graduate School of Architecture & Urban Design, among others. To complement our course work, Urban Studies offers local internships in the St. Louis area or internships through the Capital Semester in Urban Studies in Washington, D.C.
Contact Person: Carol Camp Yeakey  
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Founding Director  
Carol Camp Yeakey  
Professor (Education); Director, Center on Urban Research & Public Policy (CURPP)  
PhD, Northwestern University

Executive Committee Members

Adrienne D. Davis  
William M. Van Cleve Professor of Law  
JD, Yale University  
(Law)

Garrett Albert Duncan  
PhD, The Claremont Graduate School  
(Education)

Gerald L. Early  
Merle Kling Professor of Modern Letters  
PhD, Cornell University  
(English)

Edward F. Lawlor  
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PhD, Brandeis University  
(Social Work)

Bruce Lindsey  
E. Desmond Lee Professor for Community Collaboration, Sam Fox School of Design & Visual Arts; Dean, College of Architecture and Graduate School of Architecture & Urban Design  
MA, Yale University  
(Architecture)

Henry L. Roediger III  
James S. McDonnell Distinguished University Professor  
PhD, Yale University  
(Psychology)

Will R. Ross  
MD, Washington University  
(Medicine)

William F. Tate IV  
Edward Mallinckrodt Distinguished University Professor in Arts & Sciences  
PhD, University of Maryland–College Park  
(Education)

Murray L. Weidenbaum

Edward Mallinckrodt Distinguished University Professor in Arts & Sciences  
PhD, Princeton University  
(Economics)

Other Affiliated Faculty

Professors

John G. Baugh Jr.  
Margaret Bush Wilson Professor in Arts & Sciences  
PhD, University of Pennsylvania  
(Linguistics)

John R. Bowen  
Dunbar–Van Cleve Professor in Arts & Sciences  
PhD, University of Chicago  
(Anthropology)

Steven Fazzari  
PhD, Stanford University  
(Economics)

Wayne D. Fields  
Lynne Cooper Harvey Distinguished Professor in English  
PhD, University of Chicago  
(English, American Culture Studies)

James L. Gibson  
Sidney W. Souers Professor of Government  
PhD, University of Iowa  
(Political Science)

Ira J. Kodner  
Solon & Bettie Gershman Professor of Surgery  
MD, Washington University in St. Louis  
(Medicine)

David Konig  
PhD, Harvard University  
(History, Law)

Kimberly Jade Norwood  
JD, University of Missouri  
(Law)

William R. Lowry  
PhD, Stanford University  
(Political Science)

Gary J. Miller  
PhD, University of Texas at Austin  
(Political Science)

Timothy H. Parsons  
PhD, Johns Hopkins University  
(History)

Itai Sened  
PhD, University of Rochester  
(Political Science)
Karen L. Tokarz  
Charles Nagel Professor of Public Interest Law & Public Service  
JD, Saint Louis University  
LLM, University of California–Berkeley  
(Law)

James V. Wertsch  
Marshall S. Snow Professor in Arts & Sciences  
PhD, University of Chicago  
(Anthropology)

Rafia Zafar  
PhD, Harvard University  
(English)

Associate Professors

Lingchei Letty Chen  
PhD, Columbia University  
(East Asian Languages and Cultures)

Mary Ann Dzuback  
PhD, Columbia University  
(Education)

Margaret C. Garb  
PhD, Columbia University  
(History)

Clarissa Hayward  
PhD, Yale University  
(Political Science)

John Hoal  
Sam Fox School of Design & Visual Arts  
PhD, Washington University in St. Louis  
(Architecture)

Gay Goldman Lorberbaum  
Sam Fox School of Design & Visual Arts  
MArch, Washington University in St. Louis  
(Architecture)

Robert G. Hansman  
Sam Fox School of Design & Visual Arts  
BFA, University of Kansas  
(Architecture)

Eric Mumford  
Sam Fox School of Design & Visual Arts  
PhD, Princeton University  
(Architecture)

Shanti A. Parikh  
PhD, Yale University  
(Anthropology)

Sunita A. Parikh  
PhD, University of Chicago  
(Political Science)

Vetta L. Sanders Thompson  
PhD, Duke University  
(Social Work)

Denise Ward-Brown  
Sam Fox School of Design & Visual Arts  
MFA, Howard University  
(Art)

Assistant Professors

Michelle M. Duguid  
PhD, Cornell University  
(Business)

Rowhea Elmesky  
PhD, Florida State University  
(Education)

Korina Jocson  
PhD, University of California–Berkeley  
(Education)

Michael D. Minta  
PhD, University of Michigan  
(Political Science)

Anne Newman  
PhD, Stanford University  
(Education)

Derek Parkman Pardue  
PhD, University of Illinois  
(Anthropology)

Nancy Y. Reynolds  
PhD, Stanford University  
(History)

Paul T. Shattuck  
PhD, University of Wisconsin  
(Social Work)

Anjanette A. Wells  
PhD, University of Southern California  
(Social Work)

Adjunct Assistant Professor

Sheri Notaro  
PhD, University of Michigan  
(Psychology, Public Health)

The Major in Urban Studies

Total required units: 33 units, 21 of which must be 300 level or above. Of these 21 advanced units, no more than 6 units may be from independent study courses.

Required courses: URST 299 The Study of Cities and Metropolitan America; one introductory course in math or applied statistics; one 400-level independent study or an internship
located locally, nationally or internationally; and a capstone seminar with required writing assignments or senior thesis.

**Elective courses:** There are five subject area concentrations in Urban Studies: neighborhoods and community development, urban education, cities of the world, public policy/social policy, and public health. Once you declare a major in urban studies, you will be assigned a major adviser who will help you formulate your area concentration.

Because of the nature of the major and requirements of the nonresidential components, majors are strongly encouraged to declare by their third semester in residency.

### Additional Information

**Study Abroad:** The program offers the International Urban Scholars Study Abroad Program through Oxford University, the London School of Economics and Political Science, University of Cape Town in South Africa, and Fudan University in Shanghai, China.

**Senior Honors:** As an Urban Studies major, you are encouraged to work for Senior Honors, for which you may apply in your junior year. Acceptance into the program is based on your previous academic performance and a proposal to a core faculty member in Urban Studies who agrees to supervise your honors research. You must complete honors thesis research and an Honors thesis, which is evaluated by a three-member faculty committee.

### The Minor in Urban Studies

**Total required units:** 15

**Required courses:**

- URST 299 The Study of Cities and Metropolitan America

**Elective courses:**

12 units at the 300 level or above. All courses for the minor must be taken for a letter grade, with a passing grade of C or better. These courses must be home-based in three different departments or programs, and may not include courses in the student’s major field. A complete list of general courses that count toward the Urban Studies minor is published each semester in WUCRSL. No more than 3 units may be counted from among the following: Directed Readings, Independent Study, Internships, University College or credits from another institution including study abroad.

### Additional Information

The Minor in Urban Studies facilitates the study of urbanization across the globe, from multiple disciplinary perspectives, and is designed to complement any major field of study. Students are encouraged to pursue course work, in companion with their major field of interest, that is distinctive yet complementary to the study of urbanization, which impacts all fields of inquiry. Courses must be selected in consultation with the program director/adviser in Urban Studies.

### Urban Studies

**L18 URST 101 Introduction to Urban Studies**

This course provides a survey of the field of Urban Studies, utilizing the City of St. Louis as a field site. The major purpose of the course is to gradually reveal how a city operates internally, and how it operates externally with its sister cities, surrounding metropolitan areas and neighboring states, amidst competing and often contradictory interests. Utilizing historical analysis as a guide, the course briefly revisits the experiences of previous waves of ethnic groups to the St. Louis metropolitan area, as a lens for understanding the current social, political and economic dilemmas that many urban dwellers in St. Louis now face. The course reveals to students the intricacies of social welfare issues and policies among high density populations, in St. Louis, that are homogeneous and heterogeneous, at the same time. Visits and discussions with various governmental and nongovernmental agencies, and how such agencies function or dysfunction for various constituencies allow students to ask crucial questions regarding equality of opportunity in a democratic society. Students also encounter diverse communities and neighborhoods and the intended and unintended consequences of social welfare policies designed to ameliorate urban dilemmas such as poverty and inequality, homelessness, educational underachievement, gentrification, migration and immigration, development, health care, fiscal issues, the informal economy, and issues concerned with crime and social justice, among others. Readings are reinforced and challenged through visits, interactions and observations with broad constituencies and institutions, ranging from city officials to community residents. As such, this course offers a survey discussion of the rich interdisciplinary field of Urban Studies for those who may be interested in pursuing a standalone major in the field of Urban Studies.

Credit 3 units. A&S: SS A&S: IQ, SSC BU: BA

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**L18 URST 163 Freedom, Citizenship and the Making of American Culture from the Colonial Era to the Present**

Same as History 163

Credit 3 units. A&S: TH, CD, SD A&S: IQ, HUM, LCD BU: HUM FA: SSP

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**L18 URST 2020 The Immigrant Experience**

Same as AMCS 202

Credit 3 units. A&S: SS, CD A&S: IQ, SSC, LCD BU: ETH, HUM FA: SSP

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**L18 URST 2152 The Theory and Practice of Justice: The American Historical Experience**
L18 URST 2188 African Urban History
Same as History 2188
Credit 3 units.   A&S : TH   A&S : IQ, HUM   BU : BA, ETH, HUM   FA : SSP

L18 URST 233 Biomedical Ethics
Same as Phil 233F
Credit 3 units.   A&S : TH   A&S : IQ, HUM   BU : ETH   FA : SSP

L18 URST 258 Law, Politics and Society
Same as Pol Sci 258
Credit 3 units.   A&S : SS   A&S : IQ, SSC

L18 URST 296 Practicum in Urban Studies
Practicum with an Urban Studies-affiliated faculty. All proposals for practicum must be submitted for review and approved by the Urban Studies adviser. Enrollment by permission of the instructor.
Credit -3 unit.

L18 URST 299 The Study of Cities and Metropolitan America
This course serves as the introductory course analyzing the forces shaping America's cities and surrounding metropolitan areas. It examines strategies for dealing with many of the profound social issues affecting urban/metropolitan America. Emanating from a historical perspective, it examines the ways in which industrialization and deindustrialization shaped Northern American cities and the consequences of deindustrialization on urban citizenry. It further surveys the demographic and spatial transformation of American cities, examining the consequences of urban transformation on federal, state and local politics on society and on her institutions. Similarly, the course focuses on the origin and societal changes and emerging goals of urban development, gentrification and evolving patterns of metropolitanism and the necessity for central city as well as neighborhood reconstruction. The dynamics of racial residential segregation; crime and punishment; issues of academic achievement and under-achievement; and the social cleavages of urban marginalized communities, family structure, urban homelessness, urban sprawl and health care among others, are viewed from the perspective of social justice by exploring social, political, economic, racial and ethnic factors that impact on access, equity and care. Various theoretical perspectives and philosophies are introduced that have dominated the discourse on race and urban poverty. A field-based component complements the course work, and is designed to build interest, awareness and skills in preparation for outreach to urban communities. Prerequisite: sophomore standing.
Credit 3 units.   A&S : SS   A&S : IQ, SSC   BU : BA

L18 URST 303 Independent Study in Urban Studies
Independent study with an Urban Studies-affiliated faculty. All proposals for practicum must be submitted for review and approved by the Urban Studies adviser. Enrollment by permission of the instructor.
Credit -3 unit.

L18 URST 3066 The American City in the 19th and 20th Centuries
Same as History 3066
Credit 3 units.   A&S : TH, SD   A&S : IQ, HUM, SD   BU : HUM

L18 URST 307A Human Variation
Same as Anthro 307A
Credit 3 units.   A&S : NS, SD, QA   A&S : IQ, NSM, AN, SD   BU : SCI   FA : NSM

L18 URST 3091 Poverty and Social Reform in American History
Same as History 3091
Credit 3 units.   A&S : TH, SD   A&S : IQ, HUM, SD   BU : BA   FA : SSP

L18 URST 310 History of Women's Health Care in America
Same as WGSS 310
Credit 3 units.   A&S : SS, WI   A&S : IQ, SSC, WI   BU : BA   FA : SSP

L18 URST 3141 Literacies, Schools and Communities
Same as Educ 314
Credit 3 units.   A&S : LA   A&S : IQ, HUM   BU : BA
L18 URST 315 Introduction to Social Psychology  
Same as Psych 315  
Credit 3 units. A&S : SS A&S : IQ, SSC  BU : BA  FA : SSP

L18 URST 316 Contemporary Women’s Health  
Same as WGSS 316  
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD  BU : BA  FA : SSP

L18 URST 316F Rediscovering the Child: Interdisciplinary Workshops in an Urban Middle School  
Same as AMCS 316F  
Credit 3 units. A&S : SS  A&S : IQ, SSC

L18 URST 3190 Engaging the City: The St. Louis Violence and Literacy Project  
Same as AMCS 3190  
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD

L18 URST 3211 Introduction to Colonial Latin America  
Same as History 321C  
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD  BU : HUM, IS  FA : SSP

L18 URST 322C African Civilization 1800 to Present  
Same as AFAS 322C  
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD  BU : IS  FA : SSP

L18 URST 3254 Vote for Pedro: A Critical Look at Youth and Popular Culture  
Over the past decade, anthropologists have become increasingly wary of the importance of youth and popular cultures as a powerful field where people not only express themselves but also influence some of the basic tenets of society. While “pop life” is not exclusive to youth groups in terms of production and distribution, young people are the majority of consumers. In this course, we examine popular Christianity in Brazil, Mexican street art, Japanese manga comics, American teenage fascination with the extraterrestrial, U.S. college sports fandom, various “white” hip-hop movements, alternative “girl” rock and drug “cultures.” These vibrant forms and practices are not homogenous; they vary across time and space. This course considers “the popular” in its broadest sense, giving us an opportunity to turn an anthropological lens onto the everyday life of teenagers and the seemingly flavor-of-the-month styles of the popular, while simultaneously opening up the discipline of cultural anthropology to appreciate the fast-paced montages and purposefully distorted sounds of consumerism and youth energy.  
Same as Anthro 3254  
Credit 3 units. A&S : SS A&S : IQ, SSC  BU : BA  FA : SSP

L18 URST 3260 Race, Class and Gender: Cultural Readings of Brazil and Its Cities  
Cities are spectacles of humanity. In Brazil, the construction and management of its metropolitan areas have been intended as a showcase of modernity and cultural development for the outside world (especially Europe and later the United States) to see. Brazilian cities are also the settings and results of intense social relationships. In this course we try to understand the relationship between spatial design and sociocultural identity through particular discussions of (im)migration, globalization, architecture, history and ideology. In our conversations about Sao Paulo, Rio de Janeiro, Brasilia, Salvador and Porto Alegre, we come to understand that places are always social and thus necessitate an analysis of race, class, gender and sexuality.  
Same as IAS 3260  
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD  BU : IS

L18 URST 3280 Political Intolerance in World Politics  
Same as Pol Sci 3280  
Credit 3 units. A&S : SS A&S : IQ, SSC  BU : IS

L18 URST 3301 Topics in Chinese Literature and Culture: Chinese Cities in the Global Context  
Same as Chinese 330  
Credit 3 units. A&S : TH, CD A&S : IQ, HUM, LCD  BU : IS

L18 URST 3326 Modern Third World  
Same as Anthro 3326  
Credit 3 units. A&S : SS A&S : IQ, SSC

L18 URST 3352 China’s Urban Experience: Shanghai and Beyond  
Same as East Asia 3352  
Credit 3 units. A&S : TH A&S : IQ, HUM

L18 URST 3353 Understanding the Evidence: Provocative Topics of Contemporary Women’s Health and Reproduction  
Same as WGSS 3353  
Credit 3 units. A&S : SS A&S : IQ, SSC  BU : ETH

L18 URST 3526 Health Economics  
Same as Econ 352
### Arts & Sciences

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
<th>Credits</th>
<th>Restrictions</th>
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<tr>
<td>L18 URST 361</td>
<td>Culture and Environment</td>
<td>Same as Anthro 361</td>
<td>3</td>
<td>A&amp;S : SS A&amp;S : IQ, SSC FA : SSP</td>
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<tr>
<td>L18 URST 3612</td>
<td>Population and Society</td>
<td>Same as Anthro 3612</td>
<td>3</td>
<td>A&amp;S : SS A&amp;S : IQ, SSC BU : ETH FA : SSP</td>
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<td>L18 URST 3613</td>
<td>City of Peace: Baghdad in Medieval Times</td>
<td>Same as JNE 361</td>
<td>3</td>
<td>A&amp;S : TH A&amp;S : IQ, HUM EN : H</td>
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<td>L18 URST 3632</td>
<td>The American Frontier: 1776–1848</td>
<td>Same as History 3632</td>
<td>3</td>
<td>A&amp;S : TH, CD, SD A&amp;S : IQ, HUM, LCD BU : HUM FA : SSP</td>
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<tr>
<td>L18 URST 372C</td>
<td>Law in American Life: 1776 to the Present</td>
<td>Same as History 372C</td>
<td>3</td>
<td>A&amp;S : TH, SD A&amp;S : IQ, HUM, SD BU : ETH, IS FA : SSP</td>
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<tr>
<td>L18 URST 375</td>
<td>Topics in Urban Studies</td>
<td>Prerequisites: URST 299 and junior standing.</td>
<td>3</td>
<td>A&amp;S : SS</td>
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<tr>
<td>L18 URST 379</td>
<td>Meltdown: Archaeology and Climate Change</td>
<td>Same as Anthro 379</td>
<td>3</td>
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<td>L18 URST 3798</td>
<td>Building St. Louis History: The City and Its Renaissance</td>
<td>Same as History 3798</td>
<td>4</td>
<td>A&amp;S : TH, SD A&amp;S : IQ, HUM, SD</td>
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<td>L18 URST 383</td>
<td>Reading the Scores: Understanding Brazilian Music through Social Categories</td>
<td>Same as IAS 383</td>
<td>3</td>
<td>A&amp;S : SS, WI A&amp;S : IQ, SSC, WI BU : IS</td>
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<td>L18 URST 3874</td>
<td>International Public Health</td>
<td>Same as Anthro 3874</td>
<td>3</td>
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<tr>
<td>L18 URST 389A</td>
<td>Power, Justice and the City</td>
<td>Same as Pol Sci 389A</td>
<td>3</td>
<td>A&amp;S : SS, SD A&amp;S : IQ, SSC, SD EN : S</td>
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<tr>
<td>L18 URST 394</td>
<td>Urban Development and the Global Economy</td>
<td>This course is designed to familiarize students with the urban effects of economic globalization and to provide students with tools that enable them to engage in scholarly and practical debates on economic growth and the city. Students are exposed to a variety of theoretical statements comparative studies, and case-specific research focusing on cities and the global economy. Topics include: industrial reorganization and its connection to the urban form; the ability of “dead” cities to adapt to economic change; how economic innovation is encouraged or suppressed within cities; growth coalitions and urban politics; networks and culture in relation to capitalist commitment to urban space; and the role of the arts and entertainment in new development versus production-based paradigms. Same as AMCS 394</td>
<td>3</td>
<td>A&amp;S : SS A&amp;S : IQ, SSC</td>
</tr>
<tr>
<td>L18 URST 400</td>
<td>Urban Education in Multiracial Societies</td>
<td>This course offers students an analysis of the historical development and contemporary contexts of urban education in English-speaking, multiracial societies. It examines legal decisions, relevant policy decisions and salient economic determinants that inform urban systems of education in Western societies including, but not limited to, the United States, Canada, Great Britain and South Africa. The course draws on quantitative, qualitative and comparative data as an empirical foundation to provide a basis for a cross-cultural understanding of the formalized and uniform system of public schooling characteristic of education in urban settings. Given the social and material exigencies that shape urban school systems in contemporary societies, special attention is given in this course to the roles of migration, immigration urbanization, criminal justice, industrialism, deindustrialism and globalization in shaping educational outcomes for diverse students in the aforementioned settings. Prerequisite: junior standing or permission of instructor.</td>
<td>3</td>
<td>A&amp;S : SS, WI A&amp;S : IQ, SSC, WI</td>
</tr>
<tr>
<td>L18 URST 403</td>
<td>Directed Study in Urban Studies</td>
<td>Directed study with an Urban Studies-affiliated faculty. All proposals for practicum must be submitted for review and approved by the Urban Studies adviser. Enrollment by permission of the instructor.</td>
<td>-3 unit.</td>
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<tr>
<td>L18 URST 4033</td>
<td>Video Microanalysis: Methods and Tools</td>
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</table>

697
The purpose of this course is to explore video microanalysis as a methodological tool for studying and valuing unconscious aspects of culturally diverse settings. Utilizing a social/cultural theoretical lens, this type of analysis reveals fleeting actions, subtle movements, peripheral events and nonverbal communication that are not easily identified in real-time viewing. Specifically, we look at facial expressions, direction of gaze, hand movements, body position, and use of material resources as micro techniques to expand our capacity to explore minute aspects and alternative interpretations of social interactions.

Same as Educ 4033
Credit 3 units.  A&S : SS, SD  A&S : IQ, SSC, SD

L18 URST 404 Directed Readings in Urban Studies
This course consists of readings in Urban Studies that deal with a range of contemporary issues, focusing on cities and the surrounding metropolitan regions. It can be taken only under the direction of the director of the Urban Studies program. Prerequisite: permission of instructor. The student must be a declared major in Urban Studies. See program approval form. Credit 3 units.

L18 URST 4041 Islam and Politics
Same as Anthro 4041
Credit 3 units.  A&S : SS, CD  A&S : IQ, SSC, LCD  BU : IS, FA : SSP

L18 URST 406 Sexual Health and the City: A Community-Based Learning Course
Same as AFAS 406
Credit 3 units.  A&S : SS, SD  A&S : IQ, SSC, SD

L18 URST 4101 Metropolitan Finance
This course is an interdisciplinary examination of fiscal policies in metropolitan regions and the related public policies that can make cities better or worse places for living and working. A particular focus is on the financial structures and arrangements — both public and private — that support or hinder quality of life in urban spaces. Core topics of study include the potential impact of decentralized governments on metropolitan economic development, determination of optimal arrangements for sharing fiscal responsibilities among levels of government, evaluation of local revenue and expenditure decisions, and assessment of prospects and options for intergovernmental fiscal reform. The course is consistent in its approach to policy. Drawing on literature in sociology, education, public finance, community development, political economy, and other related fields, the course readings and experiences explore how fiscal policies can and do affect urban dwellers and their well-being. This is a departure from many public finance courses. Such an approach leads to very different questions: How do liquor zoning regulations influence minority and nonminority children in schools? Should whites be paid to move into minority neighborhoods or vice versa? This approach to the study of metropolitan finance puts an emphasis on topics such as child care, public transportation, minimum wage, housing codes, street behavior, homelessness, incarceration, alcohol, sports stadiums, illicit drugs, tax abatements, water service, garbage collection, schools, higher education, sprawl, and technological change, with consideration given to political, institutional, and cultural factors. Students are required to attend hearings, meetings, and other relevant functions associated with the development of public financial policy. Prerequisites: URST 299 and either junior standing or permission of the instructor. Credit 3 units.  A&S : SS  A&S : IQ, SSC

L18 URST 4134 The AIDS Epidemic: Inequalities, Ethnography and Ethics
Same as Anthro 4134
Credit 3 units.  A&S : SS, SD  A&S : IQ, SSC, SD

L18 URST 418 Studying the City: Approaches to Social Research
In this course we explore social science/social scientific research methods. The course is designed primarily for students majoring in urban studies. However, the research skills that students acquire can be applied to any substantive topic in the social sciences. The main goal of this course is that students develop the skills to independently design and execute high-quality social research, regardless of their substantive interests. To develop these skills we read about methods, assess published research from a methodological perspective, and complete original research projects. Credit 3 units.  A&S : SS  A&S : IQ, SSC

L18 URST 4210 Tale of Two Cities: The Growth and Structure of Chicago and St. Louis
Same as AMCS 4210
Credit 3 units.  A&S : TH  BU : HUM

L18 URST 4211 New Media Literacy and Popular Culture in Education
Same as Educ 4211
Credit 3 units.  A&S : SS  A&S : IQ, SSC

L18 URST 4261 Political Economy of Urban Education
Same as Educ 4621
Credit 3 units.  A&S : SS, CD  A&S : IQ, SSC, LCD

L18 URST 4262 Racialization, Engendering and Articulation: Theories of Identity Formation
L18 URST 4280 History of Urban Schooling in the United States
Same as Educ 4280
Credit 3 units.   A&S : TH A&S : IQ, HUM

L18 URST 4289 Neighborhoods, Schools and Social (In)equality
Same as Educ 4289
Credit 3 units.   A&S : SS A&S : IQ, SSC

L18 URST 4315 Culture, Language and the Education of Black Students
Same as Educ 4315
Credit 3 units.   A&S : SS, CD A&S : IQ, SSC, LCD FA : SSP

L18 URST 4411 In the Field: Ethnographic and Qualitative Methods
This course provides an introduction to ethnographic and qualitative research. Ethnography is the study of culture and social organization through participant observation and interviewing. Ethnographers carry out their research by becoming a participant/observer, to varying degrees, in the social setting they wish to study. Ethnographic research provides interpretative and descriptive analyses of the routine practices of everyday life. Conducting ethnographic research in familiar settings requires that we “make the familiar strange” or make visible what otherwise are implicit and taken for granted aspects of social life. Ethnographic accounts represent different ways people live and make sense of their experiences and describe the types of social organization (for example, gender relations, class systems, racial divisions or national contexts) that, in part, serve to structure or pattern social behavior.
Same as AMCS 441
Credit 3 units.   A&S : SS A&S : IQ, SSC

L18 URST 4511 Race, Ethnicity and Culture
Same as AFAS 4511
Credit 3 units.   A&S : SS, SD A&S : IQ, SSC, SD BU : BA

L18 URST 453 Sociology of Education
Same as Educ 453B
Credit 3 units.   A&S : SS, SD A&S : IQ, SSC, SD BU : BA, ETH, HUM, IS FA : SSP

L18 URST 455 Topics in Urban Studies
Prerequisites: URST 299 and senior standing.
Credit 3 units.   A&S : SS

L18 URST 4601 Urban Economics
Same as Econ 460
Credit 3 units.   A&S : SS A&S : IQ, SSC FA : SSP

L18 URST 4608 The Education of Black Children and Youth in the United States
Same as Educ 4608
Credit 3 units.   A&S : TH, SD, WI A&S : IQ, HUM, SD, WI FA : SSP

L18 URST 461B Construction and Experience of Black Adolescence
Same as AFAS 461B
Credit 3 units.   A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L18 URST 462 Politics of Education
Same as Educ 462
Credit 3 units.   A&S : SS A&S : IQ, SSC FA : SSP

L18 URST 4622 Labor and Labor Movements in Global History
Same as IAS 4622
Credit 3 units.   A&S : SD A&S : IQ, SSC, SD EN : S

L18 URST 4631 Seminar on Urban Cultures in Latin America
This class pursues a theoretical study of Latin American urban cultures, as well as a research agenda regarding specific aspects of each city. The course covers three aspects. First, we cover some of the most important conceptual tools to approach Latin-American urban cultures as proposed by some of the major cultural critics in the region (Angel Rama, Néstor García Canclini, Diana Taylor, Esperanza Bielsa, Carlos Monsiváis). These include: lettered city, empire, capitalism, modernity, consumerism, city, performance, chronic, film, imaginary. Second, we use these categories to approach some of the major cultural manifestations of Latin-American cities: power, graffiti, rock music, public protests, scenic arts, youth cultures, etc. Finally, each student develops a research project on a specific case study, using the theoretical points discussed in class. This course may be used as a capstone by LAS and IAS majors. Prerequisite: none. IAS 165 Survey of Latin American Culture is recommended for IAS and LAS majors.
Same as IAS 463
Credit 3 units.   A&S : SD A&S : IQ, SSC, SD ED : S

L18 URST 4689 American Intellectual History to 1865
Same as History 4689
Credit 3 units.  A&S: TH  A&S: IQ, HUM

L18 URST 482 Senior Thesis in Urban Studies
This course is required for students to complete the degree requirements in Urban Studies. Students discuss research methods and make regular research reports both to the instructor and for other students.
Credit 3 units.

L18 URST 4834 Health, Healing and Ethics: Comparative Perspectives on Sickness and Society
Same as Anthro 4834
Credit 3 units.  A&S: SS  A&S: IQ, SSC

L18 URST 4872 Colonial Cities and the Making of Modernity
Same as History 4872
Credit 3 units.  A&S: TH, CD  A&S: IQ, HUM, LCD  FA: SSP

L18 URST 4882 Anthropology and Public Health
Same as Anthro 4882
Credit 3 units.  A&S: SS  A&S: IQ, SSC  FA: SSP

L18 URST 4883 The Political Economy of Health
Same as Anthro 4883
Credit 3 units.  A&S: SS  A&S: IQ, SSC  FA: SSP

L18 URST 4891 Education and Public Policy in the United States
Same as Educ 489
Credit 3 units.  A&S: SS  A&S: IQ, SSC  FA: SSP

L18 URST 498 Senior Capstone: Seminar in Urban Studies
Credit 3 units.  A&S: SS

L18 URST 4981 Advanced Seminar: Historical Perspectives on Human Rights and Globalization
Same as History 4981
Credit 4 units.  A&S: TH  A&S: IQ, HUM

L18 URST 499 Independent Work for Senior Honors
Credit -3 unit.

L18 URST 4991 Senior Honors Thesis in Urban Studies
This course is required for students seeking college honors through Urban Studies. Students discuss research methods and make regular research reports, both to the instructor and for other students. Prerequisites: satisfactory standing as a candidate for senior honors (3.5 cumulative GPA) and permission of thesis director.
Credit 3 units.  A&S: SS

Women, Gender, and Sexuality Studies

Courses in the Women, Gender, and Sexuality Studies program examine how gender affects many aspects of the world in which we live, such as literature, art, history, political structures, social relations and economic institutions. The curriculum provides opportunities to explore the specificity of women's and men's experiences, concerns and perspectives and to see how these vary among different social groups and at different points in time. The Women, Gender, and Sexuality Studies program has three areas of focus around which courses are organized: literature/theory/history; sexuality/the body/health; and global and transnational feminist and gender studies. Students may choose to concentrate in one of these areas or to investigate all three.

The Women, Gender, and Sexuality Studies program offers both interdisciplinary courses based in the program and more disciplinary-based courses coming from departments and programs throughout the university. Examples of interdisciplinary courses located within the program include: Introduction to Women, Gender, and Sexuality Studies; Masculinities; Women's Healthcare in America; and Race, Sex and Sexuality: Concepts of Identity.

Among the first in the nation (est. 1972), the Women, Gender, and Sexuality Studies program at Washington University has emphasized the importance of gender to such disciplines and interdisciplinary programs as philosophy, psychology, history, education, law, architecture, art history and archaeology, anthropology, political science, international studies, American culture studies, and studies in culture and languages.

Women, Gender, and Sexuality Studies students are often leaders in campus organizations that deal with issues concerning women, gender relations, sexuality and health. They also participate in a wide spectrum of extracurricular organizations available to undergraduates, including Students for Choice, Uncle Joe's Peer Counseling, MORE, Student Forum on Sexuality, X Magazine and SARAH.

Women, Gender, and Sexuality Studies encourages you to think critically and to participate actively in your education. Most classes are small, rely heavily on classroom discussion, and emphasize interaction between faculty and students. Courses in the Women, Gender, and Sexuality Studies program can be taken as electives, toward a primary or secondary major, or
toward a minor. Graduate students can pursue a certificate in Women, Gender, and Sexuality Studies.

Women, Gender, and Sexuality Studies can help students prepare for a career that involves women’s and men’s concerns or issues of gender or sexuality. Many graduates who continue their schooling choose to focus on such issues in medical school, law school, public health programs or social work. Some students envisage a career in college or university teaching, where they can apply a gender studies focus. Other students find jobs in social agencies focused on women’s or gender issues. Others currently are employed in such areas as health care, business, education, the arts, media, politics and law.

Phone: 314/935-5102
E-mail: women@artsci.wustl.edu
Departmental website: http://wgss.artsci.wustl.edu/

Director
Mary Ann Dzuback
PhD, Columbia University
(Education; History; Women, Gender, and Sexuality Studies)

Associate Director
Barbara Baumgartner
PhD, Northwestern University
(Senior Lecturer, Women, Gender, and Sexuality Studies)

Endowed Professors
Jean Allman
J. H. Hexter Professor in the Humanities in Arts & Sciences
PhD, Northwestern University
(History)

Susan Freligh Appleton
Lemma Barkeloo and Phoebe Couzins Professor of Law
JD, University of California–Berkeley
(Law)

Marion Crain
Wiley Rutledge Professor of Law
JD, University of California–Los Angeles
(Law)

Adrienne Davis
William M. Van Cleve Professor of Law
JD, Yale University
(Law)

R. Marie Griffith
John C. Danforth Distinguished Professor
PhD, Harvard University
(Director, John C. Danforth Center on Religion and Politics)

Linda J. Nicholson
Susan E. and William P. Stiritz Professor in Women’s Studies and Professor of History
PhD, Brandeis University
(History; Women, Gender, and Sexuality Studies)

Robert Pollak
Robert E. Hernreich Distinguished Professor of Economics
PhD, Massachusetts Institute of Technology
(Economics)

Gaylyn Studlar
David May Distinguished University Professor in the Humanities
PhD, University of Southern California
(Film and Media Studies)

Lynne Tatlock
Hortense and Tobias Lewin Distinguished Professor in the Humanities
PhD, Indiana University
(Germanic Languages and Literatures)

Karen Tokarz
Charles Nagel Professor of Public Interest and Public Service Law
JD, Saint Louis University
LLM, University of California–Berkeley
(Law)

Gerhild Scholz Williams
Barbara Schaps Thomas and David M. Thomas Professor in the Humanities
PhD, University of Washington
(Germanic Languages and Literatures)

Professors
Lois Beck
PhD, University of Chicago
(Anthropology)

Nancy E. Berg
PhD, University of Pennsylvania
(Modern Hebrew Languages and Literatures)

Rebecca Copeland
PhD, Columbia University
(Japanese Languages and Literatures)

Beata Grant
PhD, Stanford University
(Chinese; East Asian Languages and Cultures)

Gerald Izenberg
PhD, Harvard University
(History)

Fatemah Keshavarz Karamustafa
PhD, University of London
(Persian Languages and Literatures)

Angela Miller
PhD, Yale University  
(Art History)

**Craig Monson**  
PhD, University of California–Berkeley  
(Music)

**Vivian Pollak**  
PhD, Brandeis University  
(English)

**Carolyn Sargent**  
PhD, Michigan State University  
(Anthropology)

**Peggie Smith**  
JD, Yale University  
(Law)

**Akiko Tsuchiya**  
PhD, Cornell University  
(Romance Languages and Literatures)

**Colette H. Winn**  
PhD, University of Missouri–Columbia  
(Romance Languages and Literatures)

**Associate Professors**

**Miriam Bailin**  
PhD, University of California–Berkeley  
(English)

**Elizabeth Childs**  
PhD, Columbia University  
(Art History)

**Deborah Dinner**  
JD, Yale University  
(Law)

**Tonya Edmond**  
PhD, University of Texas at Austin  
(Social Work)

**Andrea Friedman**  
PhD, University of Wisconsin  
(History)

**Christine Johnson**  
PhD, Johns Hopkins University  
(History)

**Rebecca Lester**  
PhD, University of California–San Diego  
(Anthropology)

**Erin McGlothin**  
PhD, University of Virginia  
(Germanic Languages and Literatures)

**Rebecca Messbarger**  
Ph.D., University of Chicago  
(Romance Languages and Literatures)

**Shanti Parikh**  
PhD, Yale University  
(Anthropology; African and African-American Studies)

**Laura Rosenbury**  
JD, Harvard University  
(Law)

**Corinna Treitel**  
PhD, Harvard University  
(History)

**Rebecca Wanzo**  
PhD, Duke University  
(Women, Gender, and Sexuality Studies)

**Sarah Westphal-Wihl**  
PhD, Yale University  
(Germanic Languages and Literatures)

**Assistant Professors**

**Shefali Chandra**  
PhD, University of Pennsylvania  
(History)

**Stephanie Kirk**  
PhD, New York University  
(Romance Languages and Literatures)

**Pauline Lee**  
PhD, Stanford University  
(East Asian Languages and Cultures)

**Anca Parvulescu**  
PhD, University of Minnesota  
(English)

**Nancy Reynolds**  
PhD, Stanford University  
(History)

**Jessica Rosenfeld**  
PhD, University of Pennsylvania  
(English)

**Julie Singer**  
PhD, Duke University  
(Romance Languages and Literatures)

**Lecturers**

**Jami Ake**  
Assistant Dean and Academic Coordinator, College of Arts & Sciences  
PhD, Indiana University–Bloomington  
(English; Women, Gender, Sexuality Studies)

**Margaret Baum**  
MD, Johns Hopkins University School of Medicine
The Major in Women, Gender, and Sexuality Studies

Total required units: 27 units

3 credits of an introductory-level class, either:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGSS 100B</td>
<td>Introduction to Women and Gender Studies</td>
<td>3</td>
</tr>
<tr>
<td>or WGSS 105</td>
<td>Introduction to Sexuality Studies</td>
<td></td>
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</tbody>
</table>

3 credits of theory:

The following courses may fulfill this requirement:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGSS 335</td>
<td>Feminist Theory</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 303</td>
<td>Queer Theory</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 475</td>
<td>Intellectual History of Feminisms</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 420</td>
<td>Contemporary Feminisms</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 419</td>
<td>Feminist Literary and Cultural Theory</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 383</td>
<td>Topics in Women and Gender Studies</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 406</td>
<td>Queering Theory: A Multidisciplinary Approach</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: The 400-level theory classes also will satisfy the requirement for a 400-level class.

3 credits of a Research Methods OR Service Learning course:

The following courses may fulfill this requirement:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGSS 392</td>
<td>Feminist Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 3942</td>
<td>Service Learning: Projects in Domestic Violence</td>
<td>4</td>
</tr>
<tr>
<td>WGSS 3131</td>
<td>Service Learning: Contemporary Female Sexualities: Designing Sex Education</td>
<td>4</td>
</tr>
</tbody>
</table>

WGSS 370 | Service-Learning: Sex, Lies and Myths of the Mother | 4 |

WGSS 3171 | Service Learning: Women and Prison | 4 |

Any other service learning course approved by WGSS

3 credits at the 400 level or an Honors Thesis:

Any home-based or cross-listed WGSS class at the 400 level or a WGSS Honors thesis will satisfy this requirement.

3 credits of a Historical Context course:

A course home-based or cross-listed in WGSS that explores gender, sex, or sexuality in a historical context or studies the history of these categories.

3 credits of an ethnic/global/racial context course:

A course home-based or cross-listed in WGSS that considers gender and ethnicity or gender and race or gender in a global context.

9 credits of WGSS courses in addition to the credits required in the categories above

Courses home-based or cross-listed in WGSS.

Additional Information

Study Abroad: We strongly encourage and support students who wish to study abroad and will accept up to 9 credits from approved programs. Please see Barbara Baumgartner, WGSS Study Abroad supervisor, about this option.

Honors: The honors program in Women, Gender, and Sexuality Studies is open to majors who have strong academic records. Students who have maintained a cumulative 3.65 grade point average through five semesters and have at least a 3.65 in the major may be considered for honors. Application to the program must be made by April 1 of junior year. (No late applications will be accepted.)

The Minor in Women, Gender, and Sexuality Studies

Units required: 18 units, 12 of which are at or above the 300 level. All 18 units must be separate courses not double-counted toward a major. All minor courses /must/ be home-based or cross-listed in Women, Gender, and Sexuality Studies. All courses taken for the minor must be taken for a grade.

Required courses:

Individual programs are designed in consultation with an adviser in light of the student’s interests and abilities, major course of
Women, Gender, and Sexuality Studies

L77 WGSS 100B Introduction to Women and Gender Studies
Interdisciplinary examination of major topics in women's lives, in gender, and in the development of feminist theories. For students without previous academic experience in WGSS. Five seats are reserved for seniors, juniors, sophomores and freshmen in each section.
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : BA, HUM FA : SSP

L77 WGSS 102 Women in Science: An Introduction
Throughout the centuries, women were interested and involved in the sciences. Their scientific contributions, however, have often been overlooked and their abilities questioned. The 2005 proposition by Harvard's President Larry Summers that women's innate differences explain why fewer women succeed in math and science suggests that women continue to face assumptions about their scientific competence. In addition to examining the history of women's participation in science, this class explores the continuing cultural and economic barriers to women interested in science. Starting with a historical overview of women in science, we look at the contributions of women scientists. We review the numbers of women in various fields with good representation, such as biology, and those with few women, such as physics and computer science. Like the prestigious journal Science, we also explore whether women do science differently. This course is restricted to Women in Science Focus program participants.
Credit 1 unit. A&S : TH

L77 WGSS 105 Introduction to Sexuality Studies
An introduction to the history of the study of sexuality in the 19th, 20th and 21st centuries. An examination of the ways that human groups attach meaning to emotions, desires and relationships reveals that human sexuality is the product of cultural history. Taking a social constructionist perspective, this course investigates how the deployment of sexuality socializes, organizes and provides identities to individuals and groups. We also consider why the topic of sexuality provokes such volatile reactions in contemporary American culture, how the discussion of sex is discouraged, and what is at stake in developing skills, knowledge and attitudes to engage in public discussion of sex.
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD BU : BA

L77 WGSS 200 Women Writers of the Near and Far East
Same as ANELL 200
Credit 3 units. A&S : TH, CD BU : BA, HUM, IS

L77 WGSS 205 Introduction to LGBTQ Studies
This course offers an introduction to the topics, questions and approaches that characterize the rapidly growing field of lesbian/gay/bisexual/transsexual/queer studies. Using an interdisciplinary approach, we explore such topics as the relation between gender and sexual identity, the history of same-sex relations, homophobia and heterosexism, queer cultures and LGBTQ politics, particularly in the United States. Our focus is on asking whether and how “LGBTQ” functions as a coherent category of analysis or identity, and we pay particular attention to differences (of race, age, gender, sexual practice, class, national origin, temperament, etc.) that are contained within, and often disrupt, that category. This course is not open to students who have taken WGSS 203 or 3031.
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : BA

L77 WGSS 209 Sex, Cyborgs and Society
This course asks how contemporary relations between women and men are changing under the transformations of technology, science and medicine. Sex is explored as an integral and complex element of gender. Does sex, as a biological construct, determine gender? Or is gender in fact fixed at all? Sexuality also is considered as a practice, in which intimate relations are being mediated by new technological developments on the internet. Society is addressed as a lens or framework for our discussion of gender. What is “social” about these dynamics? Cyborgs are the substantive focus of our discussion. We pay special attention to developments in technology, science and medicine, and ask if it is improving or degrading gender relations.
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD BU : BA

L77 WGSS 210 Freshman Seminar: Gender and Citizenship
Who is a citizen, and what exactly does this term mean? This freshman seminar investigates how ideologies relating to gender have shaped the rights and duties attached to citizenship in the United States, and how women and men have drawn on those ideologies to make claims to citizenship. We focus on distinct movements in the past and present to identify models of citizenship that have been available to Americans. These movements include the creation of an ideology of “republican motherhood” in the early Republic; the Reconstruction-era debate over the disfranchisement of African-American men; the male culture of 19th-century political parties; the woman suffrage campaign; 20th-century debates over military service for women and for gay men and lesbians; welfare rights and welfare reform; and abortion conflicts since Roe vs. Wade. We take an interdisciplinary approach that encompasses scholarly writings and a wide variety of historical and contemporary documents.
Credit 3 units. A&S : TH, SD BU : BA FA : SSP

L77 WGSS 214C Introduction to Women’s Texts
Discussion of canonical and nontraditional texts, most by women. Emphasis on how these texts represent gender, how literature contributes to identity formation, and how women have used the written word to change their social and imaginative conditions. Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : HUM FA : Lit

Same as AFAS 2250
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : BA

L77 WGSS 240 Not Members of this Club: Women and Slaves in the Greco-Roman World
Same as Classics 240
Credit 3 units. A&S : SS, CD, SD A&S : IQ, SSC, LCD BU : BA FA : SSP

L77 WGSS 246A Freshman Seminar: Latin-American Women in History and Culture: Icons and Idols
Same as Span 246
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, LCD BU : IS

L77 WGSS 247 Freshman Seminar
Same as Span 247
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD BU : ETH

L77 WGSS 253 Women’s Fiction in Contemporary Spain
Same as Span 245
Credit 3 units. A&S : TH BU : IS FA : Lit

L77 WGSS 299 Independent Study: Internships
This course number is to be used for internships only. Credit -3 unit.

L77 WGSS 3012 Gender and Politics
Same as Pol Sci 3010
Credit 3 units. A&S : SS

L77 WGSS 301U Historical Methods — United States History
Same as History 301U
Credit 3 units. A&S : TH A&S : IQ, HUM

L77 WGSS 303 Gender and Education
Same as Educ 303
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD BU : BA FA : SSP

L77 WGSS 3031 Queer Theory
This course provides students with an interdisciplinary examination of the history, politics and cultural expressions of gay and lesbian communities in American culture. It explores the ways lesbians, gay men, bisexual and transgendered people construct, participate in and resist various constructions of gender and sexuality. We question desire and social/cultural power, the nature and power of social change, etc. Particular attention is paid to examining the roots and effects of heterosexism and homophobia, the call for hate crime legislation, the ethics of ‘outing’ and ‘passing’, the impact of AIDS, partnership recognition and domestic violence on GLBT communities. Throughout the course students are encouraged to examine the intersections of gender, race, ethnicity and social class with sexual orientation. Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : BA

L77 WGSS 3033 Global Masculinities
An interdisciplinary survey of expressions of masculinity and male gender in global perspective with a strong emphasis on non-Western cultures. Themes and topics include the increasingly global culture and economy, terrorism, international relations, development policy, colonization/imperialism and war/militarism, as well as specific cultural, social and national expressions of masculinity across a wide geographical range. Credit 3 units. A&S : SS, CD A&S : IQ, SSC, LCD BU : BA

L77 WGSS 304 Sex, Gender and Popular Culture
A critical survey of sex and gender in the production, reception and content of contemporary popular culture. Possible topics include: television, film, advertising, popular fiction, music, comics, Internet, foodways and fashion. Themes include: the representation and stylization of sexed and gendered bodies; popular models of sexual and gendered social relations; production of normative and alternative sex and gender identities through media consumption; sex and gender in systems of popular cultural production. Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD BU : BA

L77 WGSS 3041 Making Sex and Gender: Understanding the History of the Body
This course provides an overview of the history of the body from antiquity to modern times using an interdisciplinary approach. By exploring selections from medical texts, literature, fashion, art, accounts of “new world” exploration, legal records, self-help books and contemporary media representations of human bodies, we consider the changing historical perception of the body. The intersection of gender, race and class factor
significantly in our discussions of how the body has been construed historically and how it is currently being constructed in contemporary American culture. This course also provides an introduction to feminist/gender methodologies that apply to understanding the history of the body. This course is not open to students who have taken WGSS 204. Prerequisite: any 100- or 200-level WGSS course or permission of instructor. Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD

L77 WGSS 306 Between Submission and Power: Women and Family in Islam
As a result of recent political upheavals in the Middle East, the Muslim woman, her rights and her role in the society have been the focus of much attention. Who dictates her dress regulation? Who defines her legal rights? Is she entitled to work? Can she be politically active outside her family? Can she be economically independent? What is her reaction to polygamy? An attempt to look at these and similar questions as addressed by traditional Islam and interpreted in major Muslim countries today. Credit 3 units. A&S : SS, CD BU : ETH FA : SSP

L77 WGSS 308 Masculinities
This course critically examines the subject of masculinity through a number of themes including history, society, politics, race, gender, sexuality, art and popular culture. Interdisciplinary readings are drawn from the fields of sociology, anthropology, literature, history, art history and cultural studies. We examine the challenges presented to “masculinity” (and a variety of responses) by the late-20th century emergence of gender studies. Our goal is to come to a working definition of masculinity and gain an understanding of past, current and possible future masculine behaviors, mythologies, ideologies, experiences and identities. Previous course work in Women, Gender, and Sexuality Studies strongly recommended but not required. Attendance mandatory first day in order to reserve your class enrollment. Credit 3 units. A&S : SS, SD BU : BA

L77 WGSS 3091 Lesbian, Gay, Bisexual Identity Development
Same as Psych 3091
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD BU : BA FA : SSP

L77 WGSS 310 History of Women’s Health Care in America
This course examines issues surrounding women’s health care in America. While the scope is broad, the major emphasis is on the 19th and 20th centuries. Through an examination of popular writing, scientific/medical writing, letters, diaries and fiction, we look at the changing perceptions and conceptions of women’s bodies and health in America.

Credit 3 units. A&S : SS, WI A&S : IQ, SSC, WI BU : BA FA : SSP

L77 WGSS 3101 An Intellectual History of Sex and Gender
Same as Hum 310
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : BA

L77 WGSS 312 Globalization and Gender
How is gender embedded in the contemporary global economy? In this course, we look at major institutions and circuits of globalization, for the purpose of uncovering masculine principles and privileges, and illuminating women’s participation, agency and resistance. This is slightly different than a traditional “comparative” approach to women’s studies. Rather than contrasting women’s positions in different societies, we look at the dynamic interrelations of nations with one another. These relations — especially hierarchical ones — are fundamental to and infused with gender, and have impacts upon gender. Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD BU : IS

L77 WGSS 3121 Topics in English and American Literature
Same as E Lit 316W
Credit 3 units. A&S : TH, WI A&S : IQ, HUM, WI

L77 WGSS 3131 Service Learning: Contemporary Female Sexualities: Designing Sex Education
This interdisciplinary service-learning course explores representations of and theories about female sexualities in postmodern America. We study how our culture constructs women’s sexual desires, fantasies, behaviors, relationships and communities. Integrating biological with social constructionist and symbolic interactionist approaches, we study how female sexualities vary over life spans and among socioeconomic groups. We read both fictional and nonfictional texts, examining them for theories of how female sexualities organize personal lives and politics today and how individuals and groups use sex to shape their environments and destinies. We coordinate what we attend to in the classroom with the needs of agency partners who are our field educators for our help with their work in the community. Projects and activities students take on depend on the current needs of our community partners and the skills and interests of particular students. Prerequisite: any 100-level WGSS course. Credit 4 units. A&S : SS, SD A&S : IQ, SSC, SD

L77 WGSS 3132 Service Learning: Girls’ Studies
2012 marks the 100th anniversary of Girl Scouts of America, an organization that has played a significant role in defining what it means to be a girl in American culture. This class looks back at girlhood over the past 100 years to today by exploring topics that include literature for girls, the education of girls,
sports and girlhood, marketing to girls, girl’s health and sexuality, and, of course, the history of organizations for girls in the United States and abroad. This course introduces students to the emerging field of Girl Studies within the field of Feminist/ Gender Studies research. Because the course builds upon basic knowledge of women’s movements in the U.S. and builds upon an understanding of core women and gender studies readings, students must take Introduction to Women and Gender Studies or Introduction to Sexuality Studies before enrolling in this course. This course includes a fieldwork component in addition to regular course meetings. Prerequisite: any 100-level WGSS course.
Credit 4 units.  A&S : TH  A&S : IQ, HUM

L77 WGSS 3151 Indian Barbie, Asian Tigers and IT Dreams: Politics of Globalization and Development in South Asia
Same as IAS 315
Credit 3 units.  A&S : SS, CD  A&S : IQ, SSC, LCD  BU : IS

L77 WGSS 316 Contemporary Women’s Health
We identify and study a broad range of health issues that are either unique to women or of special importance to women. The roles that women play as both providers and consumers of health care in the United States are examined. The interface of gender, race and class and their impact on an individual’s access to and experience in the health care system are central concerns. Topics are wide-ranging and include discussions of breast cancer, mental health, cardiovascular disease in women, women and eating (from anorexia to obesity), reproductive issues (from menstruation to fertility to menopause), as well as the politics of women’s health, gender differences in health status, the effect of employment on health, the history of women’s health research.
Credit 3 units.  A&S : SS, SD  A&S : IQ, SSC, SD  BU : BA  FA : SSP

L77 WGSS 3171 Service Learning: Women and Prison
Since President Reagan declared a war on drugs in the 1980s, the numbers of women in prison has increased dramatically. Due to mandatory minimum sentencing requirements and increasingly punitive prisoners for non-violent offences, there are no more than 200,000 women incarcerated in the United States with more than 1 million on probation and parole. While women are the fastest growing population in prison, men still make up the vast majority of prisoners, and the system is largely geared toward men and their needs. In this course, we explore the historical and contemporary issues of girls and women who are convicted of a crime. Through readings, films, reflective writings and facility tours, we explore the impact of incarceration on women and their families. While our scope is national, we focus on the corrections system in Missouri. Prerequisite: Introduction to Women and Gender Studies or Introduction to Sexuality Studies.
Credit 4 units.  A&S : SS, SD  A&S : IQ, SSC, SD

L77 WGSS 3172 Queer Histories
Queer history is a profoundly political project. Scholars and activists use queer histories to assert theories of identity formation, build communities and advance a vision of the meanings of sexuality in modern life and the place of queer people in national communities. This history of alternative sexual identities is narrated in a variety of settings — the internet as well as the academy, art and film as well as the streets — and draws upon numerous disciplines, including anthropology, geography, sociology, oral history, fiction and memoir, as well as history. This discussion-based course examines the sites and genres of queer history, with particular attention to moments of contestation and debate about its contours and meanings.
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD

L77 WGSS 3191 Contemporary American Women Poets
Same as E Lit 3191.
Same as E Lit 3191
Credit 3 units.  A&S : TH  A&S : IQ, HUM  BU : HUM  FA : Lit

L77 WGSS 3201 Gender, Culture and Madness
Same as Anthro 3201
Credit 3 units.  A&S : SS, SD  A&S : IQ, SSC, SD  BU : BA, ETH  FA : SSP

L77 WGSS 3205 Women in Music
Same as Music 3025
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD

L77 WGSS 3206 Global Gender Issues
This course compares the life experiences of women and men in societies throughout the world. We discuss the evidence regarding the universal subordination of women, and examine explanations that propose to situate women’s and men’s personality attributes, roles and responsibilities in the biological or cultural domains. In general, through readings, films and lectures, the class provides a cross-cultural perspective on ideas regarding gender and how gendered meanings, practices, performances serve as structuring principles in society. Prerequisites: any 100- or 200-level WGSS course or permission from the instructor.
Credit 3 units.  A&S : SS, CD  A&S : IQ, SSC, LCD

L77 WGSS 323 Topics in English and American Writers
Same as E Lit 323
L77 WGSS 3255 Deconstructing Black Manhood
Same as AFAS 3255
Credit 3 units. A&S : TH    A&S : IQ , HUM

L77 WGSS 327C Gender and Literary History: Early Modern Women Writers
Same as Comp Lit 327
Credit 3 units. A&S : TH    A&S : IQ , HUM

L77 WGSS 3282 Sexuality in Africa
Same as AFAS 3282
Credit 3 units. A&S : SS , CD    BU : BA    FA : SSP

L77 WGSS 329 The Psychology of Women
This course examines women’s psychological and social experiences throughout the life span. Covered topics include current research and theoretical perspectives of gender identity, gender role development, cognitive, social and biopsychological gender differences, gender communication, and cross-cultural perspectives in women’s experiences. If registering for the class under Psychology, the student must have completed Psych 100B Introduction to Psychology.
Credit 3 units. A&S : SS    A&S : IQ , SSC    BU : BA

L77 WGSS 330C Culture and Identity
Same as AMCS 330C
Credit 3 units. A&S : TH , SD    A&S : IQ , HUM , SD

L77 WGSS 3312 Topics in Politics
Credit 3 units.

L77 WGSS 3313 Gender and American Politics
Same as Pol Sci 331B
Credit 3 units. A&S : SS , SD    BU : BA , ETH    FA : SSP

L77 WGSS 3323 Topics in Gender and Religion: Women and Islam
Same as Anthro 3313
Credit 3 units. A&S : SS , CD    A&S : IQ , SSC , LCD    BU : BA    FA : SSP

L77 WGSS 335 Feminist Theory
This course begins by examining the 19th and early 20th century historical context out of which contemporary feminist theory emerged. We then turn to the 1960s and the emergence of the “Second Wave” of Feminism. We focus on some of the major theories that developed during the 1960s, 1970s and 1980s and the conflicts and internal problems these theories generated. We then examine some of the ways these problems were resolved in feminist theory of the 1990s. The last part of the course focuses on topics of concern to contemporary feminists — such as the family, sexuality and globalism — and the contributions feminist theory brings to these topics. Open to graduate students by enrolling in WGSS 500; contact the Women, Gender, and Sexuality Studies office for details.
Credit 3 units. A&S : TH , SD    A&S : IQ , HUM , SD    BU : BA    FA : SSP

L77 WGSS 337 Women’s Literature: Before Thelma and Louise: American Women’s Adventure Stories
American literature is filled with adventurers and adventure stories. Some of the most exciting tales were written by women. Their adventures include Mary Rowlandson’s autobiography of her capture by and life with the Indians, E.D.E.N. Southworth’s story of a 19th-century heroine who rescues imprisoned maidens and fights duels, and Octavia Butler’s science fiction account of a 20th-century black woman who is transported back through time to an antebellum plantation. Until recently, American women authors and their stories were largely dismissed because they were perceived to focus on domestic concerns, which were seen as narrow and trivial. But the works of many women authors are far different from sentimental domestic fiction. In addition to looking closely at the historical and cultural conditions in which the narratives were written, we examine the ways in which these writers conform to and rebel against cultural prescriptions about femininity. Finally, we read some contemporary and current criticism about these works and American women’s writing and discuss the politics of canon formation. Tentative Reading List: Mary Rowlandson, The Captivity and Restoration of Mrs. Mary Rowlandson (1682); The Journal of Madam Knight (1704); Catharine Maria Sedgwick, Hope Leslie (1827); E.D.E.N. Southworth, The Hidden Hand (1858); Zora Neale Hurston, Their Eyes Were Watching God (1937); Octavia Butler, Kindred (1979); Paule Marshall, Praisesong for the Widow (1983).
Writing-intensive.
Credit 3 units. A&S : TH , SD , WI    A&S : IQ , HUM , SD , WI

L77 WGSS 340 Israeli Women Writers
Same as MHBR 340
Credit 3 units. A&S : TH , CD , SD , WI    A&S : IQ , HUM , LCD , SD , WI

L77 WGSS 3401 Performing Gender
This course investigates an array of contemporary performances to explore manifestations of and challenges to gender norms in American culture. An initial reading of crucial performance theories by Judith Butler, Jill Dolan and others help set the stage for our examination of a diverse collection of contemporary...
texts, including plays, solo performances, stand-up comedy and pop culture phenomenon. We raise questions about feminist performance strategies, butch/femme performance, camp, cross-dressing, feminist spectatorship, multimedia performances and the representation of lesbian desire. Prerequisite: any 100-level WGSS course. Credit 3 units. A&S : LA, SD A&S : IQ, HUM, SD BU : BA

L77 WGSS 3413 Women in Early Modern Europe
Same as History 3413
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : BA

FA : SSP

L77 WGSS 343 Understanding the Evidence: Provocative Topics of Contemporary Women’s Health and Reproduction
Contemporary topics of women’s health and reproduction are used as vehicles to introduce the student to the world of evidence-based data acquisition. Selected topics span and cross a multitude of contemporary boundaries. Issues evoke moral, ethical, religious, cultural, political and medical foundations of thought. The student is provided introductory detail to each topic and subsequently embark on an independent critical review of current data and opinion to formulate their own said notions. Examples of targeted topics for the upcoming semester include, but are not limited to: abortion, human cloning, genetics, elective Cesarean section, fetal surgery, hormone replacement, refusal of medical care, medical reimbursement, liability crisis and gender bias of medical care. Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA

L77 WGSS 345A Sexual Politics in Film Noir and Hardboiled Literature
Same as Film 345
Credit 3 units. A&S : TH A&S : IQ, HUM

L77 WGSS 346 Female Gaze: Picturing Abuse in the Media
This course offers an opportunity to examine the ways women’s relationships and experiences are pictured in the media. The goal of this class is to help build alternative frames of reference to those currently common in the classic cinema repertoire, TV advertising and the nightly news. The course combines formal lectures with screenings and discussions of current and classic media from around the world. We screen more than a dozen independent short films by women about women’s issues introducing students to diverse constructions of masculinity, femininity, romance and violence. We examine how shooting and editing techniques affect the meaning of the documentary and manipulate viewers’ beliefs. Credit 3 units. A&S : TH BU : BA

L77 WGSS 3461 Hooking Up: Healthy Exploration or Harmful Exploitation?
Not since “free love” discourse in the 1960s and ’70s has young adults’ sexual culture come under such academic scrutiny. A plethora of studies attempt to frame and understand the significance and consequences of increasingly casual patterns of sexual behavior among America’s teens and young adults. This course looks at the contemporary cultural phenomenon of hooking up, from feminist, social and symbolic interactionist, and critical theoretical points of view. We consider the historical contexts, political implications and personal consequences of hooking up. We read both literary and social science texts. Prerequisite: any 100- or 200- level WGSS course or permission of instructor. Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA

L77 WGSS 347 Gender and Citizenship: Writing-Intensive Seminar
In this writing-intensive course we examine how ideas about gender have shaped the ways Americans understand what it means to be a citizen. We focus on a variety of cases in the past and present to explore the means by which women and men have claimed the rights and responsibilities of citizenship. The types of questions that we ask include: What rights or duties devolve from the status of citizen? Who qualifies for citizenship and what qualifies them? What distinct models of citizenship have been available to Americans? How have individuals used notions of gender identity to make claims to political subjectivity? And finally, how do gendered claims to citizenship intersect or conflict with claims based on race, class, ethnicity or humanity? Prerequisite: previous course work in Women, Gender, and Sexuality Studies or permission of the instructor. Not open to students who have taken WGSS 210. Credit 3 units. A&S : TH, WI BU : BA

L77 WGSS 3506 Women Writers of Early Modern Spain
Same as Span 3506
Credit 3 units. A&S : TH

L77 WGSS 3551 Gender in Korean Film and Literature
Same as Korean 355
Credit 3 units. A&S : TH, CD, SD A&S : IQ, HUM, LCD, SD

L77 WGSS 3560 Black Women Writers
Same as AFAS 3651
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : HUM

L77 WGSS 3561 Women and the Law
We explore the development of women’s legal rights by examining the ways in which social constructions of gender, race, class and sexuality have shaped American legal concepts
within the limited bounds of traditional legal reasoning. We begin by placing our current legal framework, and its gender, race and other societal assumptions, in an historical and Constitutional context. We then examine many of the critical questions raised by feminist theory, feminist legal thought and other critical perspectives. For example, is the legal subject gendered as male, and, if so, how effectively can women use the law to gain greater social equity? What paradoxes have emerged in areas, such as employment discrimination, family law or reproductive rights, as women have sought liberal equality? What is the equality/difference debate about and why is it important for feminists? The course is thematic, but we spend time on key cases that have influenced law and policy, examining how they affect the everyday lives of women.

Credit 3 units.   A&S : SS, SD   A&S : IQ, SSC, SD   BU : BA

L77 WGSS 358 Scribbling Women: 19th-Century American Women Writers
In 1855, Nathaniel Hawthorne wrote to his publisher, William Tichnor, that “America is now wholly given over to a damned mob of scribbling women, and I should have no chance of success while the public taste is occupied with their trash.” In this class, we examine works of those scribbling women of the 19th century. We read one of the best-selling novels of the century, one that created a scandal and ruined the author’s literary reputation, along with others that have garnered more attention in our time than their own. In addition to focusing on these women writers, we also explore questions about the canon of American literature: What makes literature “good”? What constitutes American literature? How does an author get in the canon and stay there? Finally, in this writing-intensive course, there are frequent writing assignments and a strong emphasis on the essential writing process of drafting and revising.

Credit 3 units.   A&S : TH, WI   A&S : IQ, HUM, WI   BU : HUM
FA : Lit

L77 WGSS 359C Women in Modern European History
Same as History 359

Credit 3 units.   A&S : TH, SD   A&S : IQ, HUM, SD   BU : IS, FA : SSP

L77 WGSS 3601 The Traffic in Women and Contemporary European Cinema
Same as Hum 360

Credit 3 units.   A&S : TH, CD, SD   A&S : IQ, HUM, LCD

L77 WGSS 3666 Women and Film
Same as Film 366

Credit 3 units.   A&S : TH, SD   A&S : IQ, HUM, SD   BU : HUM

L77 WGSS 369A Reading Sex in Premodern England
Same as E Lit 369

Credit 3 units.   A&S : TH, SD   A&S : IQ, HUM, SD

L77 WGSS 370 Service-Learning: Sex, Lies and Myths of the Mother
This interdisciplinary service-learning course begins with a fundamental question: What makes a good mother? Students have opportunities to deepen their understanding of motherhood — both as an institution and as a practice — through interviews with mothers, through reflections on their service-learning experiences, and through the course readings. Students learn to identify interconnections between motherhood, the social construction of gender, and systems of oppression in women’s lives. Readings include cross-cultural myths and mythologies; transnational, historical and contemporary personal narratives; feminist analyses; a novel or play; and journal articles from the social sciences. Grades based on attendance, service-learning participation, web-based journal entries, an art project, short papers and a final project for Kids’ Place, our community partner.

Prerequisite: any 100- or 200-level WGSS course.

Credit 4 units.   A&S : TH, WI   A&S : IQ, HUM, SD, WI

L77 WGSS 3701 Women Writers at Court: Japanese Examples in Comparative Context
Same as Hum 370

Credit 3 units.   A&S : TH   A&S : IQ, HUM

L77 WGSS 3725 Topics in Renaissance Literature
Same as E Lit 3725

Credit 3 units.   A&S : TH   A&S : IQ, HUM   BU : HUM

L77 WGSS 373A Issues in Theater and Performance Studies
Same as Drama 373

Credit 3 units.   A&S : LA, WI   A&S : IQ, HUM, WI

L77 WGSS 3751 Topics in Women’s History
Same as History 3751

Credit 3 units.   A&S : TH, SD   A&S : IQ, HUM, SD   FA : SSP

L77 WGSS 3752 Women in American History
Same as History 3752

Credit 3 units.   A&S : TH, SD   A&S : IQ, HUM, SD   BU : BA   FA : SSP

L77 WGSS 3754 African-American Women’s History
An analysis of how African-American women have defined their roles in American life and within the black community: attaining literacy, the push for suffrage, anti-slavery and colonization efforts, class stratification and the Cult of Domesticity, the
Civil War and reconstruction, migration and the impact of urbanization, religious attitudes, political activism and elective office, sexuality and the myth of the Black Matriarch. Prerequisites: at least one course in American history, women's history or African-American history, and permission of the instructor.
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD BU : BA

L77 WGSS 375A Topics in Comparative Literature I
Same as Comp Lit 375
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD FA : Lit

L77 WGSS 3776 Sexuality, Courtship and Marriage in U.S. History
This course surveys the history of practices, identities, legal constructs and social norms relating to sexuality, courtship and marriage. Students particularly focus on locating the history of sexuality in its larger social, economic and cultural contexts. Students also discuss the experience of individuals or social groups who deviated from the socially and legally constructed norms of the day in order to gain insight into how the sexual order has developed as a whole in this country.
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD

L77 WGSS 380 Biomedicalization: Life Under Medical Authority
Medication is a cultural process by which conditions that were not thought to be medical come to be defined and treated as illnesses. Medication investigates the ways in which medical authority is able to legitimate or de-legitimate physical, mental and social states as medical issues. For instance, how does a handicap placard in the contemporary United States distinguish the bearer as having a real physical impairment? As such, medication is both an examination and a critique of biomedicine. This class asks how certain social states come to be medicalized or demedicalized, and question some of the social implications for the individuals impacted by these changes. What are some of the goals of medication? How can medication be seen as helpful for individuals? How can medication be seen as detrimental to individuals? What are some ways individuals find meaning in medicalized identities? How is the body now a social problem necessitating an individual fix? Prerequisite: any 100- or 200-level WGSS course or WGSS 3283 or permission of instructor.
Credit 3 units. A&S : SS A&S : IQ, SSC

L77 WGSS 3820 Writing Women of Imperial China
Same as Chinese 382
Credit 3 units. A&S : TH, WI A&S : IQ, HUM, LCD, WI BU : HUM

L77 WGSS 383 Topics in Women and Gender Studies
Topic varies. See semester Course Listings for current offering.
Credit 3 units.

L77 WGSS 384 Gender and Consumer Culture in U.S. Fiction of the Late 19th and Early 20th Century
The decades between the end of the Civil War and the 1930s saw the rise of a mass consumer culture that would dramatically reshape America. The fiction writers of this period, keen to capture the spirit of the age, helped to create the enduring idea that consumerism and an orientation toward material acquisition are at the heart of gendered concepts of American identity. Their stories documented, and sometimes celebrated, the emergence of recognizable "types" of American womanhood and manhood — such as self-made millionaires, ambitious "working girls," bargain-hunting middle-class housewives, and the commercially minded women and men of the social and intellectual elite. At the same time, their stories articulated anxieties about U.S. consumer culture and its impact on the world. Students in this course read, discuss and write about novels and short stories by writers such as Henry James, Mary Wilkins Freeman, Kate Chopin, Theodore Dreiser, Edith Wharton, Nella Larsen, Langston Hughes and F. Scott Fitzgerald. Students in the course also examine primary materials such as magazine advertisements, and read and respond to relevant scholarship on the period. Writing-Intensive course.
Credit 3 units. A&S : TH, SD, WI A&S : IQ, HUM, SD, WI

L77 WGSS 384A8 Women, Men and Gender in Africa
Same as History 38A8
Credit 3 units. A&S : TH, CD, WI A&S : IQ, HUM, LCD BU : BA

L77 WGSS 391 Social Construction of Female Sexuality
This course examines the relationship between female sexuality and its social, historical and ideological contexts. Course materials provide feminist analyses of the changing social organization and cultural meaning of women's bodies, sexual desires and sexual practices. Prerequisite: WGSS 100B, WGSS 105 or permission from the instructor. Preference to those who have taken WGSS 395. WGSS majors and minors, seniors, juniors.
Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA FA : SSP

L77 WGSS 392 Feminist Research Methods
This course examines feminist epistemologies and research methods. We ask how gender theory and feminist politics shape the kinds of research questions we ask, the types of materials we use, and how we define our relationships with our subjects. We study how feminist scholars have challenged dominant theories of knowledge and the major methodologies employed in their disciplines. Students explore research methods from
the social sciences and humanities (interviews, life histories, participation observation, textual analysis) and engage feminist critiques and evaluation of such methods. The course requires commitment to a research project completed in stages over the course of the semester. Prerequisite: at least one WGSS course at the 100 or 200 level. Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD BU : ETH FA : SSP

L77 WGSS 393 Violence Against Women: Current Issues and Responses
This course explores the issue of violence against women within families, by strangers in the workplace, and within the context of international and domestic political activity. In each area, issues of race, class, culture and sexuality are examined as well as legal, medical and sociological responses. Readings cover current statistical data, research and theory as well as information on the history of the battered women’s movement, the rape crisis center movement, violent repression of women’s political expressions internationally, and the effect of violence on immigrant and indigenous women in the United States and abroad. Not open to students who have taken U92 (UCollege) WGSS 363. Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD BU : BA FA : SSP

L77 WGSS 394 Communities of Women: Service-Learning Seminar
This course explores the sometimes vexed relationship between the theory and the practice of women’s studies. Students in the course, who must also enroll in the service companion course (WGSS 3941), participate in service work while taking the course. In class, we discuss and write about the history of women and voluntarism, the ethical challenges of service work, the ongoing affinity between community service and female citizenship, as well as how students’ particular experiences challenge or confirm theoretical discussions in women’s studies. Because this is a writing-intensive course, students are expected to submit and revise three medium-sized papers as well as to write other, unrevised writing assignments including directed journals and a writing assignment determined by each agency partner. The three essay assignments are each part of a larger paper submitted (with further revision) at the end of the course. Enrollment limited to Women, Gender and Sexuality Studies students with junior or senior standing or with permission of the instructor. Credit 3 units. A&S : SS, WI

L77 WGSS 3941 Communities of Women: Service-Learning Seminar Internship Component
This course is the service companion course for WGSS 394 Communities of Women: Service-Learning Seminar. Students must be enrolled in WGSS 394. For the internship component, students choose from a number of pre-approved service projects at local agencies whose mission it is to serve women from St. Louis. This course has variable credits. For 2 units of credit, students are expected to work at their partner agency for six to eight hours per week; for 3 units of credit, students are expected to work between eight and 10 hours per week. Students cannot receive credit for any paid work. Credit to be determined in each case. Credit units. A&S : SS

L77 WGSS 3942 Service Learning: Projects in Domestic Violence
In this course, we explore the links between the theories and practices of Women, Gender and Sexuality Studies through a combination of research and direct community engagement. Course readings focus on the ways that poverty and violence, along with race and gender expectations, shape the lives of women. A required community service project for this course asks students to examine the relationship between the course readings and the lives of actual women in St. Louis. Over the course of the semester, students design and execute programming for women at a local community agency. This is a writing-intensive course. Students must contact instructor for permission to enroll. CBTL course. Credit 4 units. A&S : SS, SD, WI A&S : IQ, SSC, SD, WI

L77 WGSS 3943 Violence Against Women Court Project
The seminar explores the links between the theories and practices of Women, Gender and Sexuality Studies through a combination of readings, discussion and direct community engagement. Readings focus on the legal system and the ways domestic violence is confronted and how criminal justice interventions have responded to new theories and research about the nature of intimate partner violence. Particular attention is directed to the ways that issues of race, poverty, parenthood and sexual orientation influence the criminal justice response and shape the lives of abused women. Students participate in a court advocacy program to investigate the important discrepancies between theory and practice in the field. Prerequisites: students are required to take WGSS 393 or have taken WGSS 393 to enroll in the seminar. Credit 1 unit. A&S : SS A&S : IQ, SSC

L77 WGSS 395 Contemporary Female Sexualities
The course explores representations of and theories about contemporary women’s sexual fantasies, attitudes, behaviors, relationships and communities. Topics include sexual desire and gender; sexuality and the female life cycle; sexual behavior and gender; sexual variations linked with particular socioeconomic, ethnic, psychological and physical variables; models of female sexual response; committed and uncommitted relationships; sex and marriage; fertility and its control; and teaching children about sex. We read both literary and theoretical texts with an eye to...
understanding what roles various sexualities play in personal lives, in relationships and in communities. Prerequisites: WGSS 100B Introduction to Women and Gender Studies or WBSS 105 Introduction to Sexuality Studies, or permission from the instructor. Preference to those who have taken WGSS 391 The Social Construction of Female Sexuality, WGSS majors, WGSS minors, seniors, juniors.

Credit 3 units.  A&S : TH    A&S : IQ, HUM    BU : BA

L77 WGSS 396 Women and Social Class
This course examines the intersection of class and gender from the late 19th century to the present. It begins by asking how a focus on women challenges conventional notions of class. Some of the topics covered include women, race and class; class and family formation; women, class and globalization; class and feminist politics; women and work; class and domestic labor; women and unionization; and class and sexual identity. The emphasis is on women and class in the United States, but includes analysis of women and class in a broader, global context. This course examines these topics using nonfiction and fiction texts. Prerequisite: one 100- or 200-level WGSS course or permission of instructor.

Credit 3 units.  A&S : TH, SD    A&S : IQ, HUM, SD    BU : BA

L77 WGSS 399 Undergraduate Work in Women’s Studies
Credit -3 unit.

L77 WGSS 3991 Undergraduate Teaching Assistant
In this course, an advanced undergraduate can assist a faculty member in the teaching of an introductory level WGSS course. Credit -3 unit.

L77 WGSS 39SC Imperialism and Sexuality: India, South Asia and the World: Writing-Intensive Seminar
Same as History 39SC
Credit 3 units.  A&S : TH, CD, SD    A&S : IQ, HUM, LCD

L77 WGSS 4011 IPH Thesis Prospectus Workshop
Same as Hum 401
Credit -3 unit.  A&S : TH    A&S : IQ, HUM

L77 WGSS 402 Transnational Reproductive Health Issues: Meanings, Technologies, Practices
This course covers recent scholarship on gender and reproductive health, including such issues as reproduction and the disciplinary power of the state, contested reproductive relations within families and communities, and the implications of global flows of biotechnology, population, and information for reproductive strategies at the local level. We will also explore how transnational migration and globalization have shaped reproductive health, the diverse meanings associated with reproductive processes, and decisions concerning reproduction. Reproduction will serve as a focus to illuminate the cultural politics of gender, power, and sexuality.

Same as Anthro 4022

Credit 3 units.  A&S : SS, CD, SD    A&S : IQ, SSC, LCD, SD    BU : BA

L77 WGSS 403 Race, Sex and Sexuality: Concepts of Identity
This course examines changes in the meanings of three concepts of identity — race, sex and sexuality — from the early modern period to the present. The course begins by looking at early modern constructions of these concepts in Western Europe. We then focus on changes occurring during the course of the 18th and 19th centuries in Europe and the United States and at how such changes were similar and different among these three concepts. We then examine 20th-century challenges to 19th-century constructions. The course concludes by studying the relationship between these challenges and 20th-century identity political movements organized around these concepts. Prerequisite: completion of at least one WGSS course or permission of the instructor.

Credit 3 units.  A&S : SS, SD    A&S : IQ, SSC, SD    BU : BA    FA : SSP

L77 WGSS 4031 Topics in Gender and Judaism: Gender and Sexuality in Judaism
Same as JNE 403

Credit 3 units.  A&S : TH, SD    FA : SSP

L77 WGSS 404 Regulating Sex: Historical and Cultural Encounters
This seminar examines various ways in which the law regulates sex, emphasizing the place of sexual pleasure in conventional legal analysis and through feminist frameworks. The class considers the history of the regulation of sex in this country, with emphasis on key historical moments, such as the European/Native American encounter; the “sexual economy” of slavery; suffragists’ 19th-century writings on sexuality; the post-WW II emergence of lesbianism; policies of the 1950s on illegitimacy, adoption and divorce; the “sexual revolution” of the 1960s and 1970s; the AIDS crisis and recognition of marital rape of the 1970s and 1980s; as well as moments when pornography, prostitution, abstinence-only education and changing understandings of marriage have each enjoyed attention. This historical approach emphasizes sites where sex-positive feminist theory and traditional legal rules converge or clash.

Credit 3 units.  A&S : TH, SD, WI    A&S : IQ, HUM, SD, WI

L77 WGSS 406 Queering Theory: A Multidisciplinary Approach
This class aims to use theory to destabilize the concepts of race, sexuality, gender, disability and academic methodology. This class submerges you in some of the most influential texts in queer theory. The selected readings range across many disciplines, including biology, philosophy, anthropology, sociology, history and cultural studies. The core premise of this class is that to queer something is to destabilize it. Therefore, not all of the readings specifically are about gay, lesbian, bisexual or transgender people. However, these readings help any scholar in their future work in queer theory. Prerequisites: any 300-level WGSS class or equivalent or permission from instructor.
Credit 3 units. A&S : SS  A&S : IQ, SSC

L77 WGSS 408A Nuns
Same as Re St 408
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD

L77 WGSS 409 Gender, Sexuality and Change in Africa
Same as AFAS 409
Credit 3 units.  A&S : SS, SD, WI  A&S : IQ, SSC, SD, WI  FA : SSP

L77 WGSS 4101 Medieval English Literature II
Same as E Lit 4101
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L77 WGSS 4106 Studies in Gender
Same as German 4106
Credit 3 units.  A&S : TH, SD, WI  A&S : IQ, HUM, LCD, SD, WI

L77 WGSS 411 Topics in Christianity: Women and Religion in Medieval Europe
Same as Re St 411
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L77 WGSS 4112 Body and Flesh: Theorizing Embodiment
Same as Anthro 4112
Credit 3 units.  A&S : SS  A&S : IQ, SSC

L77 WGSS 4134 The AIDS Epidemic: Inequalities, Ethnography and Ethics
Same as Anthro 4134
Credit 3 units.  A&S : SS, SD  A&S : IQ, SSC, SD

L77 WGSS 414 Gender, Religion, Medicine and Science
Until recently the histories of science, medicine and religion were written by men and for men. These fields did not critically analyze gender or sexuality. Neither masculinity nor femininity were topics of interest in the studies of great scientists or famous theologians. Sexuality in scientific writing and religious thought rarely received more than a sentence or two in the writings of historians. What changed? Feminist/Queer theory made us rethink the way we learn about the history of medicine, science and religion. Despite these great strides, we are only beginning to explore the interplay between these fields from a feminist/queer perspective. In other words, while feminist/queer scholars have deepened our understandings of both science and religion, they have only recently begun to examine the relationship between these two fields. This course explores how feminist research has broadened our understanding of the interplay between the authority of religion, science and medicine in historical and contemporary studies. Some of the topics we explore include: conception and gestation, birth control, birthing, sexuality and aging. Prerequisites: WGSS 100B Introduction to Women and Gender Studies and at least one 300-level WGSS course that addresses feminist and/or queer theory such as: WGSS 308 Masculinities, WGSS 3041 Making Sex and Gender, WGSS 360 Transgender Studies.
Credit 3 units.  A&S : TH, SD  A&S : IQ, HUM, SD

L77 WGSS 418C Gender and Sexuality in East Asian Religions
Same as Re St 418
Credit 3 units.  A&S : TH, CD, SD  A&S : IQ, HUM, LCD

L77 WGSS 419 Feminist Literary and Cultural Theory
This course is intended to acquaint students with basic ideas and issues raised by a diversity of voices in contemporary feminist and cultural theory. Readings cover a wide range of approaches and tendencies within feminism, among them: French feminism, Foucauldian analyses of gender and sexuality, lesbian and queer theories, Third World/postcolonial feminism, and feminism by women of color. Given that feminist theories developed in response to and in dialogue with wider sociopolitical, cultural and philosophical currents, the course explores feminist literary and cultural theory in an interdisciplinary context. Note: this course is in the core curriculum for the Women, Gender, and Sexuality Studies graduate certificate. Prerequisite: advanced course work in WGSS or in literary theory (300 level and above), or permission of the instructor required.
Credit 3 units.  A&S : TH  A&S : IQ, HUM

L77 WGSS 420 Contemporary Feminisms
The purpose of this course is to provide a framework, a map, within which students can locate feminist ideas. The course, which may be presented historically, explores and compares different types of feminism selected from, for example, the following feminisms: liberal, Marxist, socialist, radical, lesbian, black, existentialist, postmodern. The class considers how such feminisms analyze the nature and sources of women’s oppressions, the worlds they envision, and the means they use...
L77 WGSS 4201 The Novel in the Feminine (Le Roman au feminin)
Same as French 4201
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD FA : Lit

L77 WGSS 4221 Topics in Women and French Literature
Same as French 4221
Credit 3 units. A&S : TH A&S : IQ, HUM FA : Lit

L77 WGSS 4231 Topics in American Literature
Same as E Lit 4231
Credit 3 units. A&S : TH A&S : IQ, HUM, LCD, SD FA : Lit

L77 WGSS 430A Divergent Voices: Italian Women Writers
Same as Ital 430
Credit 3 units. A&S : TH, SD A&S : IQ, HUM EN : H

L77 WGSS 432 Women Writers of the 20th Century
Same as Ital 432
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, LCD, SD FA : Lit

L77 WGSS 4333 Women of Letters
Same as French 4331
Credit 3 units. A&S : TH FA : Lit

L77 WGSS 4362 Local Genders, Global Transformations
Same as Anthro 4362
Credit 3 units. A&S : SS FA : SSP

L77 WGSS 4363 Sex, Gender and Power
Same as Anthro 4363
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD

L77 WGSS 437 Global Feminisms
This course examines the global dimensions of feminist organizing and policy-making, drawing on both historical and contemporary examples. It applies insights from research on social movements, state-society relations and multilevel governance to explore the formation, activities and strategies of international and transnational women's networks on issues ranging from suffrage and equal rights to domestic violence and gender quotas. It considers interactions with local and national women’s movements, as well as states and international organizations, and weighs the opportunities and constraints involved in mobilizing beyond the nation-state in struggles against inequality in global and national arenas.
Credit 3 units. A&S : SS, SD A&S : IQ, SSC, SD

L77 WGSS 440 Women in the History of Higher Education and Professions
Same as Educ 440
Credit 3 units. A&S : TH, SD FA : SSP

L77 WGSS 4454 Irish Women Writers: 1800 to Present
Same as E Lit 4454
Credit 3 units. A&S : TH, CD, WI A&S : IQ, HUM, LCD, WI FA : Lit

L77 WGSS 4472 Spanish-American Women Writers II
Same as Span 4472
Credit 3 units. A&S : TH, SD FA : Lit

L77 WGSS 4479 Senior Seminar in Religious Studies: Contemporary Approaches to the Study of Women and Religion
Same as Re St 479
Credit 3 units. A&S : TH, SD A&S : IQ, HUM, SD

L77 WGSS 4494 Modern Japanese Women Writers: Madame Butterfly’s Delinquent Daughters
Same as Japan 449
Credit 3 units. A&S : TH, CD, SD, WI A&S : IQ, HUM, LCD, SD, WI BU : HUM

L77 WGSS 4495 Topics
Same as Comp Lit 449
Credit 3 units. A&S : TH A&S : IQ, HUM

L77 WGSS 4502 Women and the Medieval French Literary Theory
Same as French 450
Credit 3 units. A&S : TH
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>L77 WGSS 457</td>
<td>Gender and Modernity in Latin America</td>
<td>Same as IAS 457. Credit 3 units. A&amp;S : TH A&amp;S : IQ, HUM</td>
</tr>
<tr>
<td>L77 WGSS 458</td>
<td>Gender, Politics and Writing in Women’s Fiction of the Post-Franco Era</td>
<td>Same as Span 458. Credit 3 units. A&amp;S : TH</td>
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<tr>
<td>L77 WGSS 461A</td>
<td>Topics in English Literature I</td>
<td>Same as E Lit 461. Credit 3 units. A&amp;S : TH A&amp;S : IQ, HUM FA : Lit</td>
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<tr>
<td>L77 WGSS 467</td>
<td>Beyond the Harem: Women, Gender and Revolution in the Modern Middle East</td>
<td>Same as History 4675. Credit 3 units. A&amp;S : TH, CD, SD A&amp;S : IQ, HUM, LCD BA</td>
</tr>
<tr>
<td>L77 WGSS 471</td>
<td>Gender and Religion in China</td>
<td>Same as Re St 4711. Credit 3 units. A&amp;S : TH A&amp;S : IQ, HUM FA : SSP</td>
</tr>
<tr>
<td>L77 WGSS 475</td>
<td>Intellectual History of Feminisms</td>
<td>We focus on feminist thought in Western culture but also examine non-Western ideas about feminisms. We trace the relationship among emergent feminist ideas and such developments as the rise of scientific methodology; Enlightenment thought; revolutionary movements and the gendering of the political subject; colonialism; romanticism; socialism; and global feminisms. Readings are drawn from both primary sources and recent feminist scholarship on the texts under consideration. Note: this course is in the core curriculum for the Women, Gender, and Sexuality Studies graduate certificate. Permission of instructor required. Prerequisite: completion of at least one WGSS course or permission of the instructor. Credit 3 units. A&amp;S : TH A&amp;S : IQ, HUM FA : Lit</td>
</tr>
<tr>
<td>L77 WGSS 4711</td>
<td>Gender and Religion in China</td>
<td>Same as Re St 4711. Credit 3 units. A&amp;S : TH A&amp;S : IQ, HUM FA : SSP</td>
</tr>
<tr>
<td>L77 WGSS 481</td>
<td>Selected English Writers I</td>
<td>Same as E Lit 481. Credit 3 units. A&amp;S : TH A&amp;S : IQ, HUM FA : Lit</td>
</tr>
<tr>
<td>L77 WGSS 482</td>
<td>Reading Seminar in Gender and Chinese Literature: Women in the Chinese Literary Tradition</td>
<td>Same as Chinese 482. Credit 3 units. A&amp;S : TH A&amp;S : IQ, HUM, LCD FA : Lit</td>
</tr>
<tr>
<td>L77 WGSS 483</td>
<td>Gender and Genre</td>
<td>Same as French 483. Credit 3 units. A&amp;S : TH, SD A&amp;S : IQ, HUM, LCD, SD FA : Lit</td>
</tr>
<tr>
<td>L77 WGSS 487</td>
<td>Discourses on Gender in 19th- and 20th-Century Spain</td>
<td>Same as Span 487. Credit 3 units. A&amp;S : TH, SD A&amp;S : IQ, HUM, LCD, SD</td>
</tr>
<tr>
<td>L77 WGSS 494</td>
<td>Advanced Seminar in History</td>
<td>Same as History 494. Credit 4 units. A&amp;S : TH FA : SSP</td>
</tr>
<tr>
<td>L77 WGSS 497</td>
<td>Advanced Seminar in History: Gender and Property Law</td>
<td>Same as History 4974. Credit 4 units. A&amp;S : TH FA : SSP</td>
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<tr>
<td>L77 WGSS 498</td>
<td>Advanced Seminar: Women and Confucian Culture in Early Modern East Asia</td>
<td>Same as History 4982. Credit 4 units. A&amp;S : TH</td>
</tr>
<tr>
<td>L77 WGSS 499</td>
<td>Honors Thesis: Research and Writing</td>
<td>Enrollment in this course is limited to students accepted into the Honor’s Program. Petition for permission to enroll is available in the Women, Gender and Sexuality Studies Office, 210 McMillan Hall. Credit 3 units. A&amp;S : TH</td>
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<tr>
<td>L77 WGSS 4990</td>
<td>Advanced Seminar: History of the Body</td>
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Writing

Although the English Department does not offer a Writing Major, it provides a full range of courses in the writing of poetry, fiction, drama and various forms of nonfiction, as well as advanced courses in expository writing. A student with a special interest in writing may count toward the major up to 9 upper-division units from a selection of these courses (designated E Comp). Students who wish to take a Writing Minor in addition to an English Major are advised to take English and American literature courses (designated E Lit) exclusively for the major, and English Composition courses (designated E Comp) exclusively for the minor. Except where noted, students are expected to receive a grade of C or better in each course.

Departmental website: http://artsci.wustl.edu/~english/

For a list of affiliated faculty, please see the Department of English faculty (p. 339) page.

The English Department does not offer a Writing Major. A student with a special interest in writing may count toward the major in English literature up to 9 upper-division units from a selection of these courses (designated E Comp). Students interested in majoring in English Literature should see the English (p. 340) page.

The Minor in Writing

Units required: 15

The Writing Minor consists of 15 units comprised of any five courses in English Composition (designated as E Comp), one of which must be E Comp 311 Exposition or E Comp 312 Argumentation, but no more than two courses (6 units) at the 200-level. With department approval, up to 6 units of Journalism courses in writing or editing offered in University College or an off-campus internship (E Comp 298 Journalism: Communications Internship) oriented to writing may be counted toward the minor.

Additional Information

Students who wish to take a Writing Minor in addition to an English Major are advised to take English and American literature courses (designated E Lit) exclusively for the major, and English Composition courses (designated E Comp) exclusively for the minor.

Transfer Units: Students must provide transcript of previous work to receive approval from the Director of Undergraduate Studies.

Study Abroad: Four affiliate programs in England are open for well-prepared students: University College, London (UCL), University of Sussex, Oxford Program for Undergraduate Studies (OPUS), and Keble College at Oxford. Students interested in study abroad must apply and participate before senior year.

L13 E Comp 211 Writing 2
This course invites students to pursue a writing project that centers on their own intellectual interests and that complicates their approaches to researched, creative and analytical work. See section description for details about specific class emphases. Limit: 12 students. Prerequisite: E Comp 100 Writing 1.
Credit 3 units. A&S : LA A&S : IQ, HUM

L13 E Comp 212 Principles of Rhetoric
The study of rhetoric, one of the original seven Liberal Arts, is perhaps more relevant today, in a world where diverse opinions reverberate 24/7 from television and the Internet, than in ancient times when rhetors invented arguments to help people choose the best course of action when they disagreed about important political, religious or social issues. How do we make our voices heard? How can we invent and present compelling written discourse. This course introduces students to common rhetorical principles and to the disciplinary history of rhetoric and compositional studies. Assignments in this class include rhetorical exercise in invention and craft, imitations, and varied compositions, ranging from the personal to critical, from the biographical to argumentative. We examine rhetorical principles (audience, context, kairos, exigency, ethos, pathos, logos and so forth) that are employed, for example, not only in literary analysis but in law, politics, education and science. We aim for a mastery of craft and a refinement of thought.
Credit 3 units. A&S : LA A&S : IQ, HUM

L13 E Comp 213 The Long Essay
This course is designed for skilled writers who want to bring more complexity and depth to their style and content. Emphasis is on the innovation that can occur when we give sustained interest to our subjects in a long work. The class is particularly
well-suited to students who wish to produce extended works of creative nonfiction, honors theses or artist statements. Prerequisite: E Comp Writing 1. Credit 3 units. A&S : LA A&S : IQ, HUM BU : HUM

L13 E Comp 220 Creative Nonfiction Writing 1
A course designed to introduce students to the fundamental craft elements involved in writing creative nonfiction. While the course covers the major forms within the genre of creative nonfiction, including literary journalism, biography, profiles, nature writing and travel writing, special emphasis is given to personal essay and memoir. Prerequisite: E Comp 100 Writing 1. Credit 3 units. A&S : LA A&S : IQ, HUM BU : HUM

L13 E Comp 221 Fiction Writing 1
A course designed to introduce students to the fundamental craft elements involved in writing fiction. Prerequisite: E Comp 100 Writing 1. Credit 3 units. A&S : LA A&S : IQ, HUM BU : HUM

L13 E Comp 222 Poetry Writing 1
A course designed to introduce students to the fundamental craft elements involved in writing poetry. Prerequisite: E Comp 100 Writing 1. Credit 3 units. A&S : LA A&S : IQ, HUM BU : HUM

L13 E Comp 224 Playwriting
An introductory course in playwriting. Limited to eight students. Prerequisites: E Comp 100 Writing 1 and permission of the instructor. Credit 3 units. A&S : LA A&S : IQ, HUM BU : HUM

L13 E Comp 298 Journalism: Communications Internship
For students undertaking projects in newspaper or magazine journalism, in radio or television, or in business, government, foundations and the arts. The student must secure permission of the chair of the Undergraduate Committee, file a description of his or her project with the department and, at the end of the semester, submit a significant portfolio of writing together with an evaluation by the internship supervisor. Up to 3 units acceptable toward the Writing Minor, but cannot be counted toward the English Major or Literature Minor. Prerequisite: E Comp 100 Writing 1. Must be taken Credit/no credit. Credit 3 units.

L13 E Comp 309 Writing the Natural World
For students interested in the environment and natural sciences. This course brings together essays from a wide range of communities including biology, physics, medicine, environmental studies, creative writing and more. Readings and assignments are intended to enhance students’ understanding of the relationship between writing and their experience/knowledge of the natural world. Major assignments allow students to follow, explore and write about their own unique interest in a related subject, and include a personal essay, an expository essay and a researched argumentative essay, as well as peer review workshops, oral presentations and revision. Students record and explore their own experiences of nature in short creative assignments that prepare them for the major papers. Prerequisites: E Comp 100 Writing 1 and junior standing. Credit 3 units. A&S : LA, WI A&S : IQ, HUM, WI

L13 E Comp 310 Guided Research in Composition: Theory and Pedagogy of One-to-One Writing Instruction
This course teaches theoretical and practical approaches to the tutoring of writing, specifically focusing on tutoring writing within the context of undergraduate courses. Students learn collaborative methods of tutoring writing, explore different approaches to writing comments on student work in various content areas, and examine the connections between writing and thinking. Students in this course analyze their own writing processes and learn how to help others through the writing and revision process. Readings and discussions focus on writing theory and pedagogy, and students practice one-to-one methods in mock conferences and with sample essays. Assignments: two short essays, a longer research paper and presentation, and a journal. Credit 3 units.

L13 E Comp 311 Exposition
This advanced writing course considers style in relationship to audience and purpose, asking the writer to engage more consciously with writing conventions, and to explore strategies appropriate to various writing situations. Prerequisites: E Comp 100 Writing 1 and junior standing. A note for students and advisers: when registering, refer to WEBstac for updated information on section times and available seats. Credit 3 units. A&S : LA A&S : IQ, HUM

L13 E Comp 3111 Exposition (Visual)
This advanced writing course emphasizes writing and visual analysis, asking students to examine important forms of visual media to develop a sophisticated sense of the strategies, techniques and the rhetoric of visual representation. Prerequisites: E Comp 100 Writing 1 and junior standing. A note for students and advisers: when registering, refer to WEBstac for updated information on section times and available seats. Credit 3 units. A&S : LA, WI A&S : IQ, HUM, WI

L13 E Comp 3112 Exposition: Writing and Medicine
For students who have a particular interest in health, illness and medical care. Exposition is a course that considers style in relationship to audience and purpose, asking the writer to engage more consciously with writing conventions and to explore strategies appropriate to various writing situations, from the more experimental and performative to the more formal and scholarly. The course involves frequent practice in analyzing and critiquing,
with special attention to techniques of organization, argument and emphasis. Students in this special section of Exposition read essays, journalism and personal narratives about the experience of physicians and patients in the modern health care system. Students use expository writing to think critically and personally about their own experiences with illness and disease. Premedical students might use this opportunity to write and think about the anticipated rewards and challenges of the profession they hope to join.

Credit 3 units. A&S : LA, WI A&S : IQ, HUM, WI

L13 E Comp 312 Argumentation
This advanced writing course examines the strategies of argumentation, exploring such elements of argument as the enthymeme, the three appeals, claim types and fallacies. Prerequisites: E Comp 1 Writing 1 and junior standing. A note for students and advisers: when registering refer to WEBstac for updated information on section times and available seats.

Credit 3 units. A&S : LA, WI A&S : IQ, HUM, WI

L13 E Comp 314 Topics in Composition
An advanced writing course focusing on selected topics related to writing. Topics chosen by department/instructor. See section description for details about specific class emphases. (Note: in some cases, this course may be cross-listed with other programs/departments and may satisfy the writing-intensive requirement.) Prerequisites: E Comp 100 Writing 1 and junior standing.

Credit 3 units. A&S : LA, WI A&S : IQ, HUM, WI

L13 E Comp 320 Creative Nonfiction Writing 2
This course is aimed at undergraduates who have taken Nonfiction Writing 1 and wish to pursue both their development as writers and the study of craft in the context of a more rigorous workshop. Prerequisite: E Comp 100 Writing 1, E Comp 220 Creative Nonfiction Writing 1.

Credit 3 units. A&S : LA A&S : IQ, HUM

L13 E Comp 321 Fiction Writing 2
This course is aimed at undergraduates who have taken Fiction Writing 1 and wish to pursue both their development as writers and the study of craft in the context of a more rigorous workshop. Prerequisites: E Comp 100 Writing 1, E Comp 222 Fiction Writing 1.

Credit 3 units. A&S : LA A&S : IQ, HUM BU : HUM

L13 E Comp 321W Mellon Undergraduate Fellows Seminar
Credit 3 units. A&S : LA, WI A&S : IQ, HUM, WI

L13 E Comp 322 Poetry Writing 2
This course is aimed at undergraduates who have taken Poetry Writing 1 and wish to pursue both their development as poets and the study of craft in the context of a more rigorous workshop. Prerequisites: E Comp 100 Writing 1, E Comp 222 Poetry Writing 1.

Credit 3 units. A&S : LA A&S : IQ, HUM BU : HUM

L13 E Comp 322W Kling Undergraduate Honors Fellowship Seminar
Credit 3 units. A&S : LA, WI A&S : IQ, HUM, WI

L13 E Comp 323 Fiction Writing: The Short-Short, Sudden Fiction and Microfiction
This course is aimed at undergraduates who have taken Fiction Writing 1 or Poetry Writing 1 and wish to further explore the craft of fiction through the medium of the short-short story. The course focuses on reading, writing and thinking critically about shorts.

Credit 3 units. A&S : LA A&S : IQ, HUM BU : HUM

L13 E Comp 324 Fiction Writing: Coming of Age in the Short Story
A fiction writing course that explores coming of age themes.

Credit 3 units. A&S : LA A&S : IQ, HUM BU : HUM

L13 E Comp 325 Poetry Writing: The Poetry of Travel
This course is offered for students who have taken Poetry 1 and are interested in further developing their craft.

Credit 3 units. A&S : LA A&S : IQ, HUM

L13 E Comp 326 Fiction Writing: Stories in the Suburbs
In the 1950s, the suburbs were still somewhat of a novelty in American culture — most people still lived in cities and small towns, or on the farm. Back then, Levitowns and the like were embraced with either gee-whiz optimism, or seen as sinister dystopias where youth, ideals and romance went to fester and die. But now that the American mainstream is stucco McMansions, strip malls and big box stores; now that the suburbs have become more ethnically diverse; now that literature is being generated from these places instead of just about them, how have stories set in the ‘burbs changed? We read short stories written from the ‘50s until the present day exploring this particular setting, and, through a series of exercises, workshops and our own short fiction, we explore the milieu as writers (whether we happen to be from the suburbs or not), always on the lookout for the unexpected in these familiar places.

Credit 3 units. A&S : LA A&S : IQ, HUM

L13 E Comp 327 Creative Nonfiction: Personal Essay and Memoir
This is an intermediate course in writing creative nonfiction, with a concentration on personal essay and memoir.
L13 E Comp 330 Fiction Writing: Fiction and Obsession
Desire is at the heart of fiction, from the forces that drive the decisions characters make to the ways stories work on us as readers.
Credit 3 units. A&S : LA A&S : IQ, HUM

L13 E Comp 331 Fiction Writing: Historical Fiction
A literature/creative writing hybrid course, students read a number of contemporary historical fictions and then write one of their own. We consider the ways in which these fictions inhabit, depart from and reflect upon the historiography and history they’re built from — upon the indeterminacy of the historical record, and the limits of its reach — but we also discuss fiction’s responsibility to historical “facts” and documents, and the relevance of fictions among nonfictions in approaching an event or figure. Prerequisites: Writing 1, Fiction 1.
Credit 3 units. A&S : LA A&S : IQ, HUM

L13 E Comp 352 Introduction to Screenwriting
Same as Film 352
Credit 3 units. A&S : LA A&S : IQ, HUM BU : HUM

L13 E Comp 401 Writing for Children and Young Adults
In this course we examine various genres of writing for young people: poetry, fiction and nonfiction.
Credit 3 units. A&S : LA

L13 E Comp 403 Dramaturgy Workshop
Same as Drama 403
Credit 3 units. A&S : LA A&S : IQ, HUM

L13 E Comp 4131 Topics in Composition
Composition topics course. Offerings vary from semester to semester.
Credit 3 units. A&S : TH A&S : IQ, HUM

L13 E Comp 421 Advanced Fiction Writing
For qualified students who wish to continue their creative writing and reading through immersion in an intensive fiction workshop. Students wishing to enroll must not only register but also submit a 15-page (double-spaced) fiction sample. The sample must include a cover page with: your name, the semester you took Fiction Writing 2, and the name of the Fiction Writing 2 instructor. Submit samples to the English Department mailbox of the E Comp 421 instructor no later than April 20. No one is officially enrolled in this class until contacted by the instructor. Prerequisites: E Comp 100 Writing 1, E Comp 221 Fiction Writing 1, E Comp 321 Fiction Writing 2.
Credit 3 units. A&S : LA A&S : IQ, HUM

L13 E Comp 422 Advanced Poetry Writing
For qualified students who wish to continue their creative writing and reading through immersion in an intensive poetry workshop. Students wishing to enroll must not only register but also submit eight poems. The sample must include a cover page with: your name, the semester you took Poetry Writing 2, and the name of the Poetry Writing 2 instructor. Submit samples to the English Department mailbox of the E Comp 421 instructor no later than April 20. No one is officially enrolled in this class until contacted by the instructor. Prerequisites: E Comp 100 Writing 1, E Comp 222 Poetry Writing 1, E Comp 322 Poetry Writing 2.
Credit 3 units. A&S : LA A&S : IQ, HUM

L13 E Comp 423 Proseminar in Writing: Nonfiction Prose
For students qualified to pursue their own projects in nonfiction prose; criticism by other members of the class and by the instructor. Limit: 12 students. Prerequisite: permission of instructor upon submission of writing samples.
Credit 3 units. A&S : LA

L13 E Comp 424 Poetry Tutorial
These credits are available to students who have completed Poetry I and Poetry II. This is an opportunity for students who have already completed Advanced Poetry, or who are not able to take Advanced Poetry because of scheduling conflicts, to meet individually with the instructor to develop a portfolio of poems. During weekly meetings students explore various writing processes and revision techniques. There are directed readings and discussions of selected topics related to contemporary poetry and poetics. Credits may be taken concurrently with Advanced Poetry. Permission of the instructor is required.
Credit 3 units. A&S : LA A&S : IQ, HUM

L13 E Comp 431 Craft of Fiction
A literature/creative writing hybrid course; students read a number of contemporary historical fictions — an increasingly important and innovative genre — and then write one of their own. CBTL course.
Credit 3 units. A&S : LA A&S : IQ, HUM

L13 E Comp 432 The Craft of Poetry
An investigation into the art and craft of poetry, in order to consider the choices a poet makes in the process of composing and revising. The students are asked to complete many poetry writing exercises, as well as the writing of critical papers, in their investigation of poetic forms and modes from many historical periods. (This course is highly recommended for those who have completed or are taking the 300-level creative writing courses and to students in The Writing Program.).
Credit 3 units. A&S : LA A&S : IQ, HUM
L13 E Comp 4521 Advanced Screenwriting  
Same as Film 452  
Credit 3 units  A&S: LA    A&S: IQ , HUM    FA: Lit

L13 E Comp 4731 Advanced Playwriting  
Same as Drama 473  
Credit 3 units  A&S: LA    A&S: IQ, HUM

Writing Center Courses

L59 WRIT 100. Writing 1  
This course teaches writing as a way of thinking and learning. Throughout the semester, students explore writing as a creative and intellectual process. They learn how to brainstorm, explore and structure ideas on a page; share their writing and learn how to give and take constructive criticism; and learn how to revise their work, both for issues related to the paper’s larger idea and for issues related to grammar and style. By regularly working their way through the writing process, students develop the habits and skills that make advanced study possible: paying close attention to the words and ideas of others; forming and responding to arguments of others; and refining a lucid style of prose that meets the expectations of the audience and occasion. This course is taught in small sections of 12 students or fewer. See online course listings for current class times.  
Credit 3 units. FA: Comp

L59 WRIT 1001. Fundamentals of Academic Writing  
This course may be required of some students before they take WRIT 100 Writing 1 (placement to be determined by the department). In WRIT 1001, students explore the writing process while working on fundamentals of written communication, including grammar and structure. Particular attention is paid to reading comprehension, critical thinking and organization of ideas. The course does not by itself satisfy the University Writing Requirement, and must be taken for a letter grade. (Note: some students also may be required to enroll in a 1-credit tutorial along with this course.)  
Credit 3 units. A&S: HUM

L59 WRIT 201. Writing Workshop  
This workshop focuses on engaging research, with all of the multiple meanings implied in the phrase’s wordplay: engaging as interesting and interested; as active, responsive to and engaged with others. Just what we mean by engaging — and by research, for that matter — is our topic of conversation all semester, and you should come prepared to contribute your views on that topic and to complicate your current understanding. Where possible, we focus on practical, applied work with sources, which should provide a good foundation for advanced research and writing in your discipline, and we give some thought to the different methods by which different audiences and scholarly disciplines select, analyze, evaluate, incorporate and document the works of others. Along the way, we attend to the relationship between different kinds of research projects and the types of sources that suit them, and we practice techniques for drawing on the ideas and writings of others in responsible and engaged ways. Finally, we grapple with the subtleties and complexities of academic integrity, attempting to understand not only the principles that govern responsible research but also the assumptions that underlie them. Ultimately, this course should enhance your ability to produce scholarly writing that not only draws on the voices and views of others responsibly, but that also speaks with its own distinct, engaging voice, that builds its own original arguments. May be taken for 1 hour of credit or 3; must be taken for a grade. Prerequisite: Writing 1 or its equivalent (as determined by the department). NOTE: check online course listings to find out which sections are 1-credit and which are 3-credit.  
Credit 1-3 units. A&S: HUM
Business

About the Olin Business School

Any top business school should give students an exceptional grounding in the basics — accounting, finance, economics, marketing and operations. At Olin Business School, mastering those functional skills is not the end, but the beginning. Here, it’s not only about what you know, but, more importantly, how you think.

Our faculty is widely regarded as among the very best in the nation in terms of scholarly research productivity. In the classroom, you’ll learn rigorous critical thinking skills — the same kind of analytical, open-minded inquiry that powers top-tier research.

Business-involved, applied-learning opportunities help you integrate your newfound knowledge, critical thinking and collaboration skills to solve real, complex, unstructured business problems. Study abroad, entrepreneurship and consulting projects further transform your perspectives, skills and competencies.

Research-driven thinking, applied — that organizing principle at Olin transforms individuals who transform business. You learn from the best and with the best, in an energizing and exhilarating environment that fosters teamwork, interdisciplinary learning and the practical experience essential to your future success.

Bachelor of Science in Business Administration (B.S.B.A.)

The Olin Business School offers a full-time Bachelor of Science in Business Administration (B.S.B.A.) degree program of instruction. As an undergraduate student at Olin, you may choose to major in one or two professional fields in business as part of your degree. Our B.S.B.A. students enroll in business courses in their freshman year. The curriculum covers the core functional areas of business, at least one major course of study in a field of business and at least 40 percent of the course work must be in nonbusiness fields — from fine arts to science — allowing you to pursue individual careers and ensuring a well-rounded educational experience.

Majors

B.S.B.A.s are offered the option to focus their studies in a specific field of business. While a business student is not required to declare a business major, almost all our business students earn at least one professional major. You may pursue one or two majors from the list below:

- Accounting
- Economics and Strategy
- Entrepreneurship
- Finance
- Healthcare Management
- International Business
- Marketing
- Operations and Supply Chain Management
- Organization and Human Resources

Specific requirements for each major can be found on the Majors (p. 722) page.

Combined Majors

As a business student, you have the option to major in more than one field of study. B.S.B.A. students can earn a total of two majors either both in business or one in business and one outside of Olin. For example, you could earn a B.S.B.A. degree with a major in finance and a major in English literature from the College of Arts & Sciences. You must complete the specific courses required for the second major, but you are not required to complete the general requirements for the second degree. You should consult with your academic adviser for additional information. Upon completion, the student’s transcript would show a B.S.B.A. degree along with the earned second major. A diploma is awarded for the degree, with reference to any major(s) on the official transcript.

Minors

Many departments and schools in the university offer minors. Business students also can pursue a minor outside of Olin in any recognized academic discipline offered within the university by satisfactorily completing all the requirements for both the B.S.B.A. degree and the minor. Required courses for a minor outside of business may range from 15 to 27 units, depending on the specific regulations of the academic department. A business student who applies for a minor and completes all of the requirements will have the award of the minor noted on the official transcript. A student must be approved for admission to a minor program by the department offering the minor.

Students from other schools of Washington University can read about business minors on the Minors (p. 722) page.

Combined Degrees

You also can earn two undergraduate degrees simultaneously — your B.S.B.A. degree and another undergraduate degree offered at the university. You must be admitted to the other degree-granting program, and you must meet specific degree requirements for both schools. Typically, this option requires additional time to complete all requirements. For example, if you combine your business degree with a degree from the College of Arts & Sciences, you must complete a minimum of 150 units between the two disciplines. Of the 150 units, at least 90 units must be from the College of Arts & Sciences and at least 55.5 units from the Olin Business School. Some courses may be used to satisfy both degree requirements simultaneously. Because requirements for a second degree vary from discipline
Joint Undergraduate and Business Master’s Degrees

Master of Business Administration (M.B.A.)

A special five-year program combining an undergraduate degree with the Master of Business Administration degree is available to a select number of undergraduates. Often referred to as the 3+2 program, it combines three years of undergraduate study and two years of M.B.A. study for completion of both degrees in five years. Joint programs include: the A.B./M.B.A. degrees offered with the College of Arts & Sciences, the B.S./M.B.A. degrees offered with the School of Engineering & Applied Science, and the B.S.B.A./M.B.A. degrees offered through Olin Business School.

Admission to the 3/2 program is extremely competitive. You must have a superior academic record, an outstanding performance on your Graduate Management Admission Test (GMAT) or Graduate Record Exam (GRE) and substantive summer internship experience in a related field.

You apply during the winter of your junior year and begin the full-time M.B.A. program in the fall semester. You must complete at least 90 units of undergraduate course work before entering Olin Business School and then complete an additional 66 units of graduate-level courses. Consult your academic adviser during your sophomore year regarding specific degree requirements.

In addition, as an M.B.A. student, you can earn a second graduate degree concurrently in one of the following disciplines:

- Master of Architecture (M.B.A./M.Arch.)
- Master of Urban Design (M.B.A./M.U.D.)
- Master of Science in Biomedical Engineering (M.B.A./M.S.-B.M.E.)
- Master of Arts in East Asian Studies (M.B.A./M.A.)
- Juris Doctorate (M.B.A./J.D.)
- Master of Social Work (M.B.A./M.S.W.)
- Master of Public Health (M.B.A./M.P.H.)
- Master of Engineering in Energy, Environmental and Chemical Engineering (M.B.A./M.Eng–EECE)

If your undergraduate major is in the School of Engineering & Applied Science or College of Arts & Sciences, up to 15 units of remaining undergraduate courses will apply toward the 66 units required in the M.B.A. program. If your undergraduate major is in the Olin Business School, up to 6 units of remaining undergraduate course work will apply toward the 66 units required in the M.B.A. program. See http://www.olin.wustl.edu/academicprograms/MBA/dualdegrees/Pages/default.aspx for more information. To apply contact the M.B.A. Admissions Office in Simon Hall, Room 114, or email mba@olin.wustl.edu.

Master of Accounting (M.A.C.C.)

Whether your career interests lie in public or corporate accounting, consulting or financial services, Olin’s Master of Accounting (M.A.C.C.) program will prepare you for an exciting and challenging future. This program requires 33 graduate-level credit units in addition to the course work requirements for your undergraduate degree. The program includes course work necessary to meet eligibility requirements to sit for the CPA exam in states with the “150-hour rule.” You can apply for admission once you have completed ACCT 3610 and earned approximately 90 undergraduate units. It is preferable that you also have completed ACCT 3620 during your undergraduate program. If you are interested in pursuing an M.A.C.C. degree, it is recommended that you contact the Specialized Masters Programs Office prior to entering your junior year. For students at Washington University the GMAT/GRE requirement and application fee are waived.

See www.olin.wustl.edu/academicprograms/MACC/Pages/default.aspx. Further information available in the Specialized Masters Programs Office in Simon 118, or email maccinfo@wustl.edu.

Master of Science in Finance (M.S.Fin.)

Graduates of Olin’s Master of Science in Finance (M.S./Finance) develop highly targeted skills by selecting the curriculum track best suited to their career aspirations — Corporate Finance and Investments or Quantitative Finance. This rigorous and comprehensive graduate program offers in-depth training in securities research, asset management, derivative pricing, fixed income and corporate finance for students pursuing specialized finance careers in either of two tracks:

- Corporate Finance and Investments requires 30 graduate-level credit units in addition to your course requirements for your undergraduate degree requirements and prepares you for careers in investment banking, asset management, sales and trading, industry finance and consulting.
- Quantitative Finance requires 39 graduate-level credit units in addition to the course requirements for your undergraduate degree and prepares you for careers in credit risk analysis, derivative pricing, risk management modeling and financial software development.

You can apply for admission to the M.S./Finance program once you have completed approximately 90 total units. If you are interested in pursuing an M.S./Finance degree, it is recommended that you contact the Specialized Masters Programs Office prior to entering your junior year. For students at Washington University, the GMAT/GRE requirement and application fee are waived.
Master of Science in Supply Chain Management (M.S.SCM.)

Exceptional management of the production and delivery of a firm’s products and services — its supply chain — is essential. The Master of Science in Supply Chain Management degree at Washington University’s Olin Business School equips graduates to stand out in this challenging and critically important career field. This program provides students with comprehensive preparation in all areas relevant to sophisticated management of a company’s supply chain, whether the company is engaged in manufacturing or in the delivery of complex services.

Completion of the degree requires a minimum of 36 graduate-level credit units in addition to the course requirements for the undergraduate degree. You can apply for admission to the Master of Science in Supply Chain Management program once you have completed approximately 90 total units. If you are interested in pursuing an M.S.SCM. degree, it is recommended that you contact the Specialized Masters Programs Office prior to entering your junior year. For students at Washington University the GMAT/GRE requirement and application fee are waived.

Special Opportunities

Center for Experiential Learning

Olin’s Center for Experiential Learning (see www.olin.wustl.edu/cel/Pages/default.aspx) is the focal point for a wide range of activities that take learning beyond the classroom to integrate what you’re learning in hands-on projects and real-world situations. Courses include:

• Investment Praxis — students manage more than $1.5 million of the university’s endowment funds.
• Taylor Community Consulting Program — students serve as management consultants in six-week projects for area nonprofit organizations.
• The Practicum — student teams consult for local, national and international companies on a wide array of business and management problems. An Olin faculty member serves as a mentor for each team. At the end of the semester-long project, your team makes a formal presentation that includes analyses, strategies and recommendations for change.

Skandalaris Center for Entrepreneurial Studies

With its collaborative, interdisciplinary focus, the Skandalaris Center connects Washington University and the St. Louis start-up community. Student interest areas include commercial, social, creative, environmental and technology entrepreneurship. The Center coordinates entrepreneurship curriculum across campus and also co-curricular programs including pre-orientation IDEA, Coffee with the Experts, the Olin Cup and YouthBridge Social Enterprise and Innovation Competitions, and its flagship, IdeaBounce®. The Center offers a set of curricular and co-curricular options for student and community entrepreneurs to help move their ideas forward. See www.idealbounce.com for more information.

Independent Study

Independent study under the direction of a faculty member is available on a selective basis. The purpose of independent study is to provide an opportunity for you to pursue subject matter beyond the specific course offerings found in the Olin School. Projects may be done for 1 to 6 units, but normally no more than 3 units will be granted in any one semester. For more information, please refer to the Olin School’s Undergraduate Student Handbook.

Students may apply a maximum of 6 units of independent study in business and 6 units outside of the Olin School toward the 120-unit degree requirement.

Internship for Credit Opportunities

Olin freshmen and sophomores who have a summer internship can enroll in MGT 450A for academic credit. This online course is designed to deepen your overall learning gained from an internship. Students enroll in this 1.5-credit course as a Pass/Fail basis. While this course will be listed on your academic transcript, it will not count toward the 120 units needed for graduation.

Olin juniors or seniors who have completed the core requirement and one advanced elective in the appropriate major field may apply to receive credit for internship experience. Students must work under the direction of a faculty member to complete an academic paper/project. The Internship Petition Form must be submitted to the student’s academic adviser by the end of the second week of the academic semester. A maximum of 6 units of internship course work may be applied toward the B.S.B.A. degree.

Undergraduate Teaching Assistantships

In this challenging program, outstanding students are chosen to assist various professors with their course development work or research efforts. Students may conduct library research, perform computer programming, develop new learning materials for
class, assist other students with their writing skills, or tutor in various areas of the curriculum.

Participation in the Undergraduate Teaching Assistantship (UTA) program is voluntary and may begin as early as the first year. As a participant, you are paid the going rate for student assistants. UTA experience also impresses company recruiters.

**Study Abroad**

As a business student, you have the opportunity to participate in various study abroad programs. You may choose to (1) apply to one of Olin’s International Internship Programs, (2) apply to participate in a semester academic exchange program, or (3) apply to participate in one of the study abroad programs sponsored by the Office of International and Area Studies in the College of Arts & Sciences. Detailed information is available at http://sa.wustl.edu or in the B.S.B.A. Programs office.

**International Internship Programs**

Our International Internship Programs offer you the opportunity to combine classroom learning with an internship in Herzliya/Tel Aviv, Germany, London, Sydney or Paris. You earn 15 units of academic credit in any of these programs by completing:

- 6 units of academic credit in appropriate areas (e.g., language study in non-English–speaking locations)
- Full-time internship placement of approximately 12 weeks (in Herzliya/Tel Aviv, London, Paris, Sydney or Germany) for credit.
- Significant research project in conjunction with the internship experience.
- European Study Tour for programs in Europe and Colloquium/Study Tour Series for programs outside of Europe for credit.

The International Internship Programs are open to all Olin juniors and seniors who have completed the equivalent of five semesters of course work (75 units) and the specific prerequisites for the particular program of study. Second majors and minors in business also may be eligible to apply. There is a minimum GPA requirement of 3.0 in your overall course work and 3.0 in your professional course work. Eligibility requirements are subject to change.

**Other Study Abroad Opportunities Through Olin**

Olin students may participate in academic exchange programs at Chinese University of Hong Kong or Hong Kong University of Science and Technology in Hong Kong; Bocconi University in Milan, Italy; the University of Melbourne in Australia; ESCP Business School in Paris, France; Carlos III University of Madrid, Spain; Singapore Management University in Singapore; WHU in Vallendar, Germany; or Fudan University in Shanghai, China. You may participate in any of these exchange programs and take course work that allows you to continue your studies toward your Olin School degree without interruption.

Olin also offers several summer programs lasting from two to eight weeks for 3 to 6 credits. Visit http://sa.wustl.edu for more information.

**Washington D.C. Opportunity**

Olin students may participate in Washington University’s Semester in D.C. program. This experience introduces students to the workings of our nation’s capital through a course on American Democracy and the Policy Making Process, an internship experience, a speaker series, an applied independent research project as well as group activities during the fall, spring and summer semesters. Additional information is available at www.olin.wustl.edu/academicprograms/BSBA/Pages/SemesterinDCProgram.aspx.

**Semester in New York City**

Olin students may participate in a semester in New York program. Students enrolled in the program take a course in a corporate ethics, attend a speaker series, intern, create applied research and take other Olin electives while spending their semester in New York. This program is available for both the fall and spring semesters. Additional information on this program can be obtained via the B.S.B.A. Programs Office.

**Academic Support Services**

**Academic Advising**

Olin Business School provides you with expert academic advising and support. B.S.B.A. Student Services has six academic advisers who serve as professional advisers to all undergraduate students on procedural matters, course planning, registration and other academic matters.

**Olin Peer Ambassadors**

In this program, undergraduate business students who are familiar with the university and with Olin’s programs and policies help incoming students make a smooth transition to the university by providing informal peer advising services throughout their first year here.

**Weston Career Center**

To provide you with personalized career planning and job search services, Olin operates its own career center. The Weston Career Center (WCC) delivers a variety of career management programs and services to Olin students pursuing their B.S.B.A., M.B.A., Master of Accounting, M.S. Supply Chain Management and M.S. Finance degrees. Services include: one-on-one advising and consultation with a functional career specialist, workshops and professional development seminars, company information sessions, mock interviews, self-assessments, resume and cover writing, and networking — all the tools you will need for an effective job search. On-campus interviews take place in the Simon Hall Interview Suite.
or Danforth Center throughout the academic year. Business students are encouraged to meet with the center’s staff early in the school year to discuss career and professional goals. For more information, see www.olin.wustl.edu/academicprograms/BSBA/Careers/Pages/default.aspx, or contact the Weston Career Center by phone at 314/935-5950 or e-mail at wcc@olin.wustl.edu.

Phone: 314/935-6315
E-mail: bsba@olin.wustl.edu
Departmental website: http://www.olin.wustl.edu/

Dean
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Dean and Geraldine J. and Robert J. Virgil Professor of Accounting and Management
PhD, Stanford University

Endowed Professors
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Vernon W. and Marion K. Piper Professor of Strategy
PhD, University of California–Berkeley

Yossi Aviv
Dan Broida Professor of Operations and Manufacturing Management
PhD, Columbia University

William P. Bottom
Joyce and Howard Wood Distinguished Professor of Organizational Behavior
PhD, University of Illinois, Urbana-Champaign

J. Stuart Bunderson
George and Carol Bauer Professor of Organizational Ethics and Governance
PhD, University of Minnesota

Siddhartha Chib
Harry C. Hartkopf Professor of Econometrics and Statistics
PhD, University of California–Santa Barbara

Kurt T. Dirks
Bank of America Professor of Managerial Leadership
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Boatmen’s Bancshares Professor of Banking and Finance
PhD, Yale University

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Beverly and James Hance Professor of Accounting
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Barton H. Hamilton
Robert Brookings Smith Distinguished Professor of Entrepreneurship
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Myron Northrop Professor of Accounting
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David Pearson
DBA, Indiana University
(Accounting)

David A. Poldoian
MBA, Harvard University
(Entrepreneurship)
as an option to focus your studies in a specific field of business. You may choose to pursue one or two majors from the areas below:

The Major in Accounting

Total units required: 15

- Accounting Core: 3 units
  - ACCT 3610 Intermediate Financial Accounting Theory I

- Accounting Elective Choices: 12 units
  - ACCT 3620 Intermediate Financial Accounting II
  - ACCT 464 Auditing
  - ACCT 466 Financial Statement Analysis
  - ACCT 467 Income Tax Fundamentals
  - ACCT 4680 Advanced Financial Accounting Problems

The Major in Economics and Strategy

Total units required: 21

- Economics & Strategy Core: 21 units
  - FIN 340 Capital Markets and Financial Management
  - MEC 370 Game Theory for Business
  - MEC 380 Competitive Industry Analysis
  - MEC 470 Market Competition and Value Appropriation
  - MEC 471 Empirical Techniques for Industry Analysis
  - MGT 380 Business Strategy
  - MGT 390 The Economics of Human Resource Management

The Major in Entrepreneurship

Total units required: 21

- Entrepreneurship Core: 12 units
  - FIN 340 Capital Markets and Financial Management
  - MGT 421 Introduction to Entrepreneurship
  - MGT 424 Business Planning for New Enterprises [The Hatchery]
  - MKT 370 Principles of Marketing

- Entrepreneurship Elective Choices: 9 units
  - ACCT 466 Financial Statement Analysis
  - MEC 370 Game Theory for Business
  - MEC 380 Competitive Industry Analysis
  - MEC 470 Market Competition and Value Appropriation
  - MGT 301 Legal Environment of Business Management
  - MGT 380 Business Strategy
  - MGT 450C Venture Consulting
  - MKT 373 Retail Management
  - MKT 400E Sales Management and Personal Selling
  - MKT 473 Marketing Research
OB 461 Negotiation
OSCM 453 Technology Management and Process Design

Students also may select several courses outside of Olin to complete their Entrepreneurship major. For more information about these choices, please review the Class of 2016 Degree Requirements in PDF form.

The Major in Finance

Total units required: 15

- Finance Core: 12 units
  - FIN 340 Capital Markets and Financial Management
  - FIN 441 Investments
  - FIN 448 Advanced Financial Management
  - FIN 451 Options, Futures and Derivative Securities

- Finance Elective Choices: 3 units
  - FIN 400G Financial Markets and Instruments
  - FIN 400H Mortgage-backed Securities
  - FIN 400M Mergers and Acquisitions
  - FIN 400J Advanced Valuation
  - FIN 428 Investments Praxis
  - FIN 443 International Finance
  - FIN 447 Information, Intermediation and Financial Markets
  - FIN 452 Advanced Derivative Securities

The Major in Healthcare Management

Total units required: 15

- Health Care Core: 12 units
  - MGT 320 Olin Grand Rounds: The Business and Practice of Medicine
  - MGT 321 Health Economics and Policy
  - MGT 322 Health Care Management
  - MGT 420 Research in Health Care Management

- Health Care Elective Choices: 3 units
  - FIN 340 Capital Markets and Financial Management
  - FIN 441 Investments
  - FIN 448 Advanced Financial Management
  - FIN 451 Options, Futures and Derivative Securities

Students select at least one course outside of Olin to complete their Healthcare major. For more information about these choices, please review the Class of 2016 Degree Requirements in PDF form.

The Major in International Business

Total units required: 24

- International Business Core Requirements: 15 units
  - Two Foundation courses chosen from the WU Global Certification Foundation course offerings:
    - INTL 300A Planning for International Learning
    - INTL 300B Applying International Experiences
    - MGT 308 Introduction to International Business
    - MGT 400S International Business Environment
    - MGT 418 International Business: A Euro Perspective
    - MKT 477 International Marketing

- Off-Danforth Campus immersive learning experience for a minimum of four weeks (All Olin semester programs are automatically approved.)

- Capstone course (Honors in Management with an international topic or the Global Certificate Capstone course)

- International Business Elective Choices: at least three courses from below:
  - FIN 400G Financial Markets and Instruments
  - FIN 443 International Finance
  - INTL 400I Business, Innovation and Entrepreneurship in Israel
  - MGT 400S International Business Environment
  - MGT 418 International Business: A Euro Perspective
  - MKT 477 International Marketing

- Upper-level foreign language or international business courses taken abroad with the approval of the Director of International Programs may count as a International Business elective.

*Effective with the Class of 2015, the International Business major will be considered as a secondary major option only. Any student majoring in International Business must declare another major field as the International Business major will no longer serve as a prime major.

The Major in Marketing

Total units required: 15

- Marketing Core: 9 units
  - MKT 370 Principles of Marketing
  - MKT 473 Marketing Research
  - MKT 480 Marketing Strategy

- Marketing Electives: 6 units
  - Group A Elective Choices: (at least one course from Group A required)
    - MKT 377 Consumer Behavior
    - MKT 470E Pricing
    - MKT 478 New Product Management

  - Group B Elective Choices:
    - MKT 373 Retail Management
    - MKT 400E Sales Management and Personal Selling
    - MKT 476 Advanced Retail Topics
    - MKT 477 International Marketing
    - MKT 481 Integrated Marketing Communication
The Major in Operations and Supply Chain Management

Total units required: 18

- Operations and Supply Chain Management Core: 6 units
  - OSCM 230 Management Science
  - OSCM 356 Operations Management
- OSCM Elective Choices: 12 units
  - Group A Elective Choices: (at least two courses from Group A required)
    - OSCM 453 Technical Management — Process Design
    - OSCM 458 Operations Planning and Control
    - OSCM 558 Advanced Operations Strategy
  - Group B Elective Choices:
    - MEC 380 Competitive Industry Analysis
    - MGT 380 Business Strategy
    - MKT 373 Retail Management
    - MKT 473 Marketing Research
    - OB 461 Negotiation

The Major in Organization and Human Resources Management

Total units required: 15

- OHR Core Requirements: 6 units
  - MGT 390 The Economics of Human Resource Management
  - OB 360 Organization Behavior Within the Firm
- OHR Electives: 9 units
  - Group A Elective Choices: (choose at least 6 units from Group A)
    - HRM 320A Managing People in Organizations
    - HRM 325A Personnel/Human Resources Management
    - MEC 380 Competitive Industry Analysis
    - MGT 380 Business Strategy
    - MGT 402 Ethical Issues in Managerial Decision-Making
    - MGT 526 Topics and Case Studies in Ethical Decision Making
    - OB 461 Negotiation
    - OB 462 Leadership in Organizations
  - OHR Group B Elective Choices:
    - Psych 315 Introduction to Social Psychology
    - Psych 353 Psychology of Personality
    - Psych 361 Psychology of Learning

Class of 2016 Degree Requirements:

For a comprehensive view of our degree program, please review the PDF of these requirements on our website or click here to download it.

Academic Options for Non-B.S.B.A. Degree Students

If you are a student in another undergraduate division of the university, you may choose to complete a second major or a minor in a business discipline.

Second Majors

Any non-B.S.B.A.-degree student may earn a second major in a specific major discipline offered through the Olin Business School. This opportunity allows you to combine your academic interests between two schools. If you wish to pursue a second major in business, you are required to follow the degree requirements for your primary school/major along with a set of core business requirements and 12–21 units of business major course work.

Core Business Requirements:

- ACCT 2610 Principles of Financial Accounting and ACCT 2620 Principles of Managerial Accounting
- Math 131 Calculus I and Math 132 Calculus II
- MGT 100 Individual in a Managerial Environment or MGT 380 Business Strategy or MEC 380 Competitive Industry Analysis*
- MEC 290 Microeconomics
- MEC 292 Global Economy or Econ 1021 Introduction to Macroeconomics
- QBA 120 Managerial Statistics I and QBA 121 Managerial Statistics II

* Transfer students must take one of the following: MGT 100, MGT 380 or MEC 380 to satisfy this requirement.

You may select a major from the following disciplines:

- Accounting
- Economics and Strategy
- Entrepreneurship
- Finance
- Healthcare Management
- International Business
- Marketing
- Operations and Supply Chain Management
- Organization and Human Resources

Requirements for all majors, with the exception of the Entrepreneurship major, follow the same protocol as a B.S.B.A. degree student earning a specific business major. Therefore, specific course requirements for each major are shown above.
under the Majors for B.S.B.A. Degree Candidates. Students taking the Second Major in Entrepreneurship are not required to complete MEC 292/Econ 1021. For a comprehensive view of our second majors, please review the PDF of these requirements on our website or click here to download it.

**Regulations:**

1. Second majors are required to complete a minimum of 24 business units through the Olin School. Transfer students from another institution must take a minimum of 18 credits through Olin Business School.
2. All courses for any business major must be taken for a grade.
3. An overall 2.0 average must be achieved in course work taken as part of the business major.
4. Students must declare their second major by the end of their junior year. A second major will not be awarded to a student unless proper declaration is made.
5. University College courses will not count toward any business major.
6. You may not count one course toward two majors.

**Minors for Non-B.S.B.A. Degree Candidates**

Non-B.S.B.A. degree students are eligible to pursue a minor in one of the specific fields of business listed below:

- Accounting
- Entrepreneurship
- Finance
- General Business
- Healthcare Management
- Leadership
- Managerial Economics
- Marketing
- Operations and Supply Chain Management
- Strategy

**Prerequisites for the Business Minor:**

The following prerequisites are required for all minors except Entrepreneurship. For Entrepreneurship, the prerequisites are recommended.

- Math 132 Calculus II or Math 128 Calculus II for the Life, Managerial and Social Sciences or the equivalent.
- Math 2200 Elementary Probability and Statistics or Math 3200 Elementary to Intermediate Statistics and Data Analysis or ESE 326 Probability and Statistics for Engineering or QBA 120 Managerial Statistics I.
- Econ 1011 Introduction to Microeconomics or MEC 290 Microeconomics.
- QBA 121 is also a prerequisite for minors in Marketing and Finance.

* AP Credit for Math 2200 will satisfy this prerequisite. This exemption applies only to Business majors.

**The Minor in Accounting**

**Total units required:** 15

**Required courses:** Five courses including:

- ACCT 2610 Principles of Financial Accounting
- ACCT 2610 Principles of Financial Accounting
- ACCT 3610 Intermediate Financial Accounting Theory I
- Plus two chosen from the following:
  - ACCT 3620 Intermediate Financial Accounting II
  - ACCT 464 Auditing
  - ACCT 466 Financial Statement Analysis
  - ACCT 467 Income Tax Fundamentals
  - ACCT 4680 Advanced Financial Accounting Problems

**The Minor in Entrepreneurship**

**Total units required:** 15

**Required courses** Five courses including:

- ACCT 2610 Principles of Financial Accounting
- MGT 100 Individual in a Managerial Environment
- MGT 301 Legal Environment of Business Management
- MGT 421 Introduction to Entrepreneurship

Plus one course chosen from the following:

- MGT 424 Business Planning for New Enterprises [The Hatchery]

MGT 550M Community Development and Environmental Preservation through Entrepreneurial Collaboration. This course seeks to develop and implement a new grass roots community development approach that builds on investments made by NGOs, aid groups and governments. Specifically, in the approach designed by the Skandaliris Center and implemented in this course, we are integrating conservation goals with self-directed, economic growth in the rural subsistence communities of Madagascar. This academically rigorous course and accompanying travel provides intensive experiential learning that is rich in hands-on content, designed to extend and enrich core discipline learning. The course is designed to facilitate the conditions in which entrepreneurial skills can be learned in their broadest and richest sense. The cross disciplinary (e.g. Anthropology, Business, Design, Engineering, Law, Social Work, Economics, Political Science, etc.) and cross-level (e.g. undergraduate, graduate, alumni, etc.) participation when combined with the daunting complexity...
and intellectual challenge of travel and the setting create a lasting capstone experience. Local level economic capacity building is a particularly difficult issue in the world’s poorest rural communities like those in Madagascar.

The Minor in Finance
Total units required: 15
Required courses: Five courses including:
- ACCT 2610 Principles of Financial Accounting
- FIN 441 Investments
- FIN 448 Advanced Financial Management
- Plus a 3-credit Finance elective

The Minor in General Business
Total units required: 15
Required courses: Five courses including:
- ACCT 2610 Principles of Financial Accounting
- Choose one course from the following:
  - MEC 380 Competitive Industry Analysis
  - MGT 380 Business Strategy
- Choose three courses from the following options:
  - MKT 370 Principles of Marketing
  - FIN 340 Capital Markets and Financial Management
  - OSCM 356 Operations Management
  - HRM 320A Managing People in Organizations
  - OB 360 Organization Behavior Within the Firm

The Minor in Health Care Management
Total units required: 15
Required courses: Five courses including:
- MGT 100 Individual in a Managerial Environment
- MGT 320 Olin Grand Rounds: The Business and Practice of Medicine
- MGT 321 Health Economics and Policy
- MGT 322 Health Care Management
- MGT 420 Research in Health Care Management

The Minor in Leadership
Total units required: 15
Required courses: Five courses including:
- MGT 100 Individual in a Managerial Environment
- OB 360 Organization Behavior Within the Firm
- OB 461 Negotiation
- OB 462 Leadership in Organizations
- Plus one course chosen from the following:
  - MGT 201 Management Communication
  - HRM 320A Managing People in Organizations

The Minor in Managerial Economics
Total units required: 15
Required courses: Five courses including:
- MEC 370 Game Theory for Business
- MEC 380 Competitive Industry Analysis
- MEC 470 Market Competition and Value Appropriation
- MEC 471 Empirical Techniques for Industry Analysis
- MGT 390 The Economics of Human Resource Management

The Minor in Marketing
Total units required: 15
Required courses: Five courses including:
- MKT 370 Principles of Marketing
- MKT 473 Marketing Research
- MKT 480 Marketing Strategy*
- Plus two courses chosen from the following:
  - MKT 373 Retail Management
  - MKT 377 Consumer Behavior
  - MKT 470E Pricing
  - MKT 476 Advanced Retail Topics
  - MKT 477 International Marketing
  - MKT 478 New Product Management
  - MKT 481 Integrated Marketing Communication
- * Marketing 480 is taken spring semester of your senior year.

The Minor in Operations Supply Chain Management
Total units required: 15
Required courses: Five courses including:
- QBA 120 Managerial Statistics I
- OSCM 230 Management Science
- OSCM 356 Operations Management
- OSCM 458 Operations Planning and Control
- OMM 558 Advanced Operations Strategy. This course examines major issues of operations policy from a strategic perspective. Covers productivity measurement; process choice; product profiling; interfaces with marketing; experience costs; process positioning; accounting and financial perspectives; and international operations. Gives
equal attention to service operations and manufacturing operations. Valuable for students with an operations or general management focus, as well as for finance and marketing students. Prerequisite: OSCM 356.

The Minor in Strategy
Total required units: 21
Required courses: Seven courses including:
- MGT 100 Individual in a Managerial Environment
- MEC 290 Microeconomics or Econ 1011 Introduction to Microeconomics
- QBA 120 Managerial Statistics I
- MGT 380 Business Strategy
- MEC 380 Competitive Industry Analysis
- MEC 470 Market Competition and Value Appropriation

Plus one course chosen from the following:
- MEC 370 Game Theory for Business
- MEC 471 Empirical Techniques for Industry Analysis
- OB 461 Negotiation
- OB 462 Leadership in Organizations

Fulfilling the Business Minor
All students pursuing any Business Minor must:
- file a declaration no later than the end of their sixth semester;
- satisfy all prerequisites;
- take all five required courses at Olin Business School. It is preferred that prerequisites be completed at Washington University. Courses taken in University College or at another university do not satisfy any of the five required courses;
- take all five required courses for grades, i.e., no Pass/Fail;
- achieve no less than a 2.0 GPA average in all Business Minor course work;
- receive permission from their academic adviser and the Olin Business School to declare a second Business Minor.

Accounting
B50 ACCT 2610 Principles of Financial Accounting
Provides an overview of the financial accounting reporting process, with a primary focus on the analysis of economic events and their effect on the major financial statements (balance sheet, income statement and statement of cash flows). Prerequisite: second semester freshman standing.
Credit 3 units.

B50 ACCT 2620 Principles of Managerial Accounting
Emphasis on the accumulation and analysis of data for internal decision makers. Introduces the vocabulary and mechanics of managerial accounting and accounting techniques used by internal managers in planning, directing, controlling and decision-making activities within their organizations. Prerequisite: ACCT 2610.
Credit 3 units.

B50 ACCT 3610 Intermediate Financial Accounting Theory I
The first of a two-course sequence in corporate financial reporting. Examines the environment of financial accounting, the standards-setting process and the conceptual framework that underlies financial accounting in the United States. Topics: review accounting basics, events and transactions that impact financial statements, comprehension of corporate financial reports, and examination of political and economic factors influencing accounting policy. Prerequisite: ACCT 2610.
Credit 3 units.

B50 ACCT 3620 Intermediate Financial Accounting II
Continuation of ACCT 3610. Focus on the accounting and reporting of various stakeholders’ claims against the corporate entity. Claims of shareholders, long-term creditors, employees and governmental bodies are examined. An in-depth understanding of applicable generally accepted accounting principles is developed by examining the strengths and weaknesses of these principles and alternative accounting practices. Prerequisite: ACCT 3610.
Credit 3 units.

B50 ACCT 466 Financial Statement Analysis
Designed to enhance your understanding of the process of evaluating financial statement information. Requires a basic familiarity with financial accounting and the assumptions underlying measurements reported in financial statements, an understanding of the economic and regulatory forces underlying corporate disclosure of financial statement information and their effects on financial statement information, and familiarity with data sources and analytical tools to extract and evaluate this data. Objectives are to develop familiarity with this type of analysis and to gain an appreciation for its limitations. Topics: profitability and risk analysis, credit risk models, forecasting and valuation. Prerequisite: ACCT 3610.
Credit 3 units.

B50 ACCT 4680 Advanced Financial Accounting Problems
Examination of the nature and financial reporting aspects of various business transactions: corporate acquisitions, mergers and the formation of other strategic alliances. Topics: accounting for business combinations and consolidations, joint ventures and foreign currency translation, accounting and financial reporting issues facing government entities. Prerequisite: ACCT 3620.
Credit 3 units.
**Finance**

**B52 FIN 340 Capital Markets and Financial Management**
Examines finances of business at the aggregate level through the flow of funds framework. Financial decision making in areas of liquidity management, investment management and the selection of capital sources. Prerequisites: Math 128 or 132, Acct 2610, MEC 290 or Econ 1011, and completion or concurrent enrollment in QBA 121. Credit 3 units. EN : S

**B52 FIN 343 Personal Finance**
Examines issues underlying decision making regarding personal investments. Topics: present value concepts, financial markets and instruments, portfolio theory, bond and equity valuations, mutual funds, mortgages, taxes and personal financial planning. Intended for nonbusiness students who are not second majors in Finance. Students may not receive credit for both this course and FIN 340. B.S.B.A. students may take this course but it will not count toward their degree requirements. Prerequisite: junior standing. Credit 3 units.

**B52 FIN 400I Mergers and Acquisitions**
This course focuses on identifying ways to increase firm value through mergers and acquisitions (M&A) and corporate restructurings. We survey the drivers of success (and failure) in M&A transactions and develop skills in the design and evaluation of such transactions. Specific topics that we address in the course are the valuation of companies, the motivations underlying mergers, structuring of transactions, deal tactics and strategy, leveraged buyouts, corporate restructuring though divestitures, spin-offs, carveouts and acquisitions of private firms. We also delve into issues of law, accounting and tax and how they affect the outcome of M&A transactions. Why is M&A an important component of any corporate finance professional toolset? It lays the foundation for effective work in a wide range of fields including corporate development, investment banking, consulting and strategy advising senior management. I hope my presentations, class discussions, case analyzes and readings help you master these important career skills. Prerequisites: FIN 340 and FIN 448. Credit 1.5 unit.

**B52 FIN 400J Advanced Valuation**
This course covers advanced topics in valuation. Main topics covered are the valuation of private firms and young businesses, and the valuation of financial services firms such as banks and insurance companies. The course applies both theory and practical valuation methods through the analysis of cases and real world examples. Prerequisite: FIN 448. Credit 1.5 unit.

**B52 FIN 428 Investments Praxis**
In this course students serve as managers of a portfolio, the Investment Praxis Fund, which is owned by the school. Students analyze investment opportunities in various industries and present recommendations to the class for possible purchases or sales of securities. Students must demonstrate that their investment decisions are consistent with the style and objectives of the fund. Valuation tools, financial statement analysis and investment techniques are emphasized as part of a thorough analysis. The course blends theory with practical advice from investment professionals such as portfolio managers, securities traders and consultants. Prerequisites: FIN 441, FIN 448 and FIN 451. Credit 3 units.

**B52 FIN 441 Investments**
Examines financial markets from the point of view of an investment/portfolio manager. Analyze some of the major financial institutions, such as the stock and options markets (exchanges). Study how financial securities (such as stocks, bonds, options and futures) are valued in a well-functioning financial market. Understand the theory of optimal portfolio selection based on the notions of static and dynamic portfolio efficiency, capital market equilibrium (a.k.a., the Capital Asset Pricing Model) and the Arbitrage Pricing Theory, bond valuation and immunization, the binomial model and its connection to the Black-Scholes option pricing model, and hedging with financial futures in theory and practice. Review professional publications, such as the *Journal of Portfolio Management* and the *Financial Analysts Journal*. Prerequisite: FIN 340. Credit 3 units.

**B52 FIN 443 International Finance**
Provides a framework for making financial decisions in an international context. Topics include: relevant features of international markets and instruments (such as foreign exchange, currency futures, options, swaps, Eurobonds, etc.); models of exchange rate determination; the issue of foreign exchange risk exposure from a corporate perspective; corporate risk management; problems related with capital budgeting in a multicurrency/environment; global investment management issues (risk return trade-off across countries and global asset allocation); project finance; international taxation; cross-border mergers and acquisitions; and international corporate governance. Prerequisites: FIN 340 and FIN 448. Credit 3 units. BU : IS

**B52 FIN 447 Information, Intermediation and Financial Markets**
Examines the organization and function of financial markets from the corporate perspective with an emphasis on investment banking activities. Topics: design, issuance and trading of corporate securities, risk management and corporate control
transactions. Develop familiarization with current practices while building a conceptual framework for understanding and anticipating change in the institutions that make up the financial markets. Prerequisites: FIN 340 and FIN 451 are required. FIN 441 and FIN 448 recommended. Credit 3 units.

**B52 FIN 448 Advanced Financial Management**
Advanced study of corporate financial management. A major focus is the relationship between the internal decisions of the corporation and the valuation of the firm in the capital market. Topics: capital budgeting systems, capital structure, debt policy, cash and working capital management, short- and long-term financial planning. Prerequisite: FIN 340. Credit 3 units.

**B52 FIN 451 Options, Futures and Derivative Securities**
Examines the theory and practical application of derivative securities such as futures, options and swaps. Central to the theory of derivative security pricing is arbitrage and payoff replication. In practice, derivative securities provide a principal route to manage and, in particular, hedge financial risk. Futures, options and swaps on different types of underlying assets are examined with emphasis on pricing and application. Prerequisite: FIN 340. Credit 3 units.

**B52 FIN 452 Advanced Derivative Securities**
This courses focuses on implementation of models for pricing and hedging derivative securities in the equity, currency and fixed-income markets. Students learn to write programs in a programming environment such as MATLAB to implement the Black-Scholes model, binomial models, Monte-Carlo methods and finite-difference methods. The derivatives studied include exotic equity and currency derivatives and caps, floors and swaptions. The goals of the course are to learn more about the various instruments that are traded, the various assumptions and methods that may be chosen in modeling them, and the importance of the assumptions in determining the prices and hedges that are chosen. The course is especially useful to students pursuing careers in sales and trading who will interact with research departments and students pursuing careers in asset management. Prerequisites: FIN 451 and permission of instructor. Same as B62 537 Credit 3 units.

**International Business**

**B99 INTL 300A Planning for International Learning**
A mini-B course required of all students participating in Olin semester abroad programs that focus on planning, assessment, the theory of global competency, cross-cultural communication skills, the structure of a research paper, and other predeparture information that will enhance the student learning experience while abroad. Prerequisite: permission of instructor. Credit 1.5 unit.

**B99 INTL 300B Applying International Experiences**
A mini-B course required of all students who participated in an Olin semester abroad program that includes a research symposium to showcase work from abroad, and which focuses on reentry issues, post-program assessment, how to articulate transferable skills, and other post-departure information that allows returnees to translate their abroad experiences into the working world. Prerequisite: permission of instructor. Credit 1.5 unit.

**Human Resources Management**

**B56 HRM 320A Managing People in Organizations**
Critically examines the interpersonal functions of management. Organized in three sections: (1) Introduces the principles of management with concepts of management including the traditional functions of planning, organizing, controlling and problem solving as well the history of management and how such historical principles continue to influence the management of today's organizations; (2) Principles of Leadership concentrates on competencies for leading people. Topics: aligning and motivating people, conflict resolution, negotiating, decision making, communication skills, teambuilding and selecting effective leadership styles; and (3) Leadership and Management: Applied Practice focuses on the nature of the workforce both now and in the volatile years ahead through case studies and group activities that comprehensively incorporate the material from throughout the course. Prerequisite: sophomore standing. Credit 3 units.

**B56 HRM 325A Personnel/Human Resources Management**
Introduces the field of human resource management (HRM) and the profession through which it is practiced. Designed to develop a broad understanding of major HRM components and apply them to the principles by which organizations are managed. Develops a familiarity with the various types of human resource positions in organizations, the opportunities for career growth and the professional resources available through the Society of Human Resource Management including membership and certification requirements, publications and websites. Prerequisite: junior standing. Credit 3 units.

**B99 INTL 4001 Business, Innovation and Entrepreneurship in Israel**
Israel is an innovation and entrepreneurial hub with more listings on the NASDAQ than any country other than the United States, more patents per capita and more entrepreneurial events occurring in Israel in both the commercial and social arena than anywhere else in the world. Students learn about Israel’s economy, different industries, Israeli culture and politics along with the critical business challenges and opportunities that face Israel. This course includes a required immersion to Israel during spring break and contains an additional lab fee for the immersion.

Credit 3 units.

Management

B53 MGT 100 Individual in a Managerial Environment
Historical analysis of major trends shaping the contemporary and future nature of business. Emphasis on the development of critical and evaluative skills. Topics: demography, trade, technology, employment, government and the economy, social ethos and economic behavior, the nature of economic organization, and the growth of business firms in the United States and abroad. Only open to freshmen in the fall semester.

Credit 3 units. EN : S

B53 MGT 150A Olin Experience Program
The Olin Experience provides business administration degree candidates a framework for the Olin curriculum. Students engage in business scholarship and discussions of business problems and current issues with members of Olin’s faculty. Enrollment is restricted to B.S.B.A. degree candidates.

Credit 1.5 unit.

B53 MGT 150B Olin Experience Program
MGT 150B is designed to teach students data analysis and spreadsheet modeling using Microsoft Excel. Additionally, students continue to develop critical thinking skills, which in this course, includes understanding data needed to solve unstructured problems. The course culminates in a team-based case analysis and presentation refereed by one of Olin’s corporate partners.

Credit 1.5 unit.

B53 MGT 201 Management Communication
Managers who write and speak effectively excel in business leadership. Persuasive and authentic communication is not only useful in advancing your business career; business employers also consider communication skills to be the most important attribute in people they hire. Effective communication involves more than mastering technical writing and presentation skills. Successful communicators use critical thinking to assess business scenarios and the audience who will hear or read a message; they craft communication in order to attain targeted results. This course gives you the opportunity to become a more polished communicator as you work toward the following goals: applying rhetorical principles to management communication; using critical thinking to analyze the audience, the organizational environment and problems before choosing communication strategies; implementing principles of plain language and effective design; collaborating with colleagues to create effective group projects; representing a company or product in a “crisis communication” press conference. Priority for enrollment is given to B.S.B.A. students.

Credit 3 units.

B53 MGT 250A Building Your Career Foundation — Techniques and Strategies
The Olin Experience provides a framework for students to understand leadership and teamwork and how to apply these concepts to not only your Olin career but your first job upon graduation. Students also engage in career education and personal career development. Enrollment is required for B.S.B.A. degree candidates.

Credit 1.5 unit.

Students work in teams to apply their business skills to address real-life business challenges of community-based and nonprofit organizations. Through these projects, students have the opportunity to strengthen their business project management skills, gain experience in solving real-world unstructured problems and connect with community and agency leaders. Community-based organizations benefit from the skills and knowledge of Olin students through their final recommendations addressing the identified business challenge. Participating agencies are located in the metro St. Louis area, throughout the United States and even internationally. CBTL course.

Credit 1.5 unit.

B53 MGT 301 Legal Environment of Business Management
Surveys the various areas of law that make up the legal environment of business. Develops a basic understanding of law as it relates to business, with traditional emphasis on private law and business transactions. This study of the micro law of business reviews the detailed substantive rules in the areas of contracts, sales, product liability, agency, corporations and partnership. In addition, a summary review of contemporary legal problems such as insider trading, discrimination in employment, sexual harassment and ethics may be discussed, if time permits. Case studies are analyzed in order to give the student an understanding of how various laws apply to actual situations.

Prerequisites: sophomore standing.

Credit 3 units.

B53 MGT 308 Introduction to International Business
Focus on the aspects of management of a business enterprise that are necessary to compete in the global marketplace. The course begins with a survey of the environmental context in which international companies operate (economic systems and cultural factors). This is followed by a review of International Trade Theory and Economics. This forms a basis for concentration in the second half of the course on strategies and structure for global operations. The course deals with the situations in Europe, Japan, Latin America and China through case studies and discussion of current topics and their relation to the fundamental aspects of global business management. Prerequisite: junior standing or permission of instructor.
Credit 3 units. BU : IS

B53 MGT 320 Olin Grand Rounds: The Business and Practice of Medicine
Grand rounds in medical schools are a forum for presenting new and challenging clinical problems and cases. The goal of Olin Grand Rounds is to focus on the challenges and solutions facing the business of medicine. The course therefore provides an introduction to the current issues facing the health care sector that integrates management tools and clinical knowledge. The objective is to provide students new insights into how modern management tools can be combined with scientific and clinical knowledge to manage health care organizations more efficiently and practice medicine more effectively.
Credit 3 units. EN : S

B53 MGT 321 Health Economics and Policy
The basic tenets of health economics are covered. This course places a unique emphasis on incorporating materials from three broad source categories: textbook elements, “lay” press and media, and academic journal publications with the aim to foster application of rigorous, critical thought to media presentations of health care economics and policy issues.
Credit 3 units. EN : S

B53 MGT 322 Health Care Management
The goal of the course is to develop facility in applying basic tenets of general management to actual situations and dilemmas that might be faced by health care managers, consultants, financiers, investors, innovators or providers in the course of their work. Issues addressed include but are not limited to financial issues, management challenges and conduct of operations. The first phase covers the basic background on the structure and financing of the health care industry to include very brief reviews of critical topics such as insurance and government-provided health care. A few basic frameworks are then developed for students to apply to course topics moving forward, such as cost/benefit analysis and evaluation of risk. The remainder of the course involves critical analyses of health care cases involving varied subjects and management challenges. Sessions emphasize student-led discussions.

B53 MGT 339 Business Strategy
This capstone course adopts the perspective of the general manager — an individual charged with developing and implementing the long-term strategy of a business. The course develops basic tools and concepts in strategy
formulation, including competitive advantage, value creation and capture, industry analysis, capability assessment, and competitive positioning. The course is designed to develop students’ skills in both analyzing observed strategies and in formulating and implementing new ones. A key feature of the course is a business simulation in which student teams interactively formulate and execute strategy for a simulated firm. Prerequisites: ACCT 2610 and MEC 290.
Credit 3 units.

**B53 MGT 390 The Economics of Human Resource Management**

Key to a firm’s success is whether it can develop a firm organization and a human resource management system that reinforce the firm’s strategic position. This course covers topics in managing work forces and organizations that are of fundamental importance to all managers, and teaches how organizational design and human resource policies interact with the firm’s market strategy and production environment. We look at how management can motivate executive and employee performance, screen and attract appropriate workers, and improve the way information is processed and decisions are made within organizations. This course combines economic analysis with case discussions to address topics including hiring policy, turnover, training, variable pay, promotions, evaluation, job design, teams, worker empowerment, hierarchy and organizational structure such as centralization and decentralization. Prerequisite: MEC 290.
Credit 3 units.

**B53 MGT 400X Sports Management**

Examines business and management issues involved in the sports industry. This industry is very diverse, ranging from global sports events (such as the Olympic Games, World Cup Soccer, etc.) to major national competitions (such as the National Football League, Major League Baseball, etc.). Engaged in this industry are many different players, including franchises, governing leagues, sponsors, media, stadium owners, government, fans and so forth. This course takes a practical look at the world of sports management and administration, with an eye on extracting key lessons for corporate management and administration.
Credit 1.5 unit.

**B53 MGT 402 Ethical Issues in Managerial Decision-Making**

Focuses on ethical issues in management and surveys a number of ethical standards or levels by which managers make decisions involving most functional areas of business. Course emphasis on class discussion of cases and problem situations that confront managers and for which ethical dimensions are a significant part of the business choices. Prerequisite: senior standing.
Credit 1.5 unit.

**B53 MGT 405T Australian Study Tour**

Individual and team research, writing, presentation and participation in Olin’s Australian Study Tour. Includes required attendance and expected professional contributions to all corporate and government visits and briefings and other required individual and group activities.
Credit 1.5 unit.

**B53 MGT 418 International Business: A Euro Perspective**

Examines the economic and institutional setting of Europe from a general business perspective. The economic and political structures of major countries are studied. The role of the European Economic Community examined as well as that of some major international organizations such as GATT and OECD. The primary emphasis is with countries of western Europe. Other topics: theory of customs, unions, monetary and economic integration, and multicity policy integration. Opportunities for and problems of doing business in Europe examined from both an overall strategic perspective and from the perspective of the different functional areas.
Credit 3 units.

**B53 MGT 420 Research in Health Care Management**

In this capstone course for the Health Management major, students learn to apply rigorous statistical and analytical approaches to research questions in health services, but not limited to questions relating to management, finance and economics, operations and policy. Faculty identify several available research project options and present these options in class. The goal is to capitalize on the strength of the university medical school and affiliated medical centers, in addition to capitalizing on existing relationships between Olin and health care firms to identify the student research projects. Students also are encouraged to formulate their own research question and to identify potential data sources they could use to address these questions, if they so desire. Students work in teams of three to four, using the approach developed for the Practicum and Hatchery courses.
Credit 3 units.

**B53 MGT 421 Introduction to Entrepreneurship**

Through case studies, frequent guest speakers and the professor’s own experience, the real world of entrepreneurship is brought into the classroom to provide a context for students to learn the fundamentals of founding, operating and exiting a start-up business. Students learn new perspectives that teach them to think like an entrepreneur. Those who are interested in the general study of entrepreneurship, those who want to be entrepreneurs, and those who would like to leverage entrepreneurial principles in other career paths are all good candidates for the course. Prerequisites: sophomore, junior or senior standing in any school or college.
Credit 3 units.
Students learn how to take into account the macroeconomic, strategies for the companies in which they invest. Additionally, capital firms as well as aid in the development of business strategies and tactics employed by private equity and venture management of start-up firms. Students learn of the fundamental of the issues of both operational management and investment students who complete the course gain a deep understanding of the complexity of both venture capital and entrepreneurship management and strategy. Students better understand the interpersonal dynamics between the relevant stakeholders, become proficient in the terminology of private equity investing, and learn how to create structure to unstructured problems, thus improving their ability for critical thinking. Participants are given the opportunity to apply their efforts beyond their basic functional business skills, and toward issues of relationship management and strategy. Required immersive experience to Herzliya, Israel in January. Prerequisites: B.S.B.A. Introduction to Entrepreneurship. Same as B63 550T
Credit 1.5 unit.

B53 MGT 450I International Internship in Business

The online course deepens the overall learning a student gains from an international internship. By completing structured assignments that relate to both the work completed during the internship and to elements of the broad-based Olin business curriculum, the value of the internship is markedly increased — for both students and employers. Internship in Business is a 1.5-credit pass/fail course for Olin Business School undergraduates. The course, credit and pass/fail grading are transcript notations, but the hours earned for MGT 450A do not count toward the 120 hours minimum needed for graduation. Prior to enrolling in this course, student must consult with and get approval from the Weston Career Center (WCC) to ensure the internship meets certain requirements.
Credit 1.5 unit.

B53 MGT 450C Venture Consulting

Students who complete the course gain a deep understanding of the issues of both operational management and investment management of start-up firms. Students learn of the fundamental strategies and tactics employed by private equity and venture capital firms as well as aid in the development of business strategies for the companies in which they invest. Additionally, students learn how to take into account the macroeconomic, political and cultural issues that affect start-up businesses that are both operating internationally and raising capital internationally. Furthermore, students learn of the subtleties in the complex relationship between the investment firm and the entrepreneur and understand both their shared and disparate motivations and objectives. Students who complete the course develop competency in the research and writing of professional consulting reports and gain a more sophisticated understanding of both venture capital and entrepreneurship management and strategy. Students better understand the interpersonal dynamics between the relevant stakeholders, become proficient in the terminology of private equity investing, and learn how to create structure to unstructured problems, thus improving their ability for critical thinking. Participants are given the opportunity to apply their efforts beyond their basic functional business skills, and toward issues of relationship management and strategy. Required immersive experience to Herzliya, Israel in January. Prerequisites: B.S.B.A. Introduction to Entrepreneurship. Same as B63 550T
Credit 3 units.

B53 MGT 450D Honors Thesis I: Research and Analysis

The Olin B.S.B.A. Honors Thesis challenges motivated students to move beyond traditional course work and apply critical thinking skills to an academic business thesis. Senior B.S.B.A. degree students in good standing with a cumulative grade point average of 3.70 or higher have the opportunity to develop an intensive research project, which extends far beyond the limits of the material in a single course during a single semester. In the two-semester honors thesis sequence, research and analysis are the foci of the first semester and, upon successful progress, the student writes, presents and defends the research in the subsequent semester. Prerequisites: senior standing and faculty permission.
Credit 3 units.

B53 MGT 450E Honors Thesis II: Writing and Presentation

The Olin B.S.B.A. Honors Thesis challenges motivated students to move beyond traditional course work and apply critical thinking skills to an academic business thesis. Senior B.S.B.A. degree students in good standing with a cumulative grade point average of 3.70 or higher have the opportunity to develop an intensive research project, which extends far beyond the limits of the material in a single course during a single semester. In the two-semester honors thesis sequence, research and analysis are the foci of the first semester and, upon successful progress, the student writes, presents and defends the research in the subsequent semester. Prerequisites: junior standing, B.S.B.A. or Entrepreneurship major recommended.
Credit 3 units.

B53 MGT 450A Internship in Business

This is an online course designed to deepen the overall learning you gain from an internship. By completing structured assignments that relate to both the work completed during the internship and to elements of the broad-based Olin business curriculum, the value of the internship is markedly increased — for both students and employers. Internship in Business is a 1.5-credit pass/fail course for Olin Business School undergraduates. The course, credit and pass/fail grading are transcript notations, but the hours earned for MGT 450A do not count toward the 120 hours minimum needed for graduation. Prior to enrolling in this course, student must consult with and get approval from the Weston Career Center (WCC) to ensure the internship meets certain requirements.
Credit 1.5 unit.

B53 MGT 450B Hatchery

In this course, two- to five-person student teams pursue their own business idea or support outside clients working on new ventures, including commercialization of early-stage scientific research and social opportunities. The academic deliverables vary with the maturity of the venture. Students involved with later-stage opportunities develop business plans, investor presentations and funding strategies. Students involved with early-stage opportunities complete one or more feasibility plans including value milestones supporting the commercialization path for new scientific discoveries. Early stage discoveries are typically provided by the Washington University Office of Technology Management. Students pursuing their own ideas must have their teams formed before the class begins. Students wishing to support outside entrepreneurs and scientific researchers must apply and be selected for those teams. Most of the work is done outside the classroom with the support of mentors, advisers and the instructor. Classes are held once per week for the first half of the semester. Workshops and rehearsals are required in the second part of the term. Students make final presentations to a panel of outside judges including venture capitalists, angel investors, entrepreneurs and people involved with early stage ventures. Prerequisite: junior standing, B.S.B.A. or Entrepreneurship major recommended.
Same as B63 524
Credit 3 units.

B53 MGT 450I International Internship in Business

The online course deepens the overall learning a student gains from an international internship. By completing structured assignments that relate to both the work completed during the internship and to elements of the broad-based Olin business curriculum, the value of the internship is markedly increased — for both students and employers. Internship in Business is a 1.5-credit pass/fail course for Olin Business School undergraduates. The course, credit and pass/fail grading are transcript notations, but the hours earned for MGT 450A do not count toward the 120 hours minimum needed for graduation. Prior to enrolling in this course, student must consult with and get approval from the Weston Career Center (WCC) to ensure the internship meets certain requirements.
Credit 1.5 unit.

B53 MGT 450C Venture Consulting

Students who complete the course gain a deep understanding of the issues of both operational management and investment management of start-up firms. Students learn of the fundamental strategies and tactics employed by private equity and venture capital firms as well as aid in the development of business strategies for the companies in which they invest. Additionally, students learn how to take into account the macroeconomic, political and cultural issues that affect start-up businesses that are both operating internationally and raising capital internationally. Furthermore, students learn of the subtleties in the complex relationship between the investment firm and the entrepreneur and understand both their shared and disparate motivations and objectives. Students who complete the course develop competency in the research and writing of professional consulting reports and gain a more sophisticated understanding of both venture capital and entrepreneurship management and strategy. Students better understand the interpersonal dynamics between the relevant stakeholders, become proficient in the terminology of private equity investing, and learn how to create structure to unstructured problems, thus improving their ability for critical thinking. Participants are given the opportunity to apply their efforts beyond their basic functional business skills, and toward issues of relationship management and strategy. Required immersive experience to Herzliya, Israel in January. Prerequisites: B.S.B.A. Introduction to Entrepreneurship. Same as B63 550T
Credit 3 units.
assignments that relate to both the work completed during the internship and to elements of the broad-based Olin business curriculum, the value of the internship increases markedly — for student and employers.

Credit 1.5 unit.

**B53 MGT 450L Ethics and Integrity in Law and Business**
This course examines complex ethical issues in contemporary business operations and decisions. Students learn to recognize ethical implications of business issues and develop models and decision techniques useful to analyzing and resolving problems.

Credit 3 units.

**B53 MGT 450R Business & Government: Understanding and Influencing the Regulatory Environment**
The United States as well as many of the world’s governments has entered a new episode with respect to the interaction of business and government. Now, more than ever, government regulations are attempting to spur job growth and the economy on one hand, but also is intruding into many aspects of business and the markets on the other hand. Business students must not only understand the shifting business government landscape, but also how to engage government officials and legislators to help shape policies that affect their firms and industries.

As an introductory course, student will learn from business and government leaders how to interact with and affect the processes of regulation.

Credit 1.5 unit.

**B53 MGT 450T Strategy and Social Responsibility**
In the modern world, large corporations have come to dominate many parts of economic life. Managers in large corporations face a challenging set of trade-offs about (1) how to balance value creation for present and future generations and (2) how to coordinate the distribution of this value among shareholders, customers, suppliers, employees and the communities in which they operate. The supremacy of shareholders among these constituencies has led some groups to fear that they will be exploited when shareholders’ interest conflict with their own.

In this course, we examine different perspectives on the role of corporate self-interest, changing social values, NGOs and government regulation in addressing this apparent conflict. In particular, the course examines how pro-social business practices affect the relationships between for-profit corporations and customers, employees, suppliers, investors, regulators and non-governmental organizations. We explore how these practices can be integrated into a firm’s operating strategy, and how they can be employed to enhance a firm’s competitive position.

Credit 1.5 unit.

**B53 MGT 450Z European Study Tour**
Individual and team research, writing, presentation and participation in Olin’s European Study Tour (EST), including Mock Parliament. Includes required attendance and expected professional contributions to all EST corporate and government visits and briefings and other EST individual and group activities.

Credit 1.5 unit.

**B53 MGT 490 Honors Seminar I**
The first of a two-course honors seminar. Students have the opportunity to investigate current issues in business utilizing an interdisciplinary approach to their research. Course content of the seminar varies from year to year. Prerequisites: senior standing and faculty invitation.

Credit 3 units.

**B53 MGT 491 Honors Seminar II**
The second of a two-course honors seminar. Students have the opportunity to investigate current issues in business utilizing an interdisciplinary approach to their research. Course content of the seminar varies from year to year. Prerequisite: MGT 490.

Credit 3 units.

**Managerial Economics**

**B54 MEC 290 Microeconomics**
Provides a foundation to the analysis of optimal decisions by firms, namely how to make decisions about how much to produce, how to produce it, how to price it and how these decisions are affected by demand, cost, the number and behavior of firms in the industry, the information the firm possesses, and the legal environment. Prerequisite: Math 127 or 131.

Credit 3 units. EN : S

**B54 MEC 292 Global Economy**
Introduces the fundamentals of international economic analysis. Provides an economic foundation to the analysis of business decisions and strategies in the global setting. Topics include: introduction to the global economy; comparative advantage as the basis for international trade and sources of comparative advantage; economies of scale and imperfect competition as the basis for international trade; tariffs and other instruments of trade policy; political, legal and institutional factors influencing international trade; balance of payments; exchange rates and the foreign exchange market; international capital flows; national competitive advantage and industrial policies; global economic competition and business strategy. Prerequisites: MEC 290 or Econ 1011 and QBA 120.

Credit 3 units. BU : IS EN : S

**B54 MEC 370 Game Theory for Business**
Provides students with a methodological framework to analyze strategic business situations. Building on a background in microeconomics and statistics, this course includes such topics as the following: modeling strategic problems, games with sequential moves, games with simultaneous moves, strategies and the derivation of strategic forms, general classes of games, uncertainty and information, strategy and voting, auctions, bargaining. Prerequisite: MEC 290.

Credit 3 units. EN : S

B54 MEC 380 Competitive Industry Analysis
Uses economics and game theory to analyze strategy and industry dynamics. Focus is split between evaluating the competitive environment within industries and developing competitive strategies that are responsive to specific competitive forces facing individuals or firms. Topics typically covered include models of price and quantity competition, barriers to entry, commitment strategies and credible threats, product differentiation, vertical integration, research and development, and patenting strategies. Prerequisite: MEC 470.

Credit 3 units.

B54 MEC 470 Market Competition and Value Appropriation
Provides students with frameworks and capabilities for making intelligent decisions in evolving markets. Course begins with general game theory concepts, which form the basis for two main topics: models of competition in markets and value appropriation. Students learn the basic framework and apply it in the context of a detailed industry study. Specific topics may include firm interactions in stable and evolving market environments, industry life cycles, the evolution of new product markets, and strategic decision-making in developing markets. Prerequisite: MEC 370.

Credit 3 units.

B54 MEC 471 Empirical Techniques for Industry Analysis
Students learn how to use data to answer a wide variety of questions regarding the incentives and behavior that generate market activity. We emphasize inference about the strategic decisions of firms and consumers. Students are introduced to new statistical and econometric tools by examining the application of these tools to current research in economics. Among the topics considered are the empirical implications of: strategic bidding in auctions, price discrimination and dispersion, differences across products, and the internal organization of firms. Prerequisite: MEC 470.

Credit 3 units.

B54 MEC 494 Business and the Environment
To sensitize business students to a broad range of environmental issues they may address as future managers; to widen the scope of the students analytical and problem-solving portfolio through the introduction of environmental considerations to the decision-making process; and to develop an economic framework that serves as a foundation for additional management research on the relationship between environmental issues and their impact on the functional areas of business, including production, accounting, auditing, finance, real estate, marketing, business and public policy, and organizational behavior. Prerequisite: junior standing or permission of instructor.

Same as Econ 451

Credit 3 units. A&S : SS A&S : IQ, SSC BU : BA, ETH FA : SSP

Marketing

B55 MKT 370 Principles of Marketing
Introduces the fundamental principles of marketing management: analyzing market opportunities; segmenting markets; selecting target markets and positioning. Developing and managing the marketing mix (product, price, distribution and promotion) within the context of the marketing environment (customers, competitors and the external environment). Prerequisites: MEC 290 or Econ 1011 and Math 127 or higher level of calculus.

Credit 3 units. EN : S

B55 MKT 373 Retail Management
Explores the fundamental factors that are critical to the success of most retailers: merchandising; store design and display; personal selling; advertising and promotion; pricing; and location. The class studies a wide variety of retailers — department stores, specialty stores, wholesale clubs, direct marketers, franchisers, food retailers, discounters and others. Through case methodology, the class studies the role that managers play in problem solving and development of strategies. Topics include: pricing strategy; and entrepreneurial retailing. Prerequisite: MKT 370.

Credit 3 units.

B55 MKT 377 Consumer Behavior
Psychological, sociological and social psychological principles as they apply to consumer response to product offerings, media communications, personal influence and other environmental factors. Consumer buying behavior is analyzed from theoretical, empirical and applied perspectives. Current applications of concepts employed by marketers are discussed in the context of both consumer and industrial marketing situations. Prerequisite: MKT 370.

Credit 3 units. EN : S

B55 MKT 400E Sales Management and Personal Selling
This course provides students with a thorough understanding of the sales function in a managerial context as well as the
process of selling from prospecting through solution selling and account maintenance. Specific topics addressed include sales force structure, salesperson selection, evaluation and compensation. Students study sales technique, strategic selling and key account management. Prerequisites: MKT 370, FIN 340, ACCT 2610, OSCM 356, MEC 290, OB 360 and QBA 120. Credit 3 units.

**B55 MKT 470E Pricing**
The environment of pricing decisions and common analytical techniques used by firms in making pricing decisions are studied. Critical-thinking skills and problem-solving skills emphasized. Topics: market structure analysis, contribution analysis, product life cycles, product line decisions, pricing in marketing channels, and transfer pricing. Prerequisites: MKT 370, QBA 120 and 121 or concurrent enrollment in QBA 121. Credit 3 units.

**B55 MKT 473 Marketing Research**
The four P's of marketing are product, place, price and promotion. Using these decision variables, firms seek to maximize profits. Making these decisions requires market information. Marketing research is the process of actively collecting, assimilating and analyzing market information to support management decision making. Teaches the nuts and bolts of market research. Prerequisites: MKT 370, QBA 120 or concurrent enrollment in QBA 121. Credit 3 units.

**B55 MKT 476 Advanced Retail Topics**
Focuses on current important issues facing retailers. Students form four- to six-person teams to identify a relevant topic, to outline a project proposal identifying its scope and methodology, and to present both a written and oral presentation of their findings and recommendations. Course relies on cases, company and industry data, and field trips. Prerequisite: MKT 373. Credit 3 units.

**B55 MKT 477 International Marketing**
Addresses three fundamental decisions confronting a company whose operations extend beyond the domestic market: (1) choosing which foreign markets to penetrate; (2) determining the mode of market entry; and (3) devising the international marketing plan. Topics include: global marketing planning; environmental and cultural influences on international marketing decisions; organizational and control issues in international marketing decisions; global marketing intelligence; foreign risk and feasibility studies; and issues of ethics in other countries. Prerequisite: MKT 370. Credit 3 units. BU : IS EN : S

**B55 MKT 478 New Product Management**
In this course we study the complete process of new product/service development and management. We examine approaches to analyzing competitive position and identifying new product/service opportunities, the generation and screening of potential new product/service ideas, concept testing and product/service design tools, pre-test and test marketing, and post-launch management. Potential marketing and product managers, marketing research analysts, consultants and entrepreneurs find this hands-on, application-oriented course to be of value in their future careers. Prerequisites: concurrent enrollment in MKT 473 and senior standing. Credit 3 units.

**B55 MKT 480 Marketing Strategy**
Focus is on the role of marketing strategy in the success of the firm and on the formulation of successful marketing strategy. Prerequisites: MKT 370, MKT 473, two additional marketing courses or completion of MKT 473, one additional marketing elective and concurrent enrollment in a third marketing course. Credit 3 units.

**B55 MKT 481 Integrated Marketing Communication**
This course focuses is on an Integrated Marketing Communications (IMC) approach to advertising and other forms of commercial communications. The purpose is to provide future managers and practitioners with a foundation in communications theory, based on understanding the target’s role in the demand chain for goods and services, as well as hands-on experience in developing marketing communications plans. A practical understanding is provided of each of the range of marketing communications vehicles: consumer and business-to-business advertising, sales promotion/incentives, direct marketing, public relations, events and sponsorships, as well as online/interactive communications. Copy strategy, creative development, media planning, promotion strategy and the evaluation of these programs are all addressed in this course. Industry experts give guest lectures. We have four companies in different industry sectors for which the class develops marketing communications plans during the course. Prerequisite: MKT 370. Credit 3 units.

**Operations and Supply Chain Management**

**B58 OSCM 230 Management Science**
Introduces concepts, methods and applications of management science. Develops a more disciplined thinking process for approaching management situations by constructing, understanding and using models both in other courses and on the job. Prerequisites: QBA 120 and MEC 290 or Econ 1011. Credit 3 units.
B58 OSCM 356 Operations Management
Introduces a variety of common operations issues that are frequently dealt with in both manufacturing and service industries and that affect other functions of the business. Specific topics include: inventory systems; process design and control; quality; facility location and layout; and forecasting. Prerequisites: ACCT 2610, MEC 290 and completion or concurrent enrollment in OSCM 230. Credit 3 units.

B58 OSCM 458 Operations Planning and Control
Examines the concepts and techniques essential for effective operations planning, scheduling and control in various manufacturing and service organizations. Discusses the use of various models for inventory control, forecasting, production planning and operations scheduling. Just-in-time techniques and material requirements planning systems also are discussed. Prerequisite: OSCM 356. Credit 3 units.

Organizational Behavior

B66 OB 360 Organization Behavior Within the Firm
Provides a toolbox of analytical and interpersonal skills that are necessary to be an effective manager. Learn how these skills can have a significant impact on profitability. Objectives: (1) understanding research conclusions through explaining the dimensions of individual differences and how they impact motivation, job satisfaction and ultimately organizational effectiveness; explaining group dynamics and how they determine effectiveness; identifying organizational implications of research; evaluating organizational structure and job design; evaluating organizational culture and identify methods of culture management; and identifying the steps and roadblocks in the process of organizational change;(2) developing management skills by writing effective reports to senior management that analyze individual, group and organizational effectiveness in actual organizations; and applying your understanding of individual, group and organizational dynamics to improve your team’s effectiveness on group projects. Prerequisite: MGT 100 or sophomore standing. Credit 3 units.

B66 OB 461 Negotiation
Skillful negotiation is an important aspect of management. Designed to improve a student’s skills in analyzing and conducting negotiations in a variety of settings. Topics include two-party bargaining, multiparty bargaining, arbitration and coalition formation. Prerequisite: OB 360. Credit 3 units.

B66 OB 462 Leadership in Organizations

Quantitative Business Analysis

B59 QBA 120 Managerial Statistics I
The first of a two-course sequence in introductory statistics. Approximately one-half of the course is devoted to probability: basic ideas, univariate and joint distributions, and expected values and moments. This work is followed by an introduction to the topics of sampling, sample statistics and sampling distributions. The sampling theory topics of estimation and hypothesis testing are covered. Prerequisite: completion or concurrent enrollment in Math 128 or Math 132. Credit 3 units.

B59 QBA 121 Managerial Statistics II
The second of a two-course sequence in introductory statistics. The course is devoted to the use of linear regression models, ways to deal with its problems (such as collinearity, serial correlation and heteroskedasticity) and time series regression and forecasting. There are quizzes and group projects in addition to a midterm and final. Prerequisites: QBA 120 or approved equivalent; Math 128/132; and MEC 290 or Econ 1011. Credit 3 units.

Degree Requirements

B.S.B.A. Degree Requirements
The Bachelor of Science in Business Administration degree is awarded to you by recommendation of the faculty. Standards established by the faculty for recommendation are:

1. Satisfactory completion of requirements regarding required and elective courses, accumulation of a minimum of 120 units of course work and satisfactory fulfillment of other requirements established in accordance with the rules and regulations of the Olin Business School.
2. Completion of the last 30 units in residence at Washington University for entering freshmen. Transfer students must complete a minimum of 60 units in residence at Washington University.

**General Requirements (a minimum of 48 units)**

This course work must be taken outside the Olin Business School to satisfy these degree requirements.

**A. Writing I (3 units):** You must demonstrate proficiency in reading and writing the English language by satisfactorily completing E Comp 100 with a grade of C+ or better.

**B. Calculus (3–6 units):** You must complete Math 131–132 or other calculus courses approved by the Olin Business School.

**C. Distribution Requirements (18 units):** You must complete 3 units of physical and life sciences, 3 units of humanities, 6 units of international studies, 3 units of behavioral analysis and 3 units of ethics and values. Approved course selections are available in the University’s [Course Listings](#). Certain business courses may satisfy these distribution requirements; if taken, the units also will count toward the professional electives requirement.

**D. Advanced Electives (18 units):** You must complete at least 18 graded units of advanced general education course work (300 level or above). Advanced electives are defined as any nonbusiness course numbered 300 or above, excluding University College courses. Advanced electives may also satisfy a distribution requirement.

**E. General Electives:** All remaining units must be completed from other divisions of the university.

**Professional Requirements (a minimum of 55.5 units)**

**A. Core Requirements (43.5 units):**

- ACCT 2610 Principles of Financial Accounting
- ACCT 2620 Principles of Managerial Accounting
- FIN 340 Capital Markets and Financial Management
- MEC 290 Microeconomics
- MEC 292 Global Economy or Econ 1021 Introduction to Macroeconomics
- MGT 100 Individual in a Managerial Environment*
- MGT 150A Olin Experience Program
- MGT 150B Olin Experience Program
- MGT 201 Management Communication
- MGT 250A Building Your Career Foundation: Techniques and Strategies
- MKT 370 Principles of Marketing
- OB 360 Organization Behavior Within the Firm
- OSCM 230 Management Science
- OSCM 356 Operations Management
- QBA 120 Managerial Statistics I
- QBA 121 Managerial Statistics II

*Transfer students entering Olin must take one of the following: MGT 100, MGT 380 or MEC 380 to satisfy this requirement.

**Professional Electives (a minimum of 12 units)**

Professional electives are nonrequired business courses offered by the Olin Business School that may or may not lead toward a specific business major. Additional information about the specific requirements for each business major is available on our Majors (p. 722) page.

**Electives (16.5 units)**

To ensure that your educational requirements are fulfilled, electives should be chosen in consultation with your academic adviser.

**Typical Four-Year Curriculum for a B.S.B.A. Student**

Typically, students must earn 30 units a year to stay on target with a four-year graduation plan.

<table>
<thead>
<tr>
<th>Fall Year</th>
<th>Units</th>
<th>Spring Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management 100</td>
<td>3</td>
<td>Managerial Economics 290</td>
</tr>
<tr>
<td>Math 131 or higher*</td>
<td>3</td>
<td>Accounting 2610</td>
</tr>
<tr>
<td>English Composition**</td>
<td>3</td>
<td>Math 132 or elective***</td>
</tr>
<tr>
<td>Management 150A</td>
<td>1.5</td>
<td>Management 150B</td>
</tr>
<tr>
<td>Electives</td>
<td>3–6</td>
<td>Electives</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sophomore Year</th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Quantitative Business Analysis 120</td>
<td>3</td>
<td>Quantitative Business Analysis 121</td>
</tr>
<tr>
<td>Management 250A</td>
<td>1.5</td>
<td>Core requirement(s)</td>
</tr>
<tr>
<td>Core requirement(s)</td>
<td>3–6</td>
<td>Electives</td>
</tr>
</tbody>
</table>
Electives****  6–9

**Junior Year**

<table>
<thead>
<tr>
<th>Core/Professional requirements</th>
<th>Electives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core/Professional requirements</td>
<td>6–12</td>
</tr>
<tr>
<td>Electives</td>
<td>3–9</td>
</tr>
</tbody>
</table>

**Senior Year**

<table>
<thead>
<tr>
<th>Professional electives</th>
<th>Electives</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>9</td>
</tr>
</tbody>
</table>

* Students may enroll in a higher level of calculus providing their academic preparation suggests a different level of calculus.

** B.S.B.A. students are assigned to enroll in their E Comp course in either fall or spring semester of their freshman year. Some students may start at a different level of English preparation and may take their E Comp course as late as sophomore year.

*** Students who completed Math 132 in the fall semester have the option to take either QBA 120 or a general elective.

**** Students may take either one more business course or complete general requirements.

### Additional Requirements

A. You must complete a minimum of 120 units including 48 units of general education course work and 55.5 professional course work. Students who substitute a nonbusiness course for a business requirement still will be required to enroll in another business course as a minimum of 55.5 credits must be earned in Olin.

B. You must earn a minimum of 2.0 overall grade point average (GPA) and 2.0 GPA in all professional course work taken at Olin.

C. You must earn the final 30 units (60 units for an external transfer) toward the degree at Washington University.

D. You must be recommended by the Olin Business faculty for degree confirmation by the Board of Trustees.

### Regulations

A. A maximum of 15 units of pre-matriculation credit may be counted toward graduation. Pre-matriculation sources include Advanced Placement (AP), International Baccalaureate (IB), British Advanced (A) Levels and college courses taken after the junior year in high school. These units will count toward the 120 credits but will not satisfy any general education requirements.

B. B.S.B.A. students may earn a maximum of two majors to include two professional majors or one professional major and one major outside of Olin.

C. B.S.B.A. students may earn one or two minors outside of Olin, depending on the number of majors you pursue. The options are two majors and one minor or one major and two minors.

D. Distribution requirements and advanced general electives (18 credits) must be taken for a grade unless a student is an approved internal transfer who completed a distribution/advanced course on a Pass/Fail basis prior to transferring to Olin.

E. All business courses must be taken for a grade with the exception of Mgt 450A.

F. B.S.B.A. students may enroll in one physical education course per semester.

G. B.S.B.A. students may enroll in one pass/fail course each semester. These credits will count only as general education electives.

H. Students are obligated to requirements and policies at the time of matriculation into the B.S.B.A. Program. However, faculty has and reserves the right to make changes to degree requirements, policies and procedures, including modifying or adding new requirements, policies and procedures at any time.

### Academic Honors & Awards

#### Scholars in Business Program:
The Scholars in Business program allows alumni, corporations and friends of Olin to provide scholarship funds to students of high academic promise who require financial support to attend the university. Students are considered for this award when they apply for financial aid in the fall of each year. Donors and students meet each other at the annual Scholars in Business dinner.

#### Dean’s List:
Dean’s List honors are awarded to undergraduates who have completed a minimum of 12 graded units and achieved a semester grade point average of 3.6 or above. No incomplete or “N” grades may be outstanding as part of your semester record.

#### Beta Gamma Sigma Honor Society:
The top 7 percent of the junior class and the top 10 percent of the senior class are eligible for invitation to Beta Gamma Sigma, the national business society. You must have completed a minimum of 30 units at Washington University to be eligible.

#### Latin Honors:
Graduating seniors in the top 5 percent of the class, based on overall university academic records, graduate *summa cum laude*. Seniors in the top 6 to 15 percent of the class graduate *magna cum laude*. These designations are recorded on the official university transcripts. All candidates for the B.S.B.A. degree in August, December or May will be considered as one group for purposes of final honors. Honors are determined in May for all graduates.

#### Honors in Management:
The Honors in Management (HIM) Seminar is a two-semester sequence course that gives students
the opportunity to work with senior-level faculty in a specialized format. In the fall semester, the HIM course will be team taught with various faculty members. For the spring semester, students will form teams to develop substantial research projects under the direction of one of the participating faculty for the remainder of the academic year. Students are expected to present their research at the Center for Research in Economics and Strategy (CRES) Conference in late April. HIM students also must have a total of 126 credits of academic work (including Mgt 490 and 491) in order to receive the Honors in Management designation at graduation.

Honors Thesis: The Olin B.S.B.A. Honors Thesis challenges students to move beyond traditional course work and apply critical thinking skills to an academic business thesis. The Honors Thesis is a two-semester sequence in which the student engages in research and analysis in the first semester and upon successful progress, the student writes, presents and defends his or her research in the subsequent semester. Students must apply and be approved to participate in this experience. All applicants must be senior B.S.B.A. degree students in good standing with a cumulative GPA of 3.7.

Academic Regulations

Attendance

Olin Business School allows each instructor of a course to decide how many absences you may have and still pass the course. The Olin Business School expects faculty to give reasonable consideration to unavoidable absences and to the feasibility of making up work that has been missed. You are expected to explain to your instructors the reasons for any absences and to discuss with them the possibility of making up missed assignments.

Enrollment

B.S.B.A. students must be enrolled in a minimum of 12 units to a maximum number of 21 units each semester. Olin undergraduates will be assessed a full-time tuition charge for their course of study through eight semesters of enrollment.

Units and Grades

A unit is a measure of quantity given for one hour of lecture or recitation course a week for one semester. A grade point is a measure of the quality of work done in the course. The Olin Business School employs the following grading system in evaluating student performance:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points Per Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0</td>
</tr>
<tr>
<td>A–</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Honors Thesis: The Olin B.S.B.A. Honors Thesis challenges students to move beyond traditional course work and apply critical thinking skills to an academic business thesis. The Honors Thesis is a two-semester sequence in which the student engages in research and analysis in the first semester and upon successful progress, the student writes, presents and defends his or her research in the subsequent semester. Students must apply and be approved to participate in this experience. All applicants must be senior B.S.B.A. degree students in good standing with a cumulative GPA of 3.7.

Academic Regulations

Attendance

Olin Business School allows each instructor of a course to decide how many absences you may have and still pass the course. The Olin Business School expects faculty to give reasonable consideration to unavoidable absences and to the feasibility of making up work that has been missed. You are expected to explain to your instructors the reasons for any absences and to discuss with them the possibility of making up missed assignments.

Enrollment

B.S.B.A. students must be enrolled in a minimum of 12 units to a maximum number of 21 units each semester. Olin undergraduates will be assessed a full-time tuition charge for their course of study through eight semesters of enrollment.

Units and Grades

A unit is a measure of quantity given for one hour of lecture or recitation course a week for one semester. A grade point is a measure of the quality of work done in the course. The Olin Business School employs the following grading system in evaluating student performance:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points Per Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0</td>
</tr>
<tr>
<td>A–</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Honors Thesis: The Olin B.S.B.A. Honors Thesis challenges students to move beyond traditional course work and apply critical thinking skills to an academic business thesis. The Honors Thesis is a two-semester sequence in which the student engages in research and analysis in the first semester and upon successful progress, the student writes, presents and defends his or her research in the subsequent semester. Students must apply and be approved to participate in this experience. All applicants must be senior B.S.B.A. degree students in good standing with a cumulative GPA of 3.7.

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nonbusiness courses in subject areas with which you may have little familiarity.

**Minimum and Maximum Course Loads**

In Olin, business students are required to enroll in a minimum of 12 units to a maximum of 21 units each semester here at Washington University. A minimum 2.0 grade point average in all course work taken at the university and a 2.0 in all professional course work taken at Olin must be achieved to satisfy B.S.B.A. graduation requirements.

**Repeating a Course**

You may retake a course if a higher grade is required or desired. The initial grade received in the course remains on your record, along with an R to indicate that the course was repeated. Credit is given only once for taking the course, and only the higher grade is used in computing your grade point average.

**Academic Probation and Suspension**

Approximately three weeks following the end of a semester, the Academic Review Committee reviews the record of each enrolled student. Students must attain and maintain a minimum 2.0 grade point average in professional (business) and general courses to be in “good academic standing.” Failure to achieve minimum standards may result in the student being placed on academic probation or becoming ineligible for future registration in the Olin Business School. Failure on the part of a student to meet the conditions of probation in the following semester may result in dismissal from the school.

Another cause for probationary action or dismissal is failure on the part of a student to complete professional requirements within a reasonable time period. Students who fall behind in completing requirements should make an appointment to see their primary adviser to work out a plan for making up the work at the earliest possible time. Registration is restricted to a maximum of 15 credits for students on academic probation.

**Leave of Absence Process**

If you are considering a leave of absence from the university, you should contact your academic adviser as soon as possible to discuss your situation. If you are considering a medical leave of absence, you should first contact Student Health Services to initiate this leave. In either case, you must complete the Leave of Absence form and submit it to your academic adviser for approval.

**Transfer Credit**

Students who are enrolled at Olin and wish to receive transfer credit for course work subsequently taken at another institution must receive approval from their adviser prior to the time the course is to be taken. General guidelines are as follows:

- The institution must meet accreditation requirements.
- No course work may be taken at a two-year institution after a student has accumulated 60 credit hours of work.
- Credit will not be given for course work taken at another institution during a student’s last 30 credit hours.
- A catalog description for each course must be submitted with the petition for review.

As a general rule, Olin encourages that all required business courses and professional electives be taken at Washington University. Under certain circumstances, permission may be granted for a student to take a business course from another university with accreditation by AACSBI–International (Association to Advance Collegiate Schools of Business). In order for consideration to be given, a syllabus showing text used must be submitted.

No transfer credit will be accepted with less than a “C” grade.

**University College Courses**

You may enroll in one University College course per semester providing your academic adviser has approved this course prior to registration. University College course work may only count as a general nonprofessional elective. Business, foreign language, Comm 220 and Comm 351 and any day division equivalent course may not be taken through University College. Students may enroll in a real estate course, but these units will not count toward the 120 units needed for the B.S.B.A. degree.

**Pre-matriculation Units**

Pre-matriculation units are earned before your enrollment at Washington University as a first-year student. These units would include Advanced Placement (AP) examinations, International Baccalaureate (IB), British Advanced (A) Levels and college credit earned after your junior year in high school. These units will be noted on your transcript. Effective with the B.S.B.A. Class of 2015, the maximum number of pre-matriculation units awarded is 15. These pre-matriculation credits will transfer as general elective course work and will not satisfy any distribution requirement.

**Administration**

Mahendra R. Gupta, PhD
Dean

Nicholas S. Argyres, PhD
Senior Associate Dean — Faculty

Mark J. Brostoff, MHA
Associate Dean and Director, Weston Career Center

Jeff Cannon, MA
Business

Associate Dean and Director, Undergraduate Programs
Paula A. Crews, MBA
Associate Dean and Director, Marketing and Communications
Joseph P. Fox, MBA
Associate Dean, M.B.A. Programs
Kay Henry, MA
Associate Dean and Director, Executive M.B.A. Programs
Gary M. Hochberg, PhD
Director, Specialized Masters Programs
Ronald R. King, PhD
Senior Associate Dean — Programs
Panos Kouvelis, PhD
Senior Associate Dean, Director of Executive Education and Director of the Boeing Center for Technology and Information Management
Anjan Thakor, PhD
Director of the Ph.D. Program, Director of the Institute for Innovation and Growth and Director of the Center for Finance and Accounting Research
Ronald Allen, MBA, MLS
Asa F. Seay Librarian
Charles A. Balsamo, MBA
Director of Information Services
Brian T. Bannister, MBA
Associate Dean of Administration
Kenneth A. Harrington, MBA
Director of the Skandalakis Center for Entrepreneurial Studies
Konstance P. Henning, BS
Associate Director for Academic and Student Services
Dorothy D. Kittner, MBA
Assistant Dean and Director of Corporate Relations
Paige E. LaRose, JD
Associate Director for Academic and Student Services
Steven J. Malter, PhD
Assistant Dean for Student Development and Strategic Initiatives
Karen J. Margo, MBA
Executive Director of Development
Glenn MacDonald, PhD
Director of the Center for Research in Economics and Strategy
Cynthia Newell, MA
B.S.B.A. Registrar
Tamara J. Orahood, MA
Director of International Programs and Global Initiatives
Slique Sen, MA
Associate Director for Academic and Student Services

Lanna K. Skadden, MS
Assistant Dean and Director of Academic and Student Services

Majors
Below is a list of majors offered by the Olin Business School. Click the link to view more information about a specific major.

- Accounting (p. 722)
- Economics and Strategy (p. 722)
- Entrepreneurship (p. 722)
- Finance (p. 722)
- Healthcare Management (p. 722)
- International Business* (p. 722)
- Marketing (p. 722)
- Operations and Supply Chain Management (p. 722)

Minors
Non-B.S.B.A. students are eligible to pursue a minor in one of the specific fields of business listed below:

- Accounting (p. 722)
- Entrepreneurship (p. 722)
- Finance (p. 722)
- General Business (p. 722)
- Health Care Management (p. 722)
- Leadership (p. 722)
- Managerial Economics (p. 722)
- Marketing (p. 722)
- Operations Supply Chain Management (p. 722)
- Strategy (p. 722)
School of Engineering & Applied Science

Mission Statement

The mission of the School of Engineering & Applied Science at Washington University is to serve society as a center for learning in engineering, science, and technology. It is our duty to disseminate and create knowledge through teaching, research, publications, and the transfer of important ideas and research into the development of new products and technologies. We strive to provide an environment that nurtures critical thinking and the education of innovators and leaders for the future.

Undergraduate Degree Programs

The School of Engineering & Applied Science offers four-year, full-time programs of instruction leading to several professional Bachelor of Science degrees. Bachelor of Science degrees are available in the fields of biomedical engineering, chemical engineering, computer engineering, computer science, electrical engineering, mechanical engineering, and systems science and engineering.

If you are not preparing for a professional engineering career but are interested in an academic program broadly based on the engineering sciences, the School of Engineering & Applied Science offers the Bachelor of Science (B.S.) Major in Applied Science degree with several options including Chemical, Computer Science, and Electrical and Systems Engineering. These degree options provide more flexibility for students who do not intend to become licensed engineers and want to select their course work according to their personal educational objectives. For example, some students use this flexibility to gain technical background and training while pursuing or preparing for professional training in medicine, business or law. However, although the flexibility exists to do so, it is not necessary to combine an Applied Science degree program with another major or degree. Students also can use this added flexibility to achieve a well-rounded undergraduate education by selecting courses from across the university while pursuing a major in the School of Engineering & Applied Science or to deepen their understanding in their chosen major.

B.S. in Engineering (Individually Designed Major)

Many of the most interesting and developing areas of engineering and applied science do not fit within a single undergraduate major. Students can create an Individually Designed Major (IDM) under the direction of a faculty adviser. Sample IDMs include biomedical informatics, imaging, energy engineering, robotics, computer graphics, and more.

The requirements to be admitted to an IDM are more stringent than those for our other engineering degree programs, and the IDM will not be available to students when they first enter WU (so it will not be listed on the admissions application as an option).

Students applying for an IDM should:

• have already completed at least one semester at WU.
• apply before the beginning of their junior year.
• have at least a 3.5 GPA at WU and maintain good standing in the School of Engineering.
• find an Engineering faculty member who will agree to serve as that student’s IDM adviser. The student and adviser will design a plan of study, which lists the courses that must be successfully completed to earn the IDM. That plan must include at least 42 engineering units of credit.
• satisfy all other general engineering degree requirements (p. 756).
• the students and adviser will present the plan to a standing engineering committee (normally, the Engineering Curriculum Committee), which will then assess the proposed plan and will approve or deny the request.

Combined Majors and/or Multiple Degrees

Multiple Majors in Engineering

All undergraduate divisions at Washington University allow students to pursue majors and degrees in more than one division. The following options are available:

Second degrees. A student in any undergraduate division of the university may be allowed by another division to pursue a second bachelor’s degree. For this, the student must satisfactorily complete all of the degree requirements for BOTH degrees in order to earn two diplomas. These requirements may include a “residency” requirement. For engineering majors, this residency requirement is stated on the Engineering Degree Requirements page. In addition, the College of Arts & Sciences requires any student earning an A.B. degree and a bachelor’s degree from another division to earn a minimum of 150 total units. Other divisions do not have this requirement. If the additional residency and units requirement for a second degree are incompatible with a student’s plan, then the student should consider a second major as a more convenient and equally viable alternative.

Second majors. A student pursuing a bachelor’s degree in engineering also may pursue second majors offered by all undergraduate divisions. There are three second majors offered by the School of Engineering & Applied Science: Computer Science, Electrical Engineering Science, and Systems Science. In addition, there are second majors offered by the College of Arts & Sciences, School of Business and College of Architecture.
Students may declare a second major online via WebSTAC until they have filed an intent to graduate (usually in first semester of senior year). Upon completion of the requirements, the student’s transcript will show an engineering degree and all earned second majors. Only one diploma is granted, and no reference to the second major is noted on the diploma.

**Minors.** Undergraduate students are allowed to pursue minors offered by any undergraduate division of the university. A minor usually requires five to six courses. The minor program’s home division sets the requirements for admission and completion of the minor program. Students may declare a minor online via WebSTAC until they have filed an intent to graduate (usually in first semester of senior year). An engineering student who completes all of the requirements will have the award of the minor noted on the official transcript, but no reference of the minor is noted on the diploma.

**Residency Rule for Engineering Minors:** No more than 6 units of credit transferred from another institution (outside Washington University) can be used to meet the requirements of any minor offered by the School of Engineering & Applied Science. The remaining units (up to the amount required for the minor) must be applicable units from Washington University. The review committee that oversees a minor has the authority to establish a more stringent residency rule.

**Special Combined Programs**

**Process Control Systems**

The Department of Energy, Environmental and Chemical Engineering and the Department of Electrical and Systems Engineering jointly sponsor a double-degree program in process control systems. Undergraduate degrees are earned in both Chemical Engineering and in Systems Science and Engineering.

The emphasis in this course of study is on the science and technology of process automation with a solid traditional foundation in the two major disciplines. Graduates of the program can contribute, through automation, to improved product quality, reduced manufacturing costs, greater capital productivity and improved safety and environmental quality.

**B.S./Master’s Program in Engineering**

This program provides undergraduate engineering students with the opportunity to plan a coordinated five-year program of studies in the School of Engineering & Applied Science leading to both the bachelor’s and master’s degrees. The program requires at least 150 units and normally takes five years to complete. With departmental approval, up to 6 units completed at the School of Engineering & Applied Science for the master’s degree may be used to count toward the engineering undergraduate degree; however, at least 150 applicable degree units must still be completed. The degrees available to students are the traditional engineering master’s degrees offered by the School of Engineering & Applied Science and do not include interdisciplinary graduate degrees with other schools on campus.

The program is open to students who have at least 3.0 cumulative GPAs; some departments may require higher minimum cumulative GPAs. Students must apply no later than September 1 of their senior year. Approval by the department and the dean’s office is required.

Undergraduate financial support is not extended for the additional semesters to complete the master’s degree requirements. Students are classified as graduate students in their final year of study. Their tuition charges are at the graduate student rate.

**When to earn the B.S. degree**

Students can choose to earn their B.S. degrees at the end of their senior year or they may instead choose to defer earning their B.S. until they also complete their master’s degree. The latter option may have financial advantages for students who do not want to earn their B.S. degrees early due to financial aid issues. For example, loan interest may accrue once an undergraduate degree has been earned, depending on the type and terms of the undergraduate student loan. Students should check with Student Financial Services if they have questions or concerns. NOTE: If a student does opt to earn the B.S. degree prior to completing the master’s degree, it will not restrict the student from receiving the merit-based scholarship support described below.

**Scholarship support**

Scholarship support for the final year of study (the master’s year of study) is automatically awarded to students who are admitted into the program. For a student who began as a freshman at Washington University, this typically would be in the student’s fifth year of study. Any scholarship support given is based upon a student’s Major GPA that is computed at the end of the student’s junior year. The major GPA is found on DARS.

Students may apply during their junior year. Admission offers will begin on September 1 of the senior year, and the major GPA at the end of the junior year will be used to determine the amount of scholarship support awarded. Award amounts vary and are granted on a graduated scale as shown below.

<table>
<thead>
<tr>
<th>Major GPA after junior year</th>
<th>Scholarship Support Given in the Final Master’s Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.75-4.00</td>
<td>50% of tuition</td>
</tr>
<tr>
<td>3.65-3.74</td>
<td>45% of tuition</td>
</tr>
<tr>
<td>3.55-3.64</td>
<td>40% of tuition</td>
</tr>
<tr>
<td>3.45-3.54</td>
<td>35% of tuition</td>
</tr>
<tr>
<td>3.35-3.44</td>
<td>30% of tuition</td>
</tr>
<tr>
<td>3.25-3.34</td>
<td>25% of tuition</td>
</tr>
<tr>
<td>3.15-3.24</td>
<td>20% of tuition</td>
</tr>
</tbody>
</table>
3.05-3.14  15% of tuition
3.00-3.04  10% of tuition

Combined Bachelor’s/Master’s Program

The Combined Bachelor’s/Master’s Program is designed to enable students in other Washington University schools (other than Engineering) to pursue a coordinated five-year study leading to a bachelor’s degree outside engineering and a master’s degree in the School of Engineering & Applied Science. The admission process and the graduation requirements for this program are identical to those of the B.S.–M.S. in Engineering program. Scholarship support for the combined Bachelor’s/Master’s Program is not available through the School of Engineering & Applied Science.

B.S.–M.B.A. Program

The School of Engineering & Applied Science and the Olin Business School offer a five-year program leading to the professional Bachelor of Science engineering degree and the Master of Business Administration degree. The purpose of the program is to provide you with the opportunity to develop an educational background particularly in demand by industry.

You should apply to this joint program by February 1 of your junior year. You must complete the application for admission to the Olin Business School, available through the business school. You should have a cumulative grade point average of B+ or better, and you must take the Graduate Management Admission Test (GMAT) administered by the Educational Testing Service. Registration materials for the test may be obtained through the business school. Applicants are judged on undergraduate performance, GMAT scores, summer and/or co-op work experience, recommendations and personal interviews.

The B.S.–M.B.A. student’s fourth-year curriculum is composed largely of business courses. The fifth-year curriculum is divided almost evenly between business and engineering courses. Because merging of the two curricula results in very tight scheduling, it is possible that course overloads may be necessary to complete both programs in 10 semesters. You are strongly urged to meet with your advisers to plan the remaining years of the program.

Co-operative Education

The Engineering Co-op Program offers students a unique opportunity to gain in-depth engineering experience prior to graduation. Co-op students learn about a field of engineering by working alongside practicing engineers on extensive projects, which are typically held by entry-level engineers. This type of experience gives students a chance to preview a career path and employment options, gain career clarification, improve communication and team project skills, and enhance marketability with future employers. The Co-op experience is typically completed over the course of a semester and a summer term.

The Engineering Co-op Program is coordinated through the Career Center.

For more information on Co-ops, please visit the Career Center’s website at careers.wustl.edu or call 314/935-5930.

Premedical Education

The School of Engineering & Applied Science makes available, as options within its undergraduate degree programs, curricula that prepare you for entry into medical or dental school while you pursue the undergraduate degree.
Engineering

These curricula were formulated in recognition of the increasing importance in medicine of the methods and subject matter of the basic engineering sciences. The student who successfully completes one of the curricula will be well prepared for the study of medicine and will have, in addition, a solid background in engineering. Moreover, the student who decides not to go on to medical school will have an exceptionally wide selection of options, including not only those commonly open to the graduate in engineering, but also those of graduate study in biomedical engineering. In accordance with the recommendations of the school’s Premed Committee, all curricula include, in addition to the normal degree requirements, the following courses:

- **Biology**: Biol 2960, 2970, 3058
- **General Chemistry**: two semesters with lab
- **Organic Chemistry**: two semesters with lab

Many medical schools have other assorted prerequisites, which you can find in the Medical School Admissions Book. You may purchase this by going to the Association of American Medical Colleges (AAMC) website at www.aamc.org on the publications page, where you can order online.

If you are interested in attending medical or dental school, you must consult and register with the Premed Committee before the end of your sophomore year. Engineering students should contact the premedical adviser in Engineering Student Services, Lopata 303.

There is extensive detailed information concerning the Medical College Admission Test, the choice of advanced biology or chemistry courses, and the choice of medical school that should be discussed prior to the beginning of the junior year. Students requesting letters of recommendation from the Premed Committee must do so in writing by the end of the fall semester of the senior year. The Premed Committee reserves the right not to write letters for students deemed not qualified.

Engineering Summer School

The School of Engineering & Applied Science offers a variety of engineering courses each summer. Class times are varied to accommodate both traditional daytime students and those with full- or part-time employment. The Engineering Summer School calendar comprises one full eight-week evening session as well as several accelerated sessions of shorter duration.

If you are interested in enrolling in an engineering summer course, you can obtain further information, advice and registration materials in 204 Lopata Hall, 314/935-5484.

**University College Courses**

Engineering students may enroll in courses offered by Washington University’s University College. The school evaluates these courses as if they were taken at another institution. Although a student’s official record will show each course with its title, units and grade, the units and grade are not counted. Each course must be pre-approved and evaluated for its applicability toward an engineering bachelor’s degree. If the course is transferable, a separate entry is inserted into the student’s record, with the transfer units and the day-school equivalent course. Students must earn a minimum grade of C (2.0) for the units to transfer.

**Student Services**

**Engineering Student Services**

Engineering Student Services, located in Lopata 303, has three main areas: Admissions, Advising Support and Registrar. Our admissions officers work closely with the university Admissions Office to provide current and useful information to students and parents who are learning about our university, our community and the opportunities available in the School of Engineering & Applied Science. The advising staff has a comprehensive knowledge of all campus resources and can help with such items as tutoring, international studies, assistance with the registration process and general advising. The registrar handles class scheduling, transfer and AP credit, course registration, graduation eligibility and other registrar related processes. Engineering Student Services serves all students, faculty and staff. For an appointment, call 314/935-6100.

**Engineering Communications Center**

The Engineering Communications Center offers all engineering students free help with their engineering communication needs. The faculty who staff the center work with students to define communication audiences and purposes, develop and organize ideas, create effective graphics and page design, and sharpen self-editing skills. Help is offered for résumés and employment correspondence, proposals, formal reports, lab reports, graduate program application statements, and both traditional and computer-based presentations. The center also houses videotape facilities for analyzing presentation rehearsals.

**The Career Center**

The Career Center helps engineering students prepare for a lifetime of career management by offering innovative approaches to help prepare them for a successful Co-op, internship and job search. The Career Center offers a variety of services and resources for Engineering undergraduate and graduate students.

Whether you are looking for a summer internship, a Co-op or a full-time job, the center is here to help. The Career Center offers a breadth of resources, including Career Options; an online job, Co-op and internship database; the Engineering Mentoring Program; Job and Internship Search Teams; special events; skill-building workshops; career fairs and on-campus interviews; and résumé referrals for job opportunities.

The Career Center offers one-on-one career guidance to students at any stage of their career-planning process. Students are encouraged to meet with a career adviser early in their academic career and at least once each year to establish a

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Engineering

relationship. To schedule an advising appointment, please contact 314/935-5930 or careers@wustl.edu, or visit the website at www.careers.wustl.edu.

Course Descriptions

For administrative purposes, the School of Engineering & Applied Science is subdivided into five academic departments: Biomedical Engineering (E62); Computer Science & Engineering (E81); Electrical & Systems Engineering (E35); Energy, Environmental and Chemical Engineering (E33, E63); and Mechanical Engineering & Materials Science (E37). Each department may offer courses leading to one or more bachelor’s, master’s and doctoral degrees.

The courses of instruction are numbered according to the following system:

- 100 to 199 are primarily for first-year students.
- 200 to 299 are primarily for sophomores.
- 300 to 399 are primarily for juniors.
- 400 to 499 are primarily for juniors and seniors, although certain courses may carry graduate credit.
- 500 or above are offered to graduate students and to juniors and seniors who have met all stated requirements. If there are no stated requirements, juniors and seniors should obtain permission of the instructor.

One unit of credit is given for each hour of lecture, and one unit for each two and one-half hours of laboratory. Each course description shows the course’s credit. A table of all engineering courses and, for each course, the division of its topics units is available and frequently updated on the school’s website.

First-Year Program

This First-Year Program is offered as a starting point for beginning students and their advisers when planning each student’s individual course schedule.

A typical first-year course load totals 14 to 16 units for each semester, and it is not wise to enroll for more than 16 units during the first semester. It may be that a load of less than 14 units is desirable. You should enroll in the following courses:

Calculus: Beginning engineering students with previous calculus course work usually begin with . Students with a strong mathematics background may be ready for Math 233 Calculus III or even Math 217 Differential Equations.

Physics and/or Chemistry: If biomedical engineering or chemical engineering is a likely major, chemistry and physics should be completed during the first year; for other majors, physics is the recommended choice.

Other courses: Most first-year engineering students also enroll in one or more humanities/social sciences courses, engineering courses at the 100 level, and perhaps a computer science course. If you have a major or are strongly leaning toward a major, you should follow the recommendations for that major.

English Composition: The English composition requirement must be completed as soon as possible. See Engineering Degree Requirements (p. 756) for further details on this requirement.

Suggested Courses for First Semester

<table>
<thead>
<tr>
<th>Units</th>
<th>Mathematics (Math 132)</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics (Physics 117A or 197)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Chemistry (Chem 111A and 151)</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

(Biomedical Engineering, Chemical Engineering and Premedicine)

Humanities/social sciences elective

Engineering course(s) 3–6

Suggested Courses for Second Semester

<table>
<thead>
<tr>
<th>Units</th>
<th>Mathematics (next course)</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics (Physics 118A or 198)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Chemistry (Chem 112A and 152)</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

(Biomedical Engineering, Chemical Engineering and Premedicine)

Humanities/social sciences elective

Engineering course(s) 3–6

Recommended Courses

The following list recommends course sequences for each engineering major.

Biomedical Engineering: BME 140, first semester; Biol 2960, second semester.

Chemical Engineering: EECE 146A, first semester.

Computer Engineering: CSE 131, first semester; CSE 132, second semester.

Computer Science: CSE 131–132, first and second semester; CSE 240, second semester.

Electrical Engineering: CSE 131 and ESE 103, first semester; ESE 260, second semester.

Mechanical Engineering: MEMS 202, first semester.

Systems Science and Engineering: CSE 131, first semester; Math 309, first or second semester; ESE 151 or 251, second semester.
Engineering

Degree Requirements

Professional Bachelor of Science Degrees

To earn any of the professional degrees (e.g., B.S. in ...), a student must satisfy all of the following general distribution requirements:

1. Complete the Common Studies program (see chart (p. 758)).
2. Satisfy the specific degree requirements of one of the professional degree programs, as outlined in other sections of this Bulletin.
3. Satisfy the requirements listed under All Undergraduate Degrees (below).

Majors in Applied Science

To earn one of the B.S. Major in Applied Science degrees, a student must satisfy all of the following general distribution requirements:

1. Complete at least 120 applicable units.
2. Complete at least 48 units of the 120 in mathematics, natural sciences and engineering.
4. Complete at least 42 of the total 120 units at the 300 level or higher.
5. Complete the specific requirements of the major.
6. Satisfy the requirements outlined under All Undergraduate Degrees.

All Undergraduate Degrees

To earn any undergraduate degree in the School of Engineering & Applied Science, you must accomplish all the following:

1. Earn at least a C (2.0) cumulative grade point average in all applicable courses taken at Washington University.
2. Earn at least the minimum total number of units specified for the particular degree. All degrees require students to complete at least 120 applicable units.
3. Earn at least a C (2.0) grade point average in your major area of study.
4. Satisfy all of the following residency requirements:

A. Complete a minimum of 30 units of 300-level or higher courses from the school, while matriculated at Washington University in a degree program. An engineering course transferring from an exchange program sanctioned by the School of Engineering & Applied Science may be counted as a school equivalent course for the purpose of satisfying this requirement.

B. Complete a minimum of 60 units at Washington University, while matriculated at Washington University in a degree program. Exchange program courses sanctioned by the school may be counted toward this requirement.

C. For students who pursue multiple engineering B.S. degrees, for each additional B.S. degree from the school, students must complete an additional 15 resident units of 300-level or higher courses from the school, which are in addition to the 30 units of 300-level or higher engineering courses that are listed in 4A above.

5. Complete the English composition requirement.

English Composition Requirement

Every student must demonstrate proficiency in reading and writing the English language. Students are considered proficient if they have earned one of the following scores: a 5 on the Advanced Placement English Examination of the College Board, or a score of 750 or higher on the SAT W examination, or a score of 36 on the ACT English exam, or a score of 7 on the International Baccalaureate examination. Proficiency is most commonly demonstrated by satisfactory performance on the Freshman English Composition proficiency test administered by the School of Engineering & Applied Science.

Students who do not demonstrate satisfactory proficiency on the test are required to enroll in Writing 1 course (E Comp 100). English composition courses taken at other institutions to satisfy the school’s requirement must be pre-approved by the school’s English composition coordinator. If the course is so approved, the student must pass with a grade of B or better.

The English composition requirement must be completed as soon as possible. Undergraduate students who have not yet satisfied this requirement must enroll in Writing 1 (or an approved alternative course) at the first possible opportunity, commonly their first spring semester. Enrollment in English composition courses for subsequent semesters may be required until the proficiency requirement is satisfied.
Before enrolling in Writing 1, some students may be required to complete English Composition 1001 or 200 or ELP 1511; these courses will not be counted toward the student’s degree requirements.

**Humanities and Social Sciences Requirement**

To earn any bachelor’s degree from the School of Engineering & Applied Science, you must complete the school’s humanities and social sciences requirement:

1. Minimum units: At least 18 units of humanities and social sciences courses must be completed with passing grades. Humanities and social sciences courses, other than transfer courses, may be taken for pass/fail credit.
2. Breadth: At least 6 units of the 18 must be in the humanities and at least 6 units must be in the social sciences.
3. Upper-level: At least 3 units of the 18 units completed must be from one or more courses numbered 300 or higher.

Washington University courses labeled with the EN:H or EN:S attribute in the semester course listings will count respectively toward the humanities or social sciences requirement for engineering degrees. In addition, all art courses (coded F10 and F20) will count toward the engineering school’s humanities requirement, even though they do not have the specific EN:H designation. As a convenience, pre-approved listings of humanities and social sciences courses are provided for Architecture, Business, and University College.

University College courses, Henry Edwin Sever Institute courses and courses taken elsewhere are treated as transfer courses. Transfer courses must be approved through Engineering Student Services as acceptable transfer credit and as applicable humanities or social sciences courses. All transfer courses must be taken for credit (not pass/fail), and students must earn a C or better in transfer courses for the credit to transfer to the school. Grades do not transfer.

**Engineering Topics Units**

Bachelor’s degree programs accredited by the Accreditation Board for Engineering and Technology (ABET) require that the program require a minimum of one and one-half years of Engineering Topics.

One and one-half years is defined as 3/8 of the total number of units required for the particular degree, with a maximum of 48 units. The number of engineering topics units assigned to a course is the sum of the course’s engineering science units and engineering design units: Engineering topics units = Engineering Design units + Engineering Science units.

**Engineering Design**

Engineering design is the process of devising a system, component or process to meet desired needs. It is a decision-making process (often iterative), in which the basic science and mathematics and engineering sciences are applied to convert resources optimally to meet a stated objective. Among the fundamental elements of the design process are the establishment of objectives and criteria, synthesis, analysis, construction, testing and evaluation. The engineering design component of a curriculum must include most of the following features: development of student creativity, use of open-ended problems, development and use of modern design theory and methodology, formulation of design problem statements and specifications, consideration of alternative solutions, feasibility considerations, production processes, concurrent engineering design and detailed system descriptions. Further, it is essential to include a variety of realistic constraints, such as economic factors, safety, reliability, aesthetics, ethics and social impact.

**Engineering Science**

The engineering sciences have their roots in mathematics and basic sciences but carry knowledge further toward creative application. These studies provide a bridge between mathematics and basic sciences on the one hand and engineering practice on the other. Such subjects include mechanics, thermodynamics, electrical and electronic circuits, materials science, transport phenomena and computer science (other than computer programming skills), along with other subjects, depending upon the discipline. While it is recognized that some subject areas may be taught from the standpoint of either the basic sciences or engineering sciences, the ultimate determination of the engineering science content is based upon the extent to which there is extension of knowledge toward creative application. In order to promote breadth, the curriculum must include at least one engineering course outside the major disciplinary area.

**Applicable Undergraduate Engineering Degree Requirements**

Undergraduate engineering students are required to satisfy those engineering degree requirements that are published in the online Undergraduate Catalog at http://bulletin.wustl.edu when they first enroll at the university as degree-seeking undergraduate students.

Undergraduate engineering students must complete all undergraduate degree requirements and graduate within 10 consecutive years of enrolling as degree-seeking undergraduate students at the university.

A student who does not graduate within 10 consecutive years will be required to satisfy the degree requirements that are in the most recently published online Undergraduate Catalog at http://
bulletin.wustl.edu and to retake courses identified by the chair of the department in which the student is seeking the degree.

- When a student wishes to return to complete course work and earn a degree after the 10-year time period has passed, the most recent online Undergraduate Catalog (http://bulletin.wustl.edu) is defined as the catalog in effect when the student re-enrolls in the School of Engineering & Applied Science as an undergraduate student seeking a degree.
- When a student has left the university and wishes to complete course work at another university to transfer back and graduate from the School of Engineering & Applied Science, and more than 10 years have elapsed since the student was first enrolled as an undergraduate engineering degree-seeking student, the most recent online Undergraduate Catalog (http://bulletin.wustl.edu) is defined as the catalog in effect when the student files an intent to graduate for an engineering undergraduate degree. The course work the student intends to complete and transfer back to the School of Engineering & Applied Science must be approved by the Engineering School before the student enrolls in the course work.

### Definition of Class Levels

For classification purposes, your undergraduate class level is defined according to the year in which you intend to graduate.

### Common Studies Program

All students who wish to earn a professional degree (e.g., B.S. in Chemical Engineering) must complete the Common Studies program. Courses required by the Common Studies program:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition (by examination or at least a C— in E Comp 100)</td>
<td>0</td>
</tr>
<tr>
<td>Calculus (Math 131, 132, 217, 233)</td>
<td>12</td>
</tr>
<tr>
<td>Physics (Physics 117A or 197, and Physics 118A or 198)</td>
<td></td>
</tr>
<tr>
<td>Chemistry (Chem 111A, 151)* 5</td>
<td>5</td>
</tr>
<tr>
<td>Technical Writing (Engr 310) 3</td>
<td></td>
</tr>
<tr>
<td>Humanities/social sciences electives 18</td>
<td></td>
</tr>
<tr>
<td></td>
<td>46</td>
</tr>
</tbody>
</table>

* Some programs also require Chem 112A, 152.

### Academic Honors & Awards

**Dean’s List:** The Dean’s List is composed of freshman, sophomore, junior and senior engineering students who, for the preceding semester, have achieved a 3.6 or higher grade point average based on a minimum of 12 units of courses taken for grades (not pass/fail). An appropriate entry is added to their official transcripts.

**Latin Honors:** The Engineering Curriculum Committee has the responsibility for determining which students will receive the designations *cum laude*, *magna cum laude* and *summa cum laude*. The criterion for making the decision is academic achievement, and cumulative grade point average is the primary indicator of academic achievement. Grade point averages are reviewed the week of Commencement, after final grades are submitted, to determine which students are awarded final honors for each graduation year.

**Washington University Engineering Scholarship Program:** The Engineering Scholarship Program enables a sponsor — an individual, a group of individuals or a company — to provide a named scholarship. The selection of students is made by the dean’s office and is based on academic achievement and potential for professional attainment. There is no application process. The awards are need-based. The total amount of the financial aid package does not change, but the source of the scholarship funds is shifted to funds that have been specifically contributed to the university for that purpose.

### Academic Regulations

#### Attendance

Each professor in the School of Engineering & Applied Science decides how many absences a student may have and still pass the course. Professors are expected to give reasonable consideration to unavoidable absences and to the feasibility of making up work that has been missed. Students are expected to explain to their professors the reasons for any absences and to discuss with them the possibility of making up missed assignments.

#### Units and Grades

A credit unit is the equivalent of one recitation or lecture hour a week for one semester, or one laboratory of two and one-half hours a week for one semester. A student’s work is rated in terms of the following system of grades and grade points:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points per Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>4.0</td>
</tr>
<tr>
<td>A</td>
<td>4.0</td>
</tr>
<tr>
<td>A−</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
</tr>
<tr>
<td>B−</td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
</tr>
<tr>
<td>C−</td>
<td>1.7</td>
</tr>
</tbody>
</table>

758
### Engineering

<table>
<thead>
<tr>
<th>Grade</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>D+</td>
<td>1.3</td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
</tr>
<tr>
<td>D–</td>
<td>0.7</td>
</tr>
<tr>
<td>F</td>
<td>0.0</td>
</tr>
<tr>
<td>P</td>
<td>Pass 0.0</td>
</tr>
<tr>
<td>F</td>
<td>Failing 0.0</td>
</tr>
<tr>
<td>I</td>
<td>Course work incomplete</td>
</tr>
<tr>
<td>X</td>
<td>No final exam taken</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawal</td>
</tr>
<tr>
<td>R</td>
<td>Repeat</td>
</tr>
<tr>
<td>L</td>
<td>Successful audit</td>
</tr>
<tr>
<td>Z</td>
<td>Unsuccessful audit</td>
</tr>
<tr>
<td>N</td>
<td>No grade submitted</td>
</tr>
</tbody>
</table>

For students who entered prior to Fall 2010, plus and minus marks to the grades of A, B, C, D and F do not affect the value of the grade points earned by each letter grade.

To graduate, a student must meet the following criteria:

1. at least a C (2.0) cumulative average and
2. at least a C (2.0) cumulative average in your major area of study

### Auditing a Course

You may register for a specific course as an auditor. When a student uses the Audit grading option, the student is expected to attend all of the course’s classes. Completion of homework and the taking of exams are not required. The grade L signifies a successful audit (class attendance) and the grade Z signifies an unsuccessful audit. Neither grade affects a student’s grade point average, nor do the course’s units contribute to the student’s total cumulative units. Audit courses do not count toward any degree. Class attendance is required to earn the grade L; unsatisfactory attendance will result in a grade of Z. Certain computer science courses do not allow students with auditor status.

### Incomplete Grades

The grade I (incomplete) indicates that the work of a student has been generally acceptable but that extenuating circumstances led to certain requirements not having been met. The grade of X is recorded when a student is absent from a midterm or final examination because of illness or other unavoidable reason, provided the work has been otherwise satisfactory.

Grades of X and I must be removed no later than the close of the next full semester a student is in residence. On failure to make up an X or I, the student will not receive credit for the course, and the grade will be changed to F unless the student has been explicitly excused by the associate dean.

### Pass/Fail Option

All undergraduate engineering students are eligible to register each semester for up to 6 units on the pass/fail option, up to a maximum of 18 units attempted. Some departments require students to take certain courses pass/fail; credits in these courses do not count toward either the semester limit of 6 units or the cumulative limit of 18 units. Other than these courses, only elective courses may be taken on this option, including courses in other divisions of the university. Humanities, social sciences and some technical electives specifically allowed by individual engineering programs, as well as some engineering courses, both undergraduate and graduate that are not specifically required for your major program may be taken with the pass/fail option. Some programs do not allow courses, required or elective, to be taken with the pass/fail option. Gradute courses taken on the pass/fail basis cannot be transferred later for credit toward a graduate degree.

Changes from the regular grade basis to pass/fail or vice versa may not be made after the last dates specified in the current Course Listings. The normal regulations for withdrawal or change to auditor status also apply to pass/fail courses.

A final grade of P# (pass) will replace the normal letter grade and will earn degree credit. A final grade of F# (fail) will be entered on the official record and will not earn degree credit. Neither P# nor F# will affect the grade point average.

### Minimum and Maximum Course Loads

Engineering students must take a minimum of 12 units of credit to be considered full-time. Students may not enroll in more than 21 units without special permission and additional per-unit tuition charge.

### Repeating a Course

If a student repeats a course, only the second grade is included in the calculation of the grade point average. Both enrollments and grades are shown on the student’s official transcript. The symbol R next to the first enrollment’s grade indicates that the course was later retaken. Credit toward the degree is allowed for the latest enrollment only.

### Academic Probation and Suspension

A student whose work is of unsatisfactory quality is placed on academic probation. If a student on probation doesn’t improve his or her academic record after a reasonable time, probation is followed by dismissal. The regulations governing probation and dismissal are as follows:

1. At the close of each semester, each student’s semester grade point average is computed as the total grade points earned during the semester divided by the total credit units earned.
attempted. At the same time, the cumulative grade point average is computed as the quotient of the cumulative total of grade points over the cumulative total of credit units attempted. The computations are made on the basis of the grade point scale indicated in the section on grades. Courses taken on a pass/fail basis are not included in these calculations.

2. At the close of each semester, each student’s semester and cumulative grade point averages are reviewed. If either is below 2.0, the probation rules stated below apply and the student is notified of any academic probation or dismissal action.

3. At the end of a semester, any student who in the judgment of the associate dean is not making adequate academic progress is required to meet with the student’s adviser before enrollment is allowed for the following semester.

4. A student who is dismissed may, if he or she desires to continue, present a written statement setting forth reasons why the student believes the situation should be reconsidered. This statement should be addressed to the Undergraduate Academic Standards Committee and forwarded via the associate dean, Lopata 303.

**Probation and Dismissal Rules**

1. Probation follows any semester during which either the semester or cumulative grade point average is less than 2.0, or a student has three I (incomplete) grades at the end of a semester, or a student was enrolled in credit courses and earns no degree credit at the end of a semester, or a student drops below full-time student status without the approval from his/her academic adviser or the associate dean for students.

2. If a student has been on academic probation twice previously, dismissal may follow the next time the student is eligible for probation.

3. Dismissal may result if a student becomes eligible for probation in two sequential semesters.

4. Dismissal may result if any course is failed twice.

**First Academic Probation**

The first time a student qualifies for probation, he/she is placed on “First Academic Probation.” Students placed on First Academic Probation status are sent a letter informing them of this action.

**Second Academic Probation**

The second time a student qualifies for probation, he/she is placed on “Second Academic Probation.” Students placed on Second Academic Probation status are sent a letter informing them of this action.

**Special Academic Probation**

Special Academic Probation means that a student was eligible for suspension but was not suspended.

**Stop Procedure**

Any student who in the judgment of the Engineering Registrar is not making adequate academic progress is required to meet with his/her academic adviser before enrollment is allowed for the following semester.

When the Engineering Registrar reviews the academic records of students eligible for probation, students having serious academic difficulties are identified and notified of the “stop” process. The letter instructs them to write a brief (one or two pages) statement, and meet with their academic advisers to discuss their situations. After this discussion takes place, the academic adviser notifies the Registrar that the discussion has occurred. If the Registrar is not notified by the deadline stated in the letter, the Registrar may withdraw the student from all current courses.

Students who have been doing satisfactory course work, and suddenly complete a semester with unacceptable grades, typically have personal problems that have seriously interfered with their academic work. It is also typical that such students are embarrassed by their academic performance and are reluctant to talk with parents, advisers, counselors and deans about their problems. The “stop” procedure is specifically designed to answer the question: “Are you getting appropriate help?”

**Academic Suspension**

The third time a student qualifies for probation, or becomes eligible for probation the second semester in a row, or fails the same course twice, he/she is dismissed from the university.

Students placed on academic suspension status are sent a letter informing them of the suspension action. Students who wish to appeal are instructed to prepare a written statement that informs the Academic Standards Committee of the decision to appeal, and respond to two questions: explain why the unsatisfactory academic performance occurred; and, if allowed to return, what would be done differently by the student. The student must then attend an appeal hearing. The student’s academic record, his/her written appeal and any other factors the student may wish to discuss are considered by the Committee. When the discussion ends, the student leaves the hearing room and the Committee immediately makes a decision regarding the student’s appeal. The Engineering Registrar then informs the student of the Committee’s decision. The Committee’s decision is final (no other appeals are possible). If the appeal is successful, the student is placed on Special Academic Probation and the student is allowed to enroll in classes.

If a student is placed on academic suspension status and chooses not to appeal, or appeals and his/her appeal is denied, the student is not allowed to enroll in any classes in any division at Washington University. If a suspended student would like
to return to the university at a future time, the student must apply for reinstatement to the School of Engineering & Applied Science.

**Full-Time & Part-Time Enrollment**

Undergraduate degree programs are full-time programs. Part-time enrollment is not allowed unless serious health problems prevent a student from being enrolled full-time.

Part-time enrollment and partial tuition charges are allowed for seniors who must enroll for an extra semester. For students who enroll as freshmen, this status is allowed after their eighth semester. For dual degree students, part-time status is allowed after their fifth semester. Part-time students take 1 to 11 units and are charged for part-time tuition, along with the standard undergraduate fees. Scholarship support is not normally available for part-time students.

**Leaves of Absence**

Engineering students may petition to take a leave of absence. On a leave of absence, you are assured re-enrollment within the next two years. Before returning you are to notify the School of Engineering & Applied Science and submit a Reinstatement Form at least six weeks prior to the beginning of the appropriate term. A student wishing to take a medical leave of absence must have a recommendation for the medical leave of absence from Student Health Services submitted to the appropriate dean in the School of Engineering & Applied Science prior to leaving and prior to re-enrollment. The dean will decide whether or not to grant the request for the medical leave of absence and re-enrollment upon reviewing the recommendations from the Student Health Services and the student’s file.

**Transfer Credit**

You must get prior approval before taking a course at another university. After completing the course, have an official copy of the transcript sent to the School of Engineering & Applied Science for evaluation. If the credit is accepted, the course will show on the transcript with the units, but not the grade. Only units of credit for courses with a grade of C or better will transfer.

**Military Training**

Army and Air Force ROTC programs are available at Washington University.

A student in the School of Engineering & Applied Science who takes an ROTC course will have the course name, number, credit units* and grade entered on the official transcript. If the course is numbered 100–299, the course’s units and grade will not apply toward the student’s degree requirements; if the course is numbered 300–499 and the grade is D– or better, the course’s units will apply toward the student’s degree requirements (as a free elective) but the grade will not affect the student’s cumulative or semester grade point average.

*All ROTC courses are initially set up with 0 units. Engineering students may petition Engineering Student Services (Lopata 303) to have units of credit posted for the ROTC course(s) in which they are enrolled.

See course descriptions for Air Force ROTC (p. 31) and Army ROTC (p. 31).

**Physical Education**

Students in the School of Engineering & Applied Science are not required to enroll in physical education courses. These courses may be taken for recreation but not for academic credit.

**University College**

Engineering students may enroll in courses offered by Washington University’s University College. The school evaluates these courses as if they were taken at another institution. Although a student’s official record will show each course with its title, units and grade, the units and the grade are not counted. Each course must be pre-approved and evaluated for its applicability toward an engineering bachelor’s degree. If the course is transferable, a separate entry is inserted into the student’s record with the transfer units and the day-school equivalent course. Students must earn a minimum grade of C for the units to transfer.

**Administration**

- **Dean’s Office**
  314/935-6350
- **Department of Biomedical Engineering**
  314/935-6164
- **Department of Computer Science and Engineering**
  314/935-6160
- **Department of Electrical and Systems Engineering**
  314/935-5565
- **Department of Energy, Environmental and Chemical Engineering**
  314/935-5545
- **Department of Mechanical Engineering and Materials Science**
  314/935-4337
- **Engineering Student Services**
  314/935-6100

**Majors**

Below is a list of majors offered by the School of Engineering & Applied Science. Click the link to view more information about a specific major. Log into WebSTAC and select Major Programs
to switch your major program within Engineering or to declare a second major or minor online.

- Applied Science (Chemical Engineering) (p. 825)
- Applied Science (Computer Science) (p. 779)
- Applied Science (Electrical Engineering) (p. 802)
- Applied Science (Systems Science and Engineering) (p. 802)
- Biomedical Engineering (p. 764)
- Chemical Engineering (p. 779)
- Computer Science (p. 779)
- Electrical Engineering (p. 802)
- Individually Designed Major (p. 751)
- Mechanical Engineering (p. 840)
- Second Major in Computer Science (p. 779)
- Second Major in Electrical Engineering Science (p. 802)
- Second Major in Systems Science (p. 802)
- Systems Science and Engineering (p. 802)

Minors

Residency Rule for Engineering Minors:

No more than 6 units of credit transferred from another institution (outside Washington University) can be used to meet the requirements of any minor offered by the School of Engineering & Applied Science. The remaining units (up to the amount required for the minor) must be applicable units from Washington University. The review committee that oversees a minor has the authority to establish a more stringent residency rule.

Below is a list of minors offered by the School of Engineering & Applied Science. Click the link to view more information about a specific minor. Log into WebSTAC and select the Major Programs link under Academic Records to declare a minor online.

- Aerospace Engineering (p. 841)
- Bioinformatics (p. 782)
- Computer Science (p. 782)
- Electrical Engineering (p. 806)
- Energy Engineering (p. 826)
- Environmental Engineering Science (p. 826)
- Mechanical Engineering (p. 841)
- Mechatronics (p. 841)
- Nanoscale Science and Engineering (p. 826)
- Robotics (p. 841)
- Systems Science and Engineering (p. 806)

Biomedical Engineering

About Biomedical Engineering

Biomedical engineering is an interdisciplinary field in which the concepts, methods and techniques of engineering are applied to solving problems in biology and medicine. It applies quantitative, analytical and integrative methods from the molecular level to that of the whole organism to further our understanding of basic biological processes and to develop innovative approaches for the prevention, diagnosis and treatment of disease.

As a student majoring in biomedical engineering, you will have the opportunity to participate in the world-class research activities of engineering and medical faculty in biomaterials and imaging, cardiovascular engineering, cell and tissue engineering, molecular cellular and systems engineering, and neural engineering. All students in biomedical engineering are encouraged to join and be active in the Biomedical Engineering Society.

Mission Statement

Our departmental mission is to serve society as a center for learning and knowledge-creation in engineering and science for the purpose of advancing biology and medicine.

Our overall educational objective is to prepare those receiving a bachelor’s degree in biomedical engineering for a variety of career paths. To that end, our undergraduate curriculum is designed to provide technical proficiency as well as communication and other professional skills so that our graduates will be able to:

- Pursue careers in the biomedical engineering industry or related fields.
- Undertake advanced study (e.g., M.S., Ph.D.) in biomedical engineering or a related field, in preparation for careers utilizing this further training.
- Complete professional degrees (e.g., in medicine, dentistry, law, business) in preparation for careers utilizing those degrees.

Academic Programs

The Bachelor of Science in Biomedical Engineering (B.S.–BME) is designed to prepare graduates for the practice of engineering at a professional level and meets nationally recognized criteria for accreditation.

The curriculum is structured around a basic core of 102 units. In addition, a complementary set of courses totaling at least 18 units completes the degree requirements. The latter courses will be elected from the sciences (biology, chemistry, physics), mathematics or engineering.

In order to satisfy Accreditation Board for Engineering and Technology (ABET) requirements, all professional engineering
curricula at the baccalaureate level must include the equivalent of one and one-half years of engineering topics, to include engineering sciences and engineering design appropriate to biomedical engineering. The B.S.–BME degree at Washington University requires 48 credits of engineering topics. The basic core curriculum includes 33 to 34 engineering topics credits. Therefore, students pursuing a B.S.–BME degree will need 14 to 15 additional engineering topics credits beyond the basic core curriculum. They also may receive up to 6 units of academic credit for a research or design project, by registering for BME 400, 400A, 400B or 400C Independent Study. In addition, their course program must include sufficient laboratory experience to ensure competence in experimental design, data collection and data analysis. For more information regarding engineering topics unit requirements, please refer to the BME Undergraduate Studies Manual, available in the Biomedical Engineering Department in Whitaker 190.

**Double Majors**

An option available to students majoring in Biomedical Engineering is the double major, leading to a second professional Bachelor of Science degree in one of the other engineering disciplines in four years. A degree in Biomedical Engineering combined with a professional degree in one of the traditional engineering disciplines can be expected to enhance employment options in industry. Depending upon the second major chosen, total unit requirements may range from 140 to 148 (or less if the student enters with AP credits). Hence, some summer work may be necessary in order to complete a double major within four academic years. To determine the specific requirements to be satisfied for both degrees, students are urged to consult with an adviser in the second department as early as possible.

**Phone:** 314/935-7208  
**Departmental website:** [http://bme.wustl.edu/Pages/default.aspx](http://bme.wustl.edu/Pages/default.aspx)

**Chair**

Frank Yin  
Stephen F. and Camilla T. Brauer Distinguished Professor  
PhD, MD, University of California–San Diego  
Biomechanics, biofluid mechanics, cell mechanics

**Endowed Professors**

Igor R. Efimov  
Lucy & Stanley Lopata Distinguished Professor of Biomedical Engineering  
PhD, Moscow Institute of Physics and Technology  
Cardiac imaging, mechanisms of arrhythmias, implantable stimulators

Yoram Rudy  
Fred Saigh Distinguished Professor  
PhD, Case Western Reserve University  
Cardiac electrophysiology, modeling of the cardiac system

Larry A. Taber  
Dennis and Barbara Kessler Professor  
PhD, Stanford University  
Mechanics of growth and development, cardiac mechanics

Lihong Wang  
Gene K. Beare Distinguished Professor  
PhD, Rice University  
Biophotonics and multimodality optical imaging

**Professors**

Mark Anastasio  
PhD, The University of Chicago  
Imaging sciences, phase-contrast, x-ray imaging

Jianmin Cui  
PhD, State University of New York–Stony Brook  
Ion channels, channel structure-function relationship, biophysics

Rohit V. Pappu  
PhD, Tufts University  
Macromolecular self assembly and function, computational biophysics

Shelly E. Sakiyama-Elbert  
PhD, California Institute of Technology  
Cell adhesion, nerve regeneration, protein engineering

**Associate Professors**

Dennis L. Barbour  
MD, PhD, Johns Hopkins University  
Auditory physiology, sensory cortex neurocircuitry, functional neuronal imaging

Donald L. Elbert  
PhD, University of Texas–Austin  
Biomaterials, polymer chemistry, proteomics

Daniel W. Moran  
PhD, Arizona State University  
Motor control, neural engineering, neuroprosthetics, movement biomechanics

Jin-Yu Shao  
PhD, Duke University  
Cell mechanics, receptor and ligand interactions, molecular biomechanics

Kurt A. Thoroughman  
PhD, Johns Hopkins University  
Human motor control and motor learning, neural computation

**Assistant Professors**

Jan Bieschke  
PhD, Max Planck Institute for Biophysical Chemistry/University of Braunschweig
Single molecule fluorescence and other biophysical methods to probe the mechanistic underpinnings of protein misfolding

**John Cunningham**  
PhD, Stanford University  
Neuro systems engineering, algorithms for brain-computer interfaces

**Vitaly Klyachko**  
PhD, University of Wisconsin–Madison  
Synaptic function and plasticity, neural circuits, information analysis, neurological disorders

**Kristen Naegle**  
PhD, Massachusetts Institute of Technology  
Computational systems biology with emphasis on cellular networks involved in cancer and diabetes

**Baranidharan Raman**  
PhD, Texas A & M University  
Computational and systems neuroscience, neuromorphic engineering, pattern recognition, sensor-based machine olfaction

**Jon Silva**  
PhD, Washington University  
Ion channel biophysics

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### The Major in Biomedical Engineering

#### The Basic Core

The B.S. in Biomedical Engineering curriculum that meets accreditation criteria is structured around a basic core of 102 units, outlined below. In addition, a complementary set of courses totaling at least 18 units (making the total to 120 units) completes the degree requirements. The latter courses will be selected from the sciences (biology, chemistry, physics), mathematics or engineering. Students in BME also may receive up to 6 units of academic credit for a research or design project, by registering for BME 400, 400A, 400B or 400C Independent Study (please see the department for the policy on Independent Study). Finally, all students in BME must complete the English Composition requirement (please see the Engineering Degree Requirements (p. 756) page), which may be satisfied by examination or a minimum grade of C+ in E Comp 100.

#### Physical Sciences Units

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Chemistry (Chem 111A, 112A)</td>
<td>6</td>
</tr>
<tr>
<td>General Chemistry Laboratory I, II (Chem 151, 152)</td>
<td>4</td>
</tr>
<tr>
<td>General Physics (Physics 117A, 118A)</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
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#### Biological Science

<table>
<thead>
<tr>
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<th>Units</th>
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<tbody>
<tr>
<td>Principles of Biology I (Biol 2960)</td>
<td>4</td>
</tr>
<tr>
<td>Principles of Biology II (Biol 2970)</td>
<td>4</td>
</tr>
<tr>
<td>Physiological Control Systems (Biol 3058)</td>
<td>2</td>
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<tr>
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<td>10</td>
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#### Mathematics

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<tr>
<th>Course Description</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Calculus II &amp; III (Math 132, 233)</td>
<td>6</td>
</tr>
<tr>
<td>Differential Equations (Math 217)</td>
<td>4</td>
</tr>
<tr>
<td>Engineering Mathematics (ESE 317)</td>
<td>4</td>
</tr>
<tr>
<td>Probability and Statistics for Engineers (ESE 326)</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
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#### Engineering Science

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Computer Science (CSE 131) or Engineering and Scientific Computing (CSE 200)</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Electrical Networks (ESE 230)</td>
<td>4</td>
</tr>
<tr>
<td>Engineering Electromagnetics</td>
<td>3</td>
</tr>
<tr>
<td>Principles (ESE 330)</td>
<td>3</td>
</tr>
<tr>
<td>Transport Phenomena I (ChE 367)</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
</tr>
</tbody>
</table>

#### Biomedical Engineering

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Biomedical Engineering (BME 140)</td>
<td>3</td>
</tr>
<tr>
<td>Biomechanics (BME 240)</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Physiology I, II (BME 301A, 301B)</td>
<td>7</td>
</tr>
<tr>
<td>Bioengineering</td>
<td>3</td>
</tr>
<tr>
<td>Thermodynamics (BME 320B)</td>
<td>3</td>
</tr>
<tr>
<td>Biomedical Engineering Design (BME 401)</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
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</table>

#### Other

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities and social sciences</td>
<td>15</td>
</tr>
<tr>
<td>Engineering Virtual Studio I-IV</td>
<td>4</td>
</tr>
<tr>
<td>Engineering Practice and Professional Values (ENGR 4501, 4502 and 4503 — one credit each)</td>
<td>3</td>
</tr>
<tr>
<td>Technical Writing (Engr 310)</td>
<td>3</td>
</tr>
</tbody>
</table>

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In order to satisfy Accreditation Board for Engineering and Technology (ABET) accreditation requirements, all professional engineering curricula at the baccalaureate level must include the equivalent of one and one-half years of engineering topics, to include engineering sciences and engineering design appropriate to biomedical engineering. Please note that the number of engineering topics credits for a course does not necessarily equal its total number of credits. Engineering topics credits and the total number of credits for any course taught in the school of engineering are provided on the Engineering Student Services website.

The B.S.–BME degree at Washington University requires 48 credits of engineering topics. The basic core curriculum includes 34 (if CSE 131 is taken) or 33 (if CSE 200 is taken) engineering topics credits. Therefore, students pursuing a B.S.–BME degree will need 14 or 15 additional engineering topics credits beyond the basic core curriculum. Out of these 14 or 15 engineering topics credits, at least 6 must be earned from the BME electives listed below (all of them carry three engineering topics credits and the ones marked with # are offered every other year or less):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BME 459/559</td>
<td>Intermediate Biomechanics</td>
<td>3</td>
</tr>
<tr>
<td>BME 458A/558</td>
<td>Biological Transport</td>
<td>3</td>
</tr>
<tr>
<td>BME 463/563</td>
<td>Orthopaedic Biomechanics — Cartilage/Tendon</td>
<td>3</td>
</tr>
<tr>
<td>BME 464/564</td>
<td>Orthopaedic Biomechanics — Cartilage/Tendon</td>
<td>3</td>
</tr>
<tr>
<td>BME 467/567</td>
<td>Cardiovascular Engineering II: Cardiac Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>BME 468/568</td>
<td>Cardiovascular Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>BME 471</td>
<td>Bioelectric Phenomena</td>
<td>3</td>
</tr>
<tr>
<td>BME 533</td>
<td>Biomedical Signal Processing</td>
<td>3</td>
</tr>
<tr>
<td>BME 572</td>
<td>Biological Neural Computation</td>
<td>3</td>
</tr>
<tr>
<td>BME 573A</td>
<td>Applied Bioelectricity</td>
<td>3</td>
</tr>
<tr>
<td>BME 421</td>
<td>Kinetics of Receptor-Mediated Processes</td>
<td>3</td>
</tr>
<tr>
<td>BME 523</td>
<td>Biomaterials Science</td>
<td>3</td>
</tr>
<tr>
<td>BME 524</td>
<td>Tissue Engineering</td>
<td>3</td>
</tr>
<tr>
<td>BME 525</td>
<td>Engineering Aspects of Biotechnology</td>
<td>3</td>
</tr>
<tr>
<td>BME 527</td>
<td>Design of Artificial Organs</td>
<td>3</td>
</tr>
</tbody>
</table>

The remaining eight or nine engineering topics credits may be earned from either the BME electives listed above or other engineering electives listed below in the order of mechanical engineering, electrical and systems engineering, and chemical engineering (all of them carry three engineering topics credits unless noted otherwise and the ones marked with # are offered every other year or less):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEMS 3410</td>
<td>Fluid Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>MEMS 350</td>
<td>Engineering Mechanics III</td>
<td>3</td>
</tr>
<tr>
<td>MEMS 431</td>
<td>Structural Dynamics and Vibrations</td>
<td>4</td>
</tr>
<tr>
<td>MEMS 5301</td>
<td>Nonlinear Vibrations #</td>
<td>3</td>
</tr>
<tr>
<td>MEMS 5500</td>
<td>Elasticity #</td>
<td>3</td>
</tr>
<tr>
<td>MEMS 5510</td>
<td>Finite Element Analysis #</td>
<td>3</td>
</tr>
<tr>
<td>ESE 351</td>
<td>Signals and Systems</td>
<td>3</td>
</tr>
<tr>
<td>ESE 411</td>
<td>Numerical Methods #</td>
<td>3</td>
</tr>
<tr>
<td>ESE 441</td>
<td>Control Systems</td>
<td>3</td>
</tr>
<tr>
<td>ChE 351</td>
<td>Engineering Analysis of Chemical Systems</td>
<td>3</td>
</tr>
<tr>
<td>ChE 368</td>
<td>Transport Phenomena II</td>
<td>3</td>
</tr>
</tbody>
</table>

Once the engineering topics requirement is satisfied, students pursuing the B.S.–BME degree may take almost any course in science or engineering to reach 120 units in total, as required by the university for a bachelor’s degree.

Another option available to students majoring in Biomedical Engineering is the double major, leading to a second professional Bachelor of Science degree in one of the other engineering disciplines in four years. A degree in Biomedical Engineering combined with a professional degree in one of the traditional engineering disciplines can be expected to enhance employment options in industry. Depending upon the second major chosen, total unit requirements may range from 140 to 148 (or fewer if the student enters with AP credits). Hence, some
summer work may be necessary in order to complete a double major within four academic years. To determine the specific requirements to be satisfied for both degrees, students are urged to consult with an adviser in the second department as early as possible.

There are no Biomedical Engineering minors. Please see the complete list of minors (p. 762) offered in the School of Engineering & Applied Science.

**E62 BME 140 Introduction to Biomedical Engineering**
An introduction to the vast and diverse field of biomedical engineering (BME), this very challenging course has two main purposes. One is to teach students — via lectures, reading assignments, homework and exams — to think on their own, to solve problems and know how engineering principles are applied to the areas of bioelectricity, biomechanics, biomolecules, biotechnology and bioimaging. The second is to introduce students — via guest lectures by school of medicine and engineering faculty — to some of the fascinating and challenging ongoing research in these areas. The course is challenging because students at this early stage, by and large, lack the knowledge base to understand either the engineering/biological aspects of the topical areas or the research being presented. Nevertheless, because future success depends on such, emphasis throughout is placed on developing self-learning as well as quantitative and analytical problem-solving skills, but at an appropriate level. By the end of the course it is hoped that students have begun to acquire the skills and approaches necessary to succeed in the engineering curriculum as well as a much more in-depth and informed perspective of BME.

**Corequisites:** Physics 117A or 197.

**Credit** 3 units.   **EN**: DU, SU, TU

**E62 BME 201 From Concept to Market — The Business of Biomedical Engineering**
This seminar course is offered as E60 324 From Concept to Market — The Business of Engineering beginning in fall 2012.

**Credit** 3 units.   **EN**: DU, SU, TU

**E62 BME 240 Biomechanics**
Principles of static equilibrium and solid mechanics applied to the human anatomy and a variety of biological problems. Statics of rigid bodies with applications to the musculoskeletal system. Mechanics of deformable media (stress, strain; stretching, torsion and bending) with introduction to nonlinear behavior, viscoelasticity and growth in living tissue. Applications to cells, bone, muscle, arteries, the heart and the cochlea.

**Prerequisites:** Physics 117A or 197.

**Credit** 3 units.   **EN**: DU, SU, TU

**E62 BME 301A Quantitative Physiology I**
A course (lectures, recitation and supervised laboratory sections) designed to elaborate the physiological background necessary for advanced work in biomedical engineering. A quantitative model-oriented approach to physiological systems is stressed. Topics include bioinstrumentation, eye movement, muscle mechanics, action potentials, sensory systems, neuroprosthetics.

**Prerequisites:** BME 140, CSE 131 or 200, ESE 230, Biol 3058 (previously Biol 3050 or 3059), ESE 317 or permission of instructor.

**Corequisites:** E60 310 or permission of instructor.

**Recitation sessions are held on Tuesdays 2:30-4 p.m.**

**Credit** 4 units.   **EN**: DU, SU, TU

**E62 BME 301B Quantitative Physiology II**
A course (lecture and supervised laboratory sessions) designed to elaborate the physiological background necessary for advanced work in biomedical engineering. A quantitative model-oriented approach to physiological systems is stressed. Topics include electrocardiography; heart contractility; pulse wave propagation in arteries; pulmonary function; renal function; immune system; drug delivery.

**Prerequisites:** BME 140, CSE 131 or 200, ESE 230, ESE 317, Biol 3058 or permission of instructor.

**Corequisites:** E60 310 or permission of the instructor.

**Credit** 4 units.   **EN**: DU, SU, TU

**E62 BME 314 Physics of the Heart**
Same as L31 314.

**Same as Physics 314**

**Credit** 3 units.   **A&S**: NS  **A&S**: IQ, NSM  **BU**: SCI  **EN**: SU, TU  **FA**: NSM

**E62 BME 320B Bioengineering Thermodynamics**
The target audience for this course is juniors majoring in Biomedical Engineering. Those who do not fit into this category need permission from the course master to enroll in this course. The foundations of thermodynamics with strong emphasis on concepts, translation of concepts, and applications in bioengineering and biophysics are the focus of the course. The lectures draw from the user-friendly textbook titled *Molecular Driving Forces: Statistical Thermodynamics in Chemistry and Biology* by Ken A. Dill and Sarina Bromberg published by Garland Science. Students have to enroll in one of the two problem-solving sessions that are offered on Thursday afternoons.

**Prerequisite:** a strong background in multivariate calculus and probability and statistics.

**Credit** 3 units.   **EN**: SU, TU

**E62 BME 400 Independent Study**
Independent investigation on topic of special interest. This course has no engineering topics units. **Prerequisites:** junior or senior standing and permission of program director.

**Credit** -6 unit.
E62 BME 400A Independent Study
Independent investigation on a topic of special interest. This course has 1 unit of engineering topics. The student and mentor must justify the number of engineering topic units being requested and the BME department’s accreditation committee must approve the requested number of engineering topics. Prerequisites: junior or senior standing and permission of program director. Credit 6 units. EN: DU, SU, TU

E62 BME 400B Independent Study
Independent investigation on a topic of special interest. This course has 2 units of engineering topics. The student and mentor must justify the number of engineering topic units being requested and the BME department’s accreditation committee must approve the requested number of engineering topics. Prerequisites: junior or senior standing and permission of program director. Credit 6 units. EN: DU, SU, TU

E62 BME 400C Independent Study
Independent investigation on a topic of special interest. This course has 3 units of engineering topics. The student and mentor must justify the number of engineering topic units being requested and the BME department’s accreditation committee must approve the requested number of engineering topics. Prerequisites: junior or senior standing and permission of program director. Credit 6 units. EN: DU, SU, TU

E62 BME 401 Biomedical Engineering Design
A design project experience to prepare students for engineering practice. Working individually or in small groups, students undertake an original design or redesign of a component or system of biotechnological significance. The design experience requires application of knowledge and skills acquired in earlier classes and laboratory work; it incorporates engineering standards and realistic constraints that include most of the following considerations: economic, environmental, ethical, manufacturability, sustainability, health and safety, social and political. Students prepare written reports and present their designs orally to their classmates and panels of faculty members and industrial representatives. Prototype construction is not generally required but may be encouraged subject to available time and financial and material resources. Prerequisite: BME 301A, BME 301B and senior standing. Credit 3 units. EN: DU, SU, TU

E62 BME 402 Senior Design II
BME 402 is a continuation of the BME 401 class. Working in small groups, students take a paper design completed in BME 401, and build a prototype. The students evaluate, optimize and undertake the building of the design. The design experience requires application of knowledge and skills acquired in earlier course work; it incorporates engineering standards and realistic constraints that include most of the following considerations: economic, environmental, sustainability, manufacturability, ethical, health and safety, social, and political. Students prepare written reports and participate in oral design reviews to a panel of faculty members and industrial representatives. Prototype construction is the final goal of the class. Prerequisites: BME 401, senior standing and approval of the instructor. Credit 3 units. EN: DU, SU, TU

E62 BME 421 Kinetics of Receptor-Mediated Processes
Receptor-mediated processes impact many aspects of cell behavior, including cell proliferation, survival, migration and death. This course focuses on the development of mathematical descriptions of cell signaling processes. In particular, we highlight models that allow the formulation of testable, mechanistic hypotheses related to cell behavior. Additionally, we examine methods to analyze the flux of information and metabolites through enzymatic cascades. Applications of these methods in cellular engineering, metabolic engineering and systems biology are described. Prerequisites: senior or graduate standing. Same as BME 521 Credit 3 units. EN: DU, SU, TU

E62 BME 423 Biomaterials Science
An understanding of the interactions between biological systems and artificial materials is of vital importance in the design of medical devices. This course will introduce the principles of biomaterials science, unifying knowledge from the fields of biology, materials science, surface science, and colloid science. The course will be taught from the primary scientific literature, focusing on the study of protein/surface interactions and hydrogel materials. Same as BME 523 Credit 3 units. EN: DU, SU, TU

E62 BME 433 Biomedical Signal Processing
An advanced undergraduate/graduate level course. Continuous-time and discrete-time application of signal processing tools to a variety of biomedical problems. Course topics include linear systems theory, frequency transforms, sampling theorem, basis functions, linear filtering, feature extraction, noise analysis, system identification. Concepts learned in class are applied using software tools to real biomedical signals such as speech, ECG, EEG, medical images. Prerequisites: ESE 317, ESE 351. Same as BME 533 Credit 3 units. EN: DU, SU, TU
E62 BME 458A Biological Transport
The principles of mass, momentum and energy transport are applied to the analysis of selected processes of biomedical and biotechnological interest. Topics include dynamics of blood flow, oxygen and solute transport, steady and transient diffusion in reacting systems, pharmacokinetic analysis, and heat transfer. Prerequisites: ChE 366 or ChE 367 or CE/MEMS 370 or graduate standing.
Same as BME 558
Credit 3 units. EN: DU, SU, TU

E62 BME 459 Intermediate Biomechanics
This course covers several of the fundamental theories of solid mechanics that are needed to solve problems in biomechanics. The theories of nonlinear elasticity, viscoelasticity, and poroelasticity are applied to a large range of biological tissues including bone, articular cartilage, blood vessels, the heart, skeletal muscle, and red blood cells. Other topics include muscle activation, the biomechanics of development and functional adaptation, and the mechanics of hearing. Prerequisites: BME 240 and ESE 317 or equivalent, or permission of instructor.
Same as BME 559
Credit 3 units. EN: DU, SU, TU

E62 BME 461 Protein Structure and Dynamics
This course covers the concepts and methods involved in the analysis of protein structure, stability, folding and misfolding. Topics include, protein structural elements, amyloid structure, intra- and intermolecular forces, folding pathways and intermediates, phi-value analysis, kinetics of protein folding and of amyloid formation, spectroscopic methods, fluorescence-based methods, hydrodynamic methods, relaxation techniques and force spectroscopy in measuring dynamics of protein structure and protein interaction, introduction to X-ray crystallography and NMR and their application to problems of bioengineering and biophysics. One half of the course consists of lectures, the other half is a student seminar, in which each student presents a paper from primary literature and its concept and methodology that is discussed in detail. Prerequisites: senior or graduate level, prior course work in physical chemistry/thermodynamics.
Credit 3 units. EN: DU, SU, TU

E62 BME 462 Protein Function and Interactions
This course focuses on the interactions between proteins, nucleic acids, small molecules and drugs. We begin with the elements of molecular recognition, binding and prediction of interactions. We next move on to molecular kinetics, inhibition and allosteric regulation. Finally we look at modeling regulatory networks and signaling pathways using systems biology approaches.
Credit 3 units. EN: DU, SU, TU

E62 BME 463 Orthopaedic Biomechanics — Bones and Joints
Basic and advanced solid mechanics applied to the musculoskeletal system, with a primary focus on bone and joint mechanics. Topics include: forces in joints; gait analysis; axial, torsional and bending loading of bones; mechanical properties (elastic, fracture, creep, fatigue) and composition of bone; bone adaptation and basic concepts of bone biology; joint kinematics; total hip and knee replacement; mechanical consequences of injury (fracture) and disease (osteoporosis). This class is geared to graduate students and upper-level undergraduates familiar with statics and mechanics of deformable bodies. Prerequisites: BME 240 or equivalent.
Same as BME 563
Credit 3 units. EN: DU, SU, TU

E62 BME 464 Special Topics: Orthopaedic Biomechanics — Cartilage/Tendon
Basic and advanced viscoelasticity and finite strain analysis applied to the musculoskeletal system, with a primary focus on soft orthopaedic tissues (cartilage, tendon and ligament). Topics include: mechanical properties of cartilage, tendon and ligament; applied viscoelasticity theory for cartilage, tendon and ligament; cartilage, tendon and ligament biology; tendon and ligament wound healing; osteoarthritis. This class is geared to graduate students and upper-level undergraduates familiar with statics and mechanics of deformable bodies. Prerequisites: BME 240 or equivalent. Note: BME 590Z (463/563) Orthopaedic Biomechanics — Bones and Joints is NOT a prerequisite.
Same as BME 564
Credit 3 units. EN: SU, TU

E62 BME 466 Cardiovascular Dynamics
Same as E62 BME 568.
Same as BME 568
Credit 3 units. EN: DU, SU, TU

E62 BME 471 Bioelectric Phenomena
This course is a quantitative introduction to the origins of bioelectricity with an emphasis on neural and cardiac electrophysiology. Topics include electric fields and current flow in volume conductors; cell membrane channels and their role in generating membrane potentials; action potentials and their propagation in myelinated and unmyelinated axons as well as cardiac tissue. Minor topics of discussion include both skeletal muscle and nonhuman (e.g. electric fish) sources of bioelectricity. Prerequisite: ESE 330.
Credit 3 units. EN: DU, SU, TU

E62 BME 472 Biological Neural Computation
E62 BME 4902 Special Topics: Cellular Neurophysiology
This course examines the biophysical concepts of synaptic function with the focus on the mechanisms of neural signal processing at synapses and elementary circuits. The course combines lectures and discussion sessions of primary research papers. Topics include synaptic and dendritic structure, electrical properties of axons and dendrites, synaptic transmission, rapid and long-term forms of synaptic plasticity, information analysis by synapses and basic neuronal circuits, principles of information coding, mechanisms of learning and memory, function of synapses in sensory systems, models of synaptic disease states such as Parkinson and Alzheimer’s diseases. Additionally, a set of lectures is devoted to modern electrophysiological and imaging techniques, and modeling approaches to study synapses and neural circuits. Prerequisites: senior or graduate standing.
Same as BME 5902
Credit 3 units. EN : DU, SU, TU

E62 BME 4903 Physical Methods for Biomedical Scientists
This course provides an introduction to various techniques and methods that are widely used in biomedical research, including spectroscopy (electronic, vibrational, Raman and magnetic resonance) and surface analysis tools. The course materials are designed for graduate students and seniors majoring in biomedical engineering and biology. Prerequisites: senior or graduate standing.
Same as BME 5903
Credit 3 units.

E62 BME 502 Cardiovascular MRI — Physics to Clinical Application
This graduate course (seniors welcome) covers the basic physics involved in creating an image by magnetic resonance technology. The use of this technology, specifically as it applies to the unique challenges of cardiovascular applications, is examined. This includes topics such as motion compensation techniques, real-time imaging, exogenous contrast enhancement, and quantitative flow measurements, for example. As much as one-third of the class involves actual case studies and the discussion of clinical use for cardiovascular MRI. Students demonstrate competence in the subject through a combination of homework, a final examination and a small semester project. Prerequisites: Calculus, introductory human physiology/anatomy/biology course.
Credit 3 units. EN : DU, SU, TU

E62 BME 503A Cell and Organ Systems Biology
This 1.5-semester course integrates and extends the basic principles of cell biology and physiology to the functions of the major organ systems of the body i.e. muscle, cardiovascular, renal, respiratory, gastrointestinal and endocrine. Same as M75 503, offered through the medical school. This course is open to biomedical engineering students only. Permission must be obtained by the chairman in Biomedical Engineering. Starts at same time as Medical School classes and ends the middle of spring semester.
Credit 6 units.

E62 BME 504 Light Microscopy and Optical Imaging
Recent advances in optics, microscopy and probe design have led to a dramatic expansion of options for measuring structural and functional features of biological tissue with light. Course topics include the basic physics underlying vital light microscopy, use of voltage-sensitive and calcium-sensitive fluorescent probes, multiphoton and confocal imaging, and image acquisition/processing. Special emphasis is placed on imaging neural tissue and live preparations. Students read current literature and devise a research project based upon an imaging technology.
Credit 3 units.

E62 BME 506 Seminar in Imaging Science and Engineering
Same as ESE 596
Credit 1 unit.

E62 BME 5068 Fundamentals of Molecular Cell Biology
Same as L41 5068.
Same as Biol 5068
Credit 4 units.

E62 BME 511 Biotechnology Techniques for Engineers
This course is a survey of techniques that biomedical engineers working in biotechnology and biomedical engineering will encounter in research or industry. It serves to introduce the important advances in the state of the art in molecular and cell biology. Students learn the basis of standard biological techniques and when these techniques should be applied, as well as their shortcomings. This course provides students with a toolbox of techniques to approach the analysis of cellular and molecular interactions. Techniques include recombinant DNA methods, PCR, protein expression and purification, protein analysis, mammalian cell culture, light microscopy, and immunohistochemistry. Prerequisites: graduate standing in biomedical engineering and BME 530A or equivalent.
Credit 3 units. EN : DU, SU, TU

E62 BME 521 Kinetics of Receptor-Mediated Processes
Receptor-mediated processes impact many aspects of cell behavior, including cell proliferation, migration, adhesion, differentiation and survival. This course focuses on the development of mathematical descriptions of cell signaling processes. In particular, we highlight models that allow the formulation of testable, mechanistic hypotheses related to cell behavior. Additionally, we examine methods to analyze the flux of information through enzymatic cascades and the emergence of complexity at non-equilibrium steady states. Prerequisites: senior or graduate standing. Credit 3 units. EN: DU, SU, TU

E62 BME 523 Biomaterials Science
An understanding of the interactions between biological systems and artificial materials is of vital importance in the design of medical devices. This course introduces the principles of biomaterials science, uniting knowledge from the fields of biology, materials science, surface science and colloid science. The course is taught from the primary scientific literature, focusing on the development of mathematical models of protein/surface interactions. Credit 3 units. EN: DU, SU, TU

E62 BME 5231 Biomaterials Science: Polymer Physics
The properties of polymeric biomaterials are largely predictable from basic polymer physics principles. Topics discussed include: single chain conformations, thermodynamics of mixing and polymer solutions, networks and gelation, rubber elasticity and swelling, and polymer dynamics. Credit 2 units.

E62 BME 524 Tissue Engineering
This course integrates the principles and methods of engineering and life sciences toward the fundamental understanding of normal and pathological mammalian tissues especially as they relate to the development of biological substitutes to restore, or improve tissue function. Current concepts and strategies including drug delivery, tissue and cell transplantation, and in vivo tissue regeneration are introduced as well as their respective clinical applications. Prerequisites: ChE 366-367 or MEMS 370, Biol 2960 and 2970. Credit 3 units. EN: DU, SU, TU

E62 BME 525 Engineering Aspects of Biotechnology
An understanding of engineering principles such as kinetics and transport is essential to the successful scale up of processes for the production of biological therapeutics. This course discusses the use of protein-based therapeutics and their production in bacterial and mammalian cells. The course unifies concepts learned in biology, thermodynamics and transport to understand the need for engineering in the field of biotechnology. The impact of emerging technologies such as genomics, proteomics, micro arrays, tissue engineering and gene therapy on the biotechnology industry also is described. Prerequisites (or corequisite): ChE 320, Che 366/7, Biol 297/2970. Credit 3 units. EN: DU, SU, TU

E62 BME 527 Design of Artificial Organs
Medical devices that replace the function of one of the major organs in the body must usually interface with flowing blood. Examples include total artificial hearts, left ventricular assist devices, membrane oxygenators, hemodialysis systems and encapsulated endocrine cells. The design of these devices relies on integration of knowledge from a variety of fields, in particular computational fluid dynamics and blood rheology. We study the process by which a concept for a medical device eventually leads to a functioning, blood-contacting medical device. An introduction to computational fluid dynamics (the finite difference and finite volume methods) are integrated with computer-aided design and testing of devices using the software package GAMBIT/Fluent. Laptop/desktop running Windows XP/Vista/7 needed for class. Credit 3 units. EN: DU, SU, TU

E62 BME 530A Molecular Cell Biology for Engineers
This course is designed for upper-level undergraduates and first-year graduate students with a background in engineering. This course covers the biology of cells of higher organisms: protein structure and function; cellular membranes and organelles; cell growth and oncogenic transformation; cellular transport, receptors and cell signaling; the cytoskeleton, the extracellular matrix, and cell movement. Emphasis is placed on examples relevant to biomedical engineering. The course includes two lectures per week and one discussion section. In the discussion section, the emphasis is on experimental techniques used in cell biology and the critical analysis for primary literature. Note this course does not count for engineering topics credits and is meant to fulfill a life science requirement for engineering or physical sciences graduate students. Prerequisite: Biol 2960 and 2970 or graduate standing. Credit 3 units.

E62 BME 530 Modeling Biomolecular Systems I
Same as Biol 5476
Credit 3 units.

E62 BME 530A Molecular Cell Biology for Engineers
Course designed for graduate students with little or no background in signal processing. Continuous-time and discrete-time application of signal processing tools to a variety of biomedical problems. Course topics include review of linear signals and systems theory, frequency transforms, sampling theorem, basis functions, linear filtering, feature extraction, parameter estimation and biological system modeling. Special emphasis is placed on signal transduction and data acquisition.
Additional topics include noise analysis of real-world biosignals, biological system identification, stochastic/chaotic/fractal nonlinear processes in biological systems. Concepts learned in class are applied using software tools to identify biomedical signals such as biological rhythms, chemical concentrations, blood pressure, speech, EMG, ECG and EEG. Prerequisite: graduate standing or consent of instructor. Credit 3 units. EN : DU, SU, TU

E62 BME 537 Computational Molecular Biology
This course focuses on mathematical and algorithmic issues in systems biology and biological sequence analysis. The essential mathematics is introduced first. Systems biology topics include synthetic biology, dynamical systems modeling, mapping and modeling gene regulatory networks, constraint based approaches to predictive modeling of metabolic networks, and the integration of regulatory and metabolic models. Sequence analysis topics include, Hidden Markov Models, parameter inference, sequence alignment, and modeling transcription factor binding sites. This course will include a combination of paper and pencil homework assignments and programming labs. Prereqs: An introductory course in computer programming or equivalent experience and at least two semesters of calculus. Credit 3 units.

E62 BME 540 Modeling Biomolecular Systems II
This course is a continuation of BME 530/Biol 5476, covering additional topics in computer modeling and simulation. The lectures cover the theory and underlying algorithms, while the laboratories and term project provide the students with hands-on experience in using various software packages. Topics include: statistical mechanics concepts in molecular simulations; algorithms for molecular dynamics, stochastic dynamics and Monte Carlo simulations; free energy calculations; electrostatics and continuum solvation methods; hybrid QM/MM calculations; multiscale modeling. Prerequisites: a background in biochemistry and physical chemistry. Credit 3 units. EN : DU, SU, TU

E62 BME 5494 Quantitative Cardiovascular Physiology
This course is the same as L41 5494.
Same as Biol 5494
Credit 3 units. EN : SU

E62 BME 557 Cellular and Subcellular Biomechanics
This is an advanced biomechanics course intended to cover the applications of mechanics to biological problems at cellular and subcellular levels. Discussion topics include mechanical equilibrium of biomembranes, constitutive equations of biomembranes, viscoelasticity of biomembranes, mechanics of the cytoskeleton, experimental tools (the micropipette aspiration technique, the atomic force microscope, the optical tweezers, etc.) and their applications. Prerequisite: instructor’s permission. Credit 3 units. EN : DU, SU, TU

E62 BME 558 Biological Transport
The principles of mass, momentum and energy transport are applied to the analysis of selected processes of biomedical and biotechnological interest. Topics include dynamics of blood flow, oxygen and solute transport, steady and transient diffusion in reacting systems, pharmacokinetic analysis and heat transfer. Prerequisites: ChE 366, or ChE 367, or CE/MEMS 370, or graduate standing. Credit 3 units. EN : DU, SU, TU

E62 BME 559 Intermediate Biomechanics
This course covers several of the fundamental theories of solid mechanics that are needed to solve problems in biomechanics. The theories of nonlinear elasticity, viscoelasticity and poroelasticity are applied to a large range of biological tissues including bone, articular cartilage, blood vessels, the heart, skeletal muscle and red blood cells. Other topics include muscle activation, the biomechanics of development and functional adaptation, and the mechanics of hearing. Prerequisites: BME 240 and ESE 317 or equivalent, or permission of instructor. Credit 3 units. EN : DU, SU, TU

E62 BME 560A Biomechanics
Advanced topics in the application of mechanics to biological problems. The specific topics selected for discussion reflect current faculty research interests and may include: mechanics and energetics of contractility, membrane mechanics, material properties of cells and tissues, and micromechanical measurement systems. Credit 3 units. EN : DU, SU, TU

E62 BME 5610 Protein Structures and Dynamics
This course covers the concepts and methods involved in the analysis of protein structure, stability, folding and misfolding. Topics include protein structural elements, amyloid structure, intra- and intermolecular forces, folding pathways and intermediates, phi-value analysis, kinetics of protein folding and of amyloid formation, spectroscopic methods, fluorescence-based methods, hydrodynamic methods, relaxation techniques and force spectroscopy in measuring dynamics of protein structure and protein interaction, introduction to X-ray crystallography and NMR and their application to problems of bioengineering and biophysics. One half of the course consists of lectures, the other half is a student seminar, in which each student presents a paper from primary literature and its concept and methodology that is discussed in detail. Prerequisites: senior or graduate level, prior course work in physical chemistry/thermodynamics.
E62 BME 562 Mechanics of Growth and Development
This course applies the fundamental principles of solid mechanics to problems involving growth, remodeling, and morphogenesis of cells, tissues and organs. Introduction to developmental biology, nonlinear elasticity, viscoelasticity, and active contraction. Particular topics include cellular morphogenetic mechanisms, growth and development of the cardiovascular system, and adaptive remodeling of bone. Prerequisites: BME 240 or ME 241 or equivalent. Credit 3 units. EN : DU, SU, TU

E62 BME 563 Orthopaedic Biomechanics — Bones and Joints
Basic and advanced solid mechanics applied to the musculoskeletal system, with a primary focus on bone and joint mechanics. Topics include: forces in joints; gait analysis; axial, torsional and bending loading of bones; mechanical properties (elastic, fracture, creep, fatigue) and composition of bone; bone adaptation and basic concepts of bone biology; joint kinematics; total hip and knee replacement; mechanical consequences of injury (fracture) and disease (osteoporosis). This class is geared to graduate students and upper-level undergraduates familiar with statics and mechanics of deformable bodies. Prerequisites: BME 240 or equivalent. Credit 3 units. EN : DU, SU, TU

E62 BME 564 Special Topics: Orthopaedic Biomechanics — Cartilage/Tendon
Basic and advanced viscoelasticity and finite strain analysis applied to the musculoskeletal system, with a primary focus on soft orthopaedic tissues (cartilage, tendon and ligament). Topics include: mechanical properties of cartilage, tendon and ligament; applied viscoelasticity theory for cartilage, tendon and ligament; cartilage, tendon and ligament biology; tendon and ligament wound healing; osteoarthritis. This class is geared to graduate students and upper-level undergraduates familiar with statics and mechanics of deformable bodies. Prerequisite: BME 240 or equivalent. Note: BME 590Z (463/563) Orthopaedic Biomechanics — Bones and Joints is NOT a prerequisite. Credit 3 units. EN : SU, TU

E62 BME 5657 prerequisites: permission from the instructor.

E62 BME 566 Cardiac Electrophysiology
A mathematical introduction to basic electrophysiology and its application to the heart. Topics include: gross cardiac anatomy and physiology; the cardiac cycle; cable theory and propagation of activity in one, two, and three dimensions; the forward and inverse problems of electrocardiology; and applications to clinical medical practice. Engineering examples include cardiac mapping systems, pacemakers and implantable defibrillators. Prerequisite: SSM 317. Credit 3 units. EN : DU, SU, TU

E62 BME 568 Cardiovascular Dynamics
This course focuses on the analysis of blood flow through the heart and blood vessels. Basic cardiovascular anatomy and physiology; principles of continuum mechanics. Flow through heart chambers, valves, and coronary arteries; peristaltic flow in the embryonic heart. Steady and unsteady flow in tubes; wave propagation in blood vessels; flow in collapsible tubes; microcirculation. Prerequisites: BME 240 or equivalent and ChE 367 or MASE/MEMS 341 or equivalent, or permission of instructor. Credit 3 units. EN : DU, SU, TU

E62 BME 569 Special Topics: Applied Bioelectricity
This course focuses on the design of bioelectric devices for use in clinical patients. Cardiac pacemakers and defibrillators as well as neural stimulators (eg. deep brain, vagal) are the basis for a case-study approach to designing and developing
E62 BME 574 Quantitative Bioelectricity and Cardiac Excitation
Action potential generation, action potential propagation, source-field relationships in homogeneous and inhomogeneous media, models of cardiac excitation and arrhythmia, quantitative electrocardiography. Prerequisites: differential equations, Laplace transform, electromagnetic field theory (undergraduate level).
Credit 3 units.

E62 BME 575 Molecular Basis of Bioelectrical Excitation
Ion channels are the molecular basis of membrane excitability in all cell types, including neuronal, heart and muscle cells. This course presents the structure and the mechanism of function of ion channels at the molecular level. It introduces the basic principles and methods in the ion channel study as well as the structure-function relation of various types of channels. Exemplary channels that have been best studied are discussed to illustrate the current understanding. Prerequisites: knowledge of differential equations, electrical circuits and chemical kinetics.
Credit 3 units.

E62 BME 589 Biological Imaging Technology
This class develops a fundamental understanding of the physics and mathematical methods that underlie imaging technology literature. The physics section examines how electromagnetic and acoustic waves interact with tissues and cells, how waves can be used to image the biological structure and function, image formation methods and diffraction limited imaging. The math section examines image decomposition using basis functions (e.g. Fourier transforms), synthesis of measurement data, image analysis for feature extraction, reduction of multidimensional imaging datasets, multivariate regression and statistical image analysis. Original literature on electron, confocal and two photon microscopy, ultrasound, computed tomography, functional and structural magnetic resonance imaging and other emerging imaging technology are critiqued.
Same as ESE 589
Credit 3 units.

E62 BME 5901 Integrative Cardiac Electrophysiology
Quantitative electrophysiology of the heart, integrating from the molecular level (ion channels, regulatory pathways, cell signaling) to the cardiac cell (action potential and calcium transient), multicellular tissue (cell-cell communication) and the whole heart (SA and AV nodes, specialized conduction system, fiber structure and anisotropy, anatomical considerations).
Prerequisite: consent of instructor.
Credit 3 units.

E62 BME 5902 Special Topics: Cellular Neurophysiology
This course examines the biophysical concepts of synaptic function with the focus on the mechanisms of neural signal processing at synapses and elementary circuits. The course combines lectures and discussion sessions of primary research papers. Topics include synaptic and dendritic structure, electrical properties of axons and dendrites, synaptic transmission, rapid and long-term forms of synaptic plasticity, information analysis by synapses and basic neuronal circuits, principles of information coding, mechanisms of learning and memory, function of synapses in sensory systems, models of synaptic disease states such as Parkinson and Alzheimer’s diseases. Additionally, a set of lectures is devoted to modern electrophysiological and imaging techniques, and modeling approaches to study synapses and neural circuits. Prerequisite: senior or graduate standing.
Credit 3 units.

E62 BME 5903 Physical Methods for Biomedical Scientists
This course provides an introduction to various techniques and methods that are widely used in biomedical research, including spectroscopy (electronic, vibrational, Raman and magnetic resonance) and surface analysis tools. The course materials are designed for graduate students and seniors majoring in biomedical engineering and biology. Prerequisite: senior or graduate standing.
Credit 3 units.

E62 BME 5904 Special Topics: Nanostructured Surfaces and Materials and Their Applications in Biomedical Research
Although this course is primarily designed for graduate students and seniors in biomedical engineering, the selected topics are also appropriate for students in other departments such as chemistry, physics, chemical engineering, mechanical engineering and materials science. This course presents an overview of the basic principles and recent activities in representative areas of nanoscience and nanotechnology. We deal with the chemistry and physics of materials, structures and surfaces with feature sizes less than 100 nm: For example, when does size matter? How do we engineer the properties of materials/structures/surfaces through size control? Is there the lowest limit for the size? How do we synthesize nanomaterials, fabricate nanostructures and generate nanoscale patterns? What are the challenges in these newly developed areas? What are the unique applications of nanostructured materials in biomedical research? Prerequisites: general chemistry and general physics.
Credit 3 units.
E62 BME 5905 Neural Computation and Motor Behavior
This course considers current problems in motor neuroscience. Emphasis is placed on experimental paradigms and computational models that most directly address how the brain represents, transforms and estimates information during movement, and how these computations adapt with experience. Graduate students from all engineering and science disciplines who aspire to deeply consider and address these issues should attend. Prerequisites: recommended background in neuroscience and/or numerical implementation of differential equations. Credit 3 units.

E62 BME 5906 Brain Networks
Large networks of interconnecting elements are now accessible for study with increasingly sophisticated simulation methods. Brain networks represent an exceptionally attractive target for such study. This course includes a survey of modern analytic methodology used to evaluate a range of biological neural networks from relatively simple cellular networks in model animals and in vitro to abstracted networks of functional areas in the human cerebral cortex. Course work involves lectures on methodology and recent findings as well as readings from the primary literature. Prerequisites: Math 217 Differential Equations, graduate standing or consent of instructor. Credit 3 units.

E62 BME 5907 Advanced Concepts in Image Science
The course exposes students to a unified treatment of the mathematical and statistical principles of imaging. This includes the deterministic analysis of imaging systems that includes continuous-to-continuous, continuous-to-discrete and discrete-to-discrete mappings from objects to images. In addition, imaging systems are analyzed in a statistical framework where stochastic models for objects and images are introduced. Methodologies for task-based image quality assessment are reviewed, which includes classification tasks and receiver operator characteristic (ROC) analysis. Basic concepts of inverse problems and tomography also are covered. Prerequisite: graduate standing or consent of instructor. Credit 3 units.

E62 BME 5908 The Cell as a Machine
The goals of this course are to provide a working understanding of the basic cell functions and the physical and chemical principles underlying them. In practical terms, we attempt to solve a number of important problems relevant to replication, transcription, translation, translocation, motility and other important functions. Classes consist of online videotaped lectures (three hours per week) and live weekly Q&A sessions (Th 6-7 p.m.). Prerequisites: Basic Physical Chemistry, Calculus, Biology, graduate standing or approval by adviser or department. Credit 3 units.

E62 BME 5909 Physiology of the Heart
This is a comprehensive cardiac physiology course for biomedical engineers, which includes (1) history, philosophy and methodology of cardiac physiology and cardiac engineering, (2) structure, biochemistry and biophysics of the heart, (3) signal transduction and regulation, (4) normal physiology and pathophysiology, and (5) current approaches to therapy of heart disease. Textbook: Arnold M. Katz, Physiology of the Heart, 5th edition. Credit 3 units.

E62 BME 5910 Reverse Engineering the Human Brain
This course investigates classic and current research that identifies the processes by which the human brain transforms, estimates and adapts to underlie mental and physical behavior. We consider how these studies succeed or fail to identify the systemic properties that make us human. The focus is on behavioral approaches, but we also integrate into our study physiological, neurological and imaging approaches. Credit 3 units. EN : DU , SU , TU

E62 BME 5911 Cardiovascular Biophysics Journal Club
This journal club is intended for beginning graduate students, advanced undergraduates and MSTP students with a background in the quantitative sciences (engineering, physics, math, chemistry, etc). The subjects covered are inherently multidisciplinary. We review landmark and recent publications in quantitative cardiovascular physiology, mathematical modeling of physiologic systems and related topics such as chaos theory and nonlinear dynamics of biological systems. Familiarity with calculus, differential equations and basic engineering/thermodynamic principles is assumed. Knowledge of anatomy/physiology is optional. Credit 1 unit. EN : DU, SU, TU

E62 BME 5912 Applied Mathematics for Biomedical Sciences
The objective of this course is to survey mathematical methods that provide a foundation for graduate research in BME and related fields. The course is organized around
four modules: Linear Algebra, Partial Differential Equations, Integral Transforms, and Introduction to Stochastic Processes, and roughly seven 90-minute lectures are dedicated to each module. The lectures introduce mathematical concepts and the application of these concepts to problems in biomedical sciences such as imaging, biotechnology, systems biology, network science and biophysics. Students are expected to have a strong background in advanced calculus, vector calculus, introductory linear algebra, differential equations and a reasonable fluency with numerical methods. The course is offered every fall semester. Dr. Anastasio teaches this course during the even-numbered years and Dr. Pappu teaches during odd years. Credit 3 units.

**E62 BME 592 Special Topics: Biomedical Optics II: Imaging**

This course covers optical imaging technologies. Topics include ballistic imaging, optical coherence tomography, Mueller optical coherence tomography, diffuse optical tomography, photoacoustic tomography and ultrasound-modulated optical tomography. Prerequisites: Math 217, BME 591. Credit 3 units.

**E62 BME 599 Masters Research**

Credit -6 unit.
Computer Science and Engineering

About Computer Science and Engineering

The field of Computer Science and Engineering studies the design, analysis, implementation and application of computation and computer technology. Computing plays an important role in virtually all fields, including science and medicine, music and art, business, law, and human communication; hence the study of Computer Science and Engineering can be interdisciplinary in nature. Whether your goal is to become a computing professional or to take a few courses to develop a basic understanding of computing for application to another field, the Department of Computer Science and Engineering at Washington University is committed to helping you gain the background you need.

People are attracted to the study of computing for a variety of reasons. Consequently, the department offers a wide variety of academic programs, including a five-course minor, a second major, several undergraduate degrees, combined undergraduate and graduate programs, as well as undergraduate research opportunities and an undergraduate honors program. Each academic program can be tailored to your individual needs.

The breadth of Computer Science and Engineering may be best understood in terms of the general areas of software systems, hardware, theory and applications.

Software Systems are collections of interacting software components that work together to support the needs of computer applications. Courses in this area help you gain a solid understanding of how software systems are designed and implemented. Examples include operating systems, which manage computational resources; network protocols, which are responsible for the delivery of information; programming languages, which support the construction of software systems and applications; and compilers, which translate computer programs into executable form.

Hardware is the term used to describe the physical and mechanical components of a computer system. Courses in this area provide background in logic circuits, which carry out basic computations; computer architecture, which defines the organization of functional components in a computer system, and peripheral devices such as disks and robot arms that are controlled by the computer system.

Theory is the study of the fundamental capabilities and limitations of computer systems. A background in theory will help you choose among competing design alternatives on the basis of their relative efficiency and will help you to verify that your implementations are correct. Theory courses provide background in algorithms, which describe how a computation is to be carried out; data structures, which specify how information is to be organized within the computer; analytical techniques to characterize the time or space requirements of an algorithm or data structure; and verification techniques to prove that solutions are correct.

Applications are the ways in which computer technology is applied to solve problems, often in other disciplines. Most applications courses provide background not only in the applications themselves but also in how the applications are designed and implemented. Examples of application areas include artificial intelligence, computer graphics and robotics.

A well-rounded study of computing will include training in each of these areas. However, depending on your educational goals, you may prefer to concentrate on certain areas for greater depth of knowledge. To help you balance your elective courses, most upper-level departmental courses are numbered with a designation in one of these categories: S for software systems, M for machines (hardware), T for theory and A for applications. If your interests are concentrated in the first two areas, a Computer Engineering degree might be best for you. If your interests are concentrated in the second two, a Computer Science degree might be best for you. You are encouraged to meet with a faculty adviser in the Department of Computer Science and Engineering to discuss your options and develop a plan consistent with your goals.

Undergraduate Programs

These pages introduce the wide variety of undergraduate programs offered by the Department of Computer Science and Engineering and will help as a starting point for students interested in studying computer science or computer engineering. We describe the Minor in Computer Science, the second major, the premedical option, the B.S. degree, the B.S.C.S. degree, the B.S. in Computer Engineering (see Majors (p. 779) and Minors (p. 782) tabs), combined undergraduate and graduate programs, the Undergraduate Research Opportunities Program, and the Cooperative Education Program. Additional information can be found at cse.wustl.edu, and our department’s faculty can offer further guidance and information about our programs.

The Majors page contains some sample schedules for several of the Computer Science and Engineering degree options. These schedules demonstrate some of the many course schedules that can be selected in completing a computer science or computer engineering degree. All students in our programs are assigned an adviser, who can help design an individualized program, monitor a student’s progress, and consult about curriculum and career options.

Many nonmajors take a CSE course to broaden their education. CSE 104 Web Development , CSE 131 Computer Science I
, and CSE 200 Engineering and Scientific Computing do not require any computer science background.

**Dual Degree**

An alternative to the second major is the dual-degree program that leads to two undergraduate degrees, one in the School of Engineering & Applied Science and one from another school. For this option you must complete all requirements (including distribution requirements) for both degrees. If Arts & Sciences is the other school, 150 credits are required for both degrees. (Only 120 credits are required for the second major because a single degree is earned.) See the Dual Degree Office (Lopata 303, 314/935-6100) for details.

**Premedical Option within Computer Science**

Students may pursue a premedicine curriculum in conjunction with either the B.S. degree or second major in computer science programs. Students interested in the premedical option should refer to the School of Engineering Bulletin (p. 751) section for details.

**Combined Undergraduate and Graduate Study**

The Department of Computer Science and Engineering offers in-depth graduate study in many areas. Students entering the graduate programs require a background in computer science fundamentals equivalent to at least the minor in computer science. Washington University undergraduates seeking admission to the graduate degree program to obtain a master’s degree in computer science or computer engineering do not need to take the Graduate Record Examination (GRE). For more information, contact the department office at 314/935-6160 or the associate chair at associatechair@cse.wustl.edu.

**The Joint B.S.–M.S.**

This five-year program that leads to both the bachelor’s and master’s degrees offers the student an excellent opportunity to combine undergraduate and graduate studies in an integrated curriculum. The combination of the two programs extends the flexibility of the undergraduate curriculum to more advanced studies, thereby enabling students to plan their entire spectrum of computer science studies in a more comprehensive educational framework. Consistent with the general requirements (p. 756) defined by the School of Engineering, a minimum of 150 units is required for completion of the B.S.–M.S. program. Provided that the 150-unit requirement is satisfied, up to 6 units of course work acceptable for the M.S. can be counted toward both the B.S. and M.S. requirement. Students in the B.S.–M.S. program can take advantage of the program’s flexibility by taking graduate courses toward the graduate degree while still completing the undergraduate degree requirements.

The B.S.–M.S. program offers early admission to the graduate programs in computer science and computer engineering in the junior year and allows you to complete the master’s degree typically in only one additional year of study (instead of the usual three semesters). Undergraduate financial support is not extended for the additional semesters to complete the master’s degree requirements; however, scholarship support based upon a student’s major GPA calculated at the end of the junior year will be awarded automatically in the student’s final year of study. Students are classified as graduate students in their final year of study, and their tuition charges are at the graduate student rate. For information regarding scholarship amounts, please click here.

If you plan to apply to this program, it is recommended that you complete at least an undergraduate minor in computer science, three additional computer science courses at the 400 level, and one at the 500 level during your first four years. You must apply to this program by September 1 of your senior year, and a minimum GPA of 3.0 is required of all applicants.

**B.S.–M.B.A. Program**

The growing importance of computer-based information systems in the business environment has produced a sustained high demand for graduates with master’s degrees in business administration and undergraduate majors in computer science and engineering.

Students should apply to this joint program by February 1 of their junior year. The application for admission to the Olin Business School is available through the business school (p. 722). Applicants are judged on undergraduate performance, GMAT scores, summer and/or co-op work experience, recommendations and a personal interview.

**Research and Industry Experience**

If you want to become involved in computer science or computer engineering research or gain experience in industry while you are an undergraduate, there are many opportunities to do so. A few of these are listed below.

**Co-op**: The Cooperative Education Program allows you to get valuable experience working in industry while an undergraduate. Doing a Co-op can help give you another perspective on your education and may lead to full-time employment. Numerous companies participate in this program. More information is available from the Engineering Co-op and Internship Program that is part of the Career Center in the Danforth University Center, Suite 110.

Research: Participating in an undergraduate research project is a great way to learn a lot about a specific area and find out what research is all about. Research projects are available either for pay or for credit through CSE 400E Independent Study. See cse.wustl.edu for details.
Honors Program: If you maintain a 3.5 GPA and complete a thesis describing research that you have performed while an undergraduate, then you will graduate “with distinction” and your thesis title will appear on your transcript. Besides being a valuable experience, completing a thesis can be advantageous if you apply to graduate school. When selecting this option, you should register for CSE 499 Undergraduate Honors Thesis. Students in the Honors Program are encouraged to take several graduate-level courses and to serve as undergraduate teaching assistants for upper-level undergraduate courses.

Computing Facilities

The School of Engineering & Applied Science has numerous undergraduate laboratories that are accessible to all students regardless of their majors. In addition, the Department of Computer Science and Engineering maintains specialized instructional laboratories such as those in support of computer engineering classes. The department actively promotes a culture of strong undergraduate participation in research. Many undergraduates work in research labs with state-of-the-art equipment that provides them the opportunity to take part in computer science and computer engineering research. Robots, sensor networks, high-speed routers, specialized FPGA hardware, wireless devices, RF tags, digital cameras, large displays and multiprocessors are just a few of the hardware devices undergraduates often use in their projects. Opportunities for exploring modern software development techniques and specialized software systems further enrich the range of research options and help undergraduates sharpen their design and programming skills.

Advanced Placement/Proficiency

Students receiving a 4 or 5 on the AP Computer Science AB exam are awarded credit for CSE 131 Computer Science I. Students who receive a 4 or 5 on the AP Computer Science A exam can receive the same credit only if they pass the CSE 131 proficiency exam. Any student can take the CSE 131 proficiency exam, and a suitable score will waive CSE 131 as a requirement.

Upon request, the computer science department will evaluate a student for proficiency for any of our introductory courses. If a student is determined to be proficient in a given course, that course will be waived (without awarding credit) in the student’s degree requirements, and the student will be offered guidance in selecting a more advanced course. Questions should be directed to the associate chair at associatechair@cse.wustl.edu.

Undergraduate Courses

Course requirements for the minor and majors may be fulfilled by CSE 131 Computer Science I, CSE 132 Computer Science II, CSE 240 Logic and Discrete Mathematics, CSE 241 Algorithms and Data Structures and CSE courses with a letter suffix in any of the categories: software systems (S), hardware (M), theory (T) and applications (A). In addition, with approval of the instructor, up to 6 units of CSE 400E Independent Study can be used toward the CSE electives of any CSE degree. Other CSE courses provide credit toward graduation but not toward the CSE elective requirements for the second major, B.S.C.S., B.S.Co.E., or B.S. with a major in Computer Science. Undergraduates are encouraged to consider 500-level courses. If you are interested in taking a course but are not sure if you have the needed prerequisites, please contact the instructor.

Phone: 314/935-6160
Departmental website: http://cse.wustl.edu/undergraduateprograms/Pages/default.aspx

Endowed Professors

Michael R. Brent
Henry Edwin Sever Professor of Engineering
PhD, Massachusetts Institute of Technology
Systems biology, computational and experimental genomics, mathematical modeling, algorithms for computational biology, bioinformatics

Jonathan S. Turner
Barbara J. and Jerome R. Cox Jr. Professor of Computer Science
PhD, Northwestern University
Design and analysis of internet routers and switching systems, networking and communications, algorithms

Professors

Jeremy Buhler
PhD, Washington University
Computational biology, genomics, algorithms for comparing and annotating large biosequences

Ron K. Cytron
PhD, University of Illinois at Urbana–Champaign
Programming languages, middleware, real-time systems

Christopher D. Gill
DSc, Washington University
Distributed real-time embedded systems, middleware, formal models and analysis of concurrency and timing

Raj Jain
PhD, Harvard University
Wireless networks, network security, next generation Internet, sensor networks, telecommunications networks, performance analysis, traffic management, quality of service

Chenyang Lu
PhD, University of Virginia
Real-time and embedded systems, wireless sensor networks, mobile computing

Robert Pless
PhD, University of Maryland
Computer vision, medical imaging, sensor network algorithms, citizen science

Weixiong Zhang
PhD, University of California–Los Angeles
Computational biology, genomics, machine learning and data mining, and combinatorial optimization

Associate Professors

Roger D. Chamberlain
DSc, Washington University
Computer engineering, parallel computation, computer architecture, multiprocessor systems

Yixin Chen
PhD, University of Illinois at Urbana–Champaign
Mathematical optimization, artificial intelligence, planning and scheduling, data mining, learning data warehousing, operations research, data security

Patrick Crowley
PhD, University of Washington
Computer and network systems, network security

Cindy M. Grimm
PhD, Brown University
Surface modeling, art-based rendering, user interfaces, texture generation

Tao Ju
PhD, Rice University
Computer graphics, visualization, mesh processing, medical imaging and modeling

William D. Richard
PhD, University of Missouri–Rolla
Ultrasonic imaging, medical instrumentation, computer engineering

William D. Smart
PhD, Brown University
Machine learning, mobile robotics, human-robot interaction, brain-computer interfaces

Assistant Professors

Kunal Agrawal
PhD, Massachusetts Institute of Technology
Scheduling, resource allocation, transactional memory, cache-aware and cache-oblivious streaming

Viktor Gruev
PhD, Johns Hopkins University
Low power integrated sensory systems, integrated polarization imaging, focal plane spatiotemporal image sensors, current mode image sensors, sensory systems in 3-D fabrication technology, micro/nano fabrication, micro fluidics, and low power analog/digital integrated circuits

Caitlin Kelleher
PhD, Carnegie Mellon University
Human-computer interaction, programming environments, and learning environments

Kilian Weinberger
PhD, University of Pennsylvania
Multi-task learning, convex optimization, metric learning, dimensionality reduction, manifold learning and machine learned ranking

Research Faculty

Sharlee Climer
PhD, Washington University
Computational biology, artificial intelligence, mathematical modeling, combinatorial optimization, pattern recognition

Lecturers

Anne Bracy
PhD, University of Pennsylvania
Computer architecture, microarchitecture, performance modeling, instruction fusion

Todd Sproull
PhD, Washington University
Computer networking and mobile application development

Senior Professors

Jerome R. Cox Jr.
ScD, Massachusetts Institute of Technology
Computer system design, computer networking, biomedical computing

Mark A. Franklin
Hugo F. and Ina Champ Urbauer Professor of Engineering
PhD, Carnegie Mellon University
Computer architecture, systems analysis and parallel processing, storage systems design

Professors Emeriti

Richard A. Dammkoehler
MS, Washington University
Computer programming theory, information retrieval, computer systems architecture

Takayuki D. Kimura
PhD, University of Pennsylvania
Communication and computation, visual programming

Seymour V. Pollack
MS, Brooklyn Polytechnic Institute
Intellectual property, information systems
Bachelor of Science in Computer Science

The Bachelor of Science in Computer Science (B.S.C.S.) is designed for students planning a career in computer science and desiring a degree with an engineering flavor. Students working toward a B.S.C.S. degree must meet all requirements for a professional degree (p. 756). In addition, there are the following departmental course requirements:

- **Common Studies Program Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math 131</td>
<td>Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>Math 132</td>
<td>Calculus II</td>
<td>3</td>
</tr>
<tr>
<td>Math 233</td>
<td>Calculus III</td>
<td>3</td>
</tr>
<tr>
<td>Math 217</td>
<td>Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>Physics 117A</td>
<td>General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>or Physics 197</td>
<td>Physics I</td>
<td></td>
</tr>
<tr>
<td>Physics 118A</td>
<td>General Physics II</td>
<td>4</td>
</tr>
<tr>
<td>or Physics 198</td>
<td>Physics II</td>
<td></td>
</tr>
<tr>
<td>Chem 111A</td>
<td>General Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>Chem 151</td>
<td>General Chemistry Laboratory I</td>
<td>2</td>
</tr>
<tr>
<td>Engr 310</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

Humanities and social sciences electives

Upon completing a course in the calculus sequence (Math 131 – Math 132 – Math 233) with a grade of C– or better, you may apply to receive credit for the preceding courses in the calculus sequence.

- **Computer Science Core Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSE 131</td>
<td>Computer Science I</td>
<td>3</td>
</tr>
<tr>
<td>CSE 132</td>
<td>Computer Science II</td>
<td>3</td>
</tr>
<tr>
<td>CSE 240</td>
<td>Logic and Discrete Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>CSE 241</td>
<td>Algorithms and Data Structures</td>
<td>3</td>
</tr>
<tr>
<td>CSE 332S</td>
<td>Object-Oriented Software Development Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>CSE 436S</td>
<td>Software Engineering Workshop</td>
<td>3</td>
</tr>
<tr>
<td>CSE 260M</td>
<td>Introduction to Digital Logic and Computer Design</td>
<td>3</td>
</tr>
<tr>
<td>or CSE 361S</td>
<td>Introduction to Systems Software</td>
<td>3</td>
</tr>
<tr>
<td>CSE 422S</td>
<td>Operating Systems Organization</td>
<td>3</td>
</tr>
<tr>
<td>or CSE 425S</td>
<td>Programming Systems and Languages</td>
<td></td>
</tr>
<tr>
<td>or CSE 431S</td>
<td>Translation of Computer Languages</td>
<td></td>
</tr>
</tbody>
</table>

Each of these core courses must be passed with a grade of C– or better.

- **Computer Science Elective Requirements:**

At least 18 additional units in computer science or computer science-related courses with an S, M, T or A suffix of which at least one must be a theory (T) course, at least one must be a systems (S) course, and at least one must be a machine (M) or application (A) course. Students may use up to 6 units of approved independent work (CSE 400E, CSE 497–CSE 499) as part of their computer science electives. Such independent work is not classified as S, M, T or A.

- **Additional Departmental Requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESE 317</td>
<td>Engineering Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>or Math 309</td>
<td>Matrix Algebra</td>
<td></td>
</tr>
<tr>
<td>ESE 326</td>
<td>Probability and Statistics for Engineering</td>
<td>3</td>
</tr>
</tbody>
</table>

All courses taken to meet the above requirements (with the exception of the humanities and social sciences electives) cannot be taken on a pass/fail basis.

Click here for a sample schedule for Computer Science Degree Options. (p. 796)

The Major in Computer Science

The most flexible degree option in computer science is the Bachelor of Science (B.S.). The B.S. degree is designed for students who want a solid background for a career in computer science, with additional flexibility to choose a well-rounded variety of courses. Because it has fewer specific course requirements than the B.S.C.S. and does not require the School of Engineering & Applied Science common studies (such as advanced mathematics, physics, chemistry, etc.), the B.S. degree program leaves room for you to select courses according to your particular needs and interests. Also, the B.S. works well if you want to complete another major along with computer science. This program is therefore well-suited for students planning to enter medical school or law school.

Students working toward a B.S. degree must meet all requirements for a Bachelor of Science Degree (see School of Engineering requirements) (p. 756) and the following course requirements:

- **Computer Science Core Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSE 131</td>
<td>Computer Science I</td>
<td>3</td>
</tr>
<tr>
<td>CSE 132</td>
<td>Computer Science II</td>
<td>3</td>
</tr>
<tr>
<td>CSE 240</td>
<td>Logic and Discrete Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>CSE 332S</td>
<td>Object-Oriented Software Development Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>CSE 422S</td>
<td>Operating Systems Organization</td>
<td>3</td>
</tr>
<tr>
<td>or CSE 431S</td>
<td>Translation of Computer Languages</td>
<td></td>
</tr>
<tr>
<td>or CSE 425S</td>
<td>Programming Systems and Languages</td>
<td></td>
</tr>
</tbody>
</table>
Each of these core courses must be passed with a grade of C– or better.

- Computer Science Electives:
  At least 24 units of computer science electives, selected from any computer science course with an S, M, T or A suffix. Students may use up to 6 units of approved independent work (CSE 400E, CSE 497- CSE 499) as part of their computer science electives.

- Math Requirement:
  Calculus (Math 131–Math 132–Math 233), Probability (ESE 326 or the sequence QBA 120 Managerial Statistics I–QBA 121 Managerial Statistics II). Upon completing a course in the calculus sequence (Math 131–Math 132–Math 233) with a grade of C– or better, you may apply to receive credit for the preceding courses in the calculus sequence.

- Additional Requirements:
  8 units in natural sciences or psychology (courses taken in the following departments will be counted: Chemistry, Earth and Planetary Sciences, Physics, Psychology, Biology, Philosophy–Neuroscience–Psychology), C+ or better in E Comp 100 (unless waived), Engr 310 Technical Writing (or comparable demonstration of technical writing ability), and the humanities and social sciences electives required of all engineering students.

Computer science and math courses taken for the above requirements as well as E Comp 100 and Engr 310 cannot be taken on a pass/fail basis.

Click here for a sample schedule for Computer Science Degree Options. (p. 796)

**Bachelor of Science in Computer Engineering**

Computer Engineering encompasses studies of hardware, software and systems issues that arise in the design, development and application of computer systems. Computer Engineering students must choose between a more hardware-focused or a more software-focused degree program, each with slightly different requirements.

Students working toward a B.S.Co.E. degree must meet all requirements for a professional degree (p. 756). Required courses and technical electives cannot be taken on a pass/fail basis. In addition, there are the following departmental course requirements:

**Common Studies Program Requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math 233</td>
<td>Calculus III</td>
<td>3</td>
</tr>
<tr>
<td>Physics 117A</td>
<td>General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>or Physics 197</td>
<td>Physics I</td>
<td></td>
</tr>
<tr>
<td>Physics 118A</td>
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<td>or Physics 198</td>
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<td></td>
</tr>
<tr>
<td>Chem 111A</td>
<td>General Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>Chem 151</td>
<td>General Chemistry Laboratory I</td>
<td>2</td>
</tr>
<tr>
<td>Engr 310A</td>
<td>Technical Writing and Service Learning</td>
<td>3</td>
</tr>
<tr>
<td>Humanities and social sciences electives</td>
<td>18</td>
<td></td>
</tr>
</tbody>
</table>

Upon completing a course in the calculus sequence (Math 131–Math 132–Math 233) with a grade of C– or better, you may apply to receive credit for the preceding courses in the calculus sequence.

- Computer Engineering Core Requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSE 131</td>
<td>Computer Science I</td>
<td>3</td>
</tr>
<tr>
<td>CSE 132</td>
<td>Computer Science II</td>
<td>3</td>
</tr>
<tr>
<td>ESE 230</td>
<td>Introduction to Electrical and Electronic Circuits</td>
<td>4</td>
</tr>
<tr>
<td>ESE 232</td>
<td>Introduction to Electronic Circuits</td>
<td>3</td>
</tr>
<tr>
<td>CSE 240</td>
<td>Logic and Discrete Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>CSE 241</td>
<td>Algorithms and Data Structures</td>
<td>3</td>
</tr>
<tr>
<td>CSE 260M</td>
<td>Introduction to Digital Logic and Computer Design</td>
<td>3</td>
</tr>
<tr>
<td>ESE 326</td>
<td>Probability and Statistics for Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CSE 361S</td>
<td>Introduction to Systems Software</td>
<td>3</td>
</tr>
<tr>
<td>CSE 362M</td>
<td>Computer Architecture</td>
<td>3</td>
</tr>
</tbody>
</table>

Each of these core courses must be passed with a grade of C– or better.

- Computer Engineering Focus Area:

Each student must satisfy the requirements of at least one focus area.

**Hardware Focus:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSE 462M</td>
<td>Computer Systems Design</td>
<td>3</td>
</tr>
<tr>
<td>and one of the following</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 463M</td>
<td>Digital Integrated Circuit Design and Architecture</td>
<td>3</td>
</tr>
<tr>
<td>CSE 464M</td>
<td>Digital Systems Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CSE 465M</td>
<td>Digital Systems Laboratory</td>
<td>3</td>
</tr>
</tbody>
</table>

**Software Focus:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSE 422S</td>
<td>Operating Systems Organization</td>
<td>3</td>
</tr>
<tr>
<td>and one of the following</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 431S</td>
<td>Translation of Computer Languages</td>
<td>3</td>
</tr>
</tbody>
</table>
Engineering

Engineering

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSE 467S</td>
<td>Embedded Computing Systems</td>
<td>3</td>
</tr>
<tr>
<td>CSE 473S</td>
<td>Introduction to Computer Networks</td>
<td>3</td>
</tr>
</tbody>
</table>

- **Computer Engineering Technical Electives:**
  At least 21 units of technical electives, drawn from 400- or 500-level CSE (with suffix S, M, T, or A) or ESE courses. These units are in addition to the 6 units needed to meet the focus area requirement described above.

- **Computer Engineering Senior Project:**
  Each student must complete a senior project (CSE 497, 3 credits), either individually or as part of a group under the direction of a CSE or ESE professor.

Click here for a sample schedule for Computer Engineering Degree Options. (p. 794)

**The Second Major in Computer Science**

The second major provides an opportunity to combine computer science with another degree program. A second major in computer science can expand your career options and enable interdisciplinary study in areas such as cognitive science, computational biology, chemistry, physics, philosophy and linguistics. The second major also is well suited for students planning careers in medicine, law, business, architecture and fine arts. The requirements are as follows. There are no additional distribution or unit requirements for the second major.

- **Computer Science Core Requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSE 131</td>
<td>Computer Science I</td>
<td>3</td>
</tr>
<tr>
<td>CSE 132</td>
<td>Computer Science II</td>
<td>3</td>
</tr>
<tr>
<td>CSE 241</td>
<td>Algorithms and Data Structures</td>
<td>3</td>
</tr>
<tr>
<td>or Math 310</td>
<td>Foundations for Higher Mathematics</td>
<td></td>
</tr>
<tr>
<td>CSE 240</td>
<td>Logic and Discrete Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>CSE 332S</td>
<td>Object-Oriented Software Development</td>
<td>3</td>
</tr>
</tbody>
</table>

  Each of these core courses must be passed with a grade of C– or better.

- **Computer Science Electives:**
  At least 15 units of computer science electives, selected from any CSE courses with an S, M, T or A suffix.

- **Math Requirement:**
  Calculus (Math 131) and Probability (ESE 326 or Math 3200, or the sequence QBA 120–QBA 121).

  **Capstone:**
  An additional 6 units of course work (or independent study) at the 300 level or higher with a significant computational component. The capstone may be completed in any department and provides an opportunity for interdisciplinary study, such as a thesis that applies computer science to another field. Your CSE adviser must approve the capstone in advance.

**The Minor in Computer Science**

If your goal is a basic foundation in computer science for application to another field, but you are not planning a career as a practicing computer scientist, the Minor in Computer Science is a good choice. The minor consists of five CSE courses, including three core courses and two electives. The core courses provide an introduction to computer science concepts and problem-solving techniques. The electives offer flexibility to integrate your computer science studies with your major area. You select the courses that are most important to you, whether your interests are in fine arts, linguistics, psychology, philosophy, law, business, medicine, the natural sciences or anything else.

**Units required:** 15

**Required courses:**

<table>
<thead>
<tr>
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<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSE 131</td>
<td>Computer Science I</td>
<td>3</td>
</tr>
<tr>
<td>CSE 132</td>
<td>Computer Science II</td>
<td>3</td>
</tr>
<tr>
<td>CSE 241</td>
<td>Algorithms and Data Structures</td>
<td>3</td>
</tr>
</tbody>
</table>

**Elective courses:**

Any two additional CSE courses selected among CSE 200 Engineering and Scientific Computing, CSE 240 Logic and Discrete Mathematics and any CSE course with a T, S, M or A suffix.

**Additional Information**

All courses used for the Computer Science minor must be taken for a grade, and you must earn a C– or better. Should you decide to go further in the field, all courses in the Computer Science minor (except CSE 200) can be used toward a second major in computer science or a degree in computer science or computer engineering.

**The Minor in Bioinformatics**

Mindful of the emerging opportunities at the interface of biology and computer science, the Department of Biology and Department of Computer Science and Engineering have fashioned a Bioinformatics Minor that serves students from both departments as well as other students from the natural sciences and engineering with an interest in this field.

**Units required:** 23–24 units as described below
Core courses:

- Biol 2960 Principles of Biology I 4
- Biol 2970 Principles of Biology II 4
- CSE 131 Computer Science I 3
- CSE 241 Algorithms and Data Structures 3
- Math 2200 Elementary Probability and Statistics 3
  or Math 3200 Elementary to Intermediate Statistics and Data Analysis
- or ESE 326 Probability and Statistics for Engineering

Advanced biology elective:

Choose one of:

- Biol 3492 Laboratory Experiments with Eukaryotic Microbes 3
- Biol 4181 Population Genetics 3
- Biol 4342 Research Explorations in Genomics 4
- Biol 437 Laboratory on DNA Manipulation 4

CSE elective:

Choose one of:

- CSE 514A Data Mining 3
- CSE 584A Algorithms for Biosequence Comparison 3
- CSE 587A Algorithms for Computational Biology 3

Additional Information

It is anticipated that for those students majoring in Biology or CSE, some portion of the introductory sequence will overlap with courses required for the major, and these courses will be applicable to both the major and the minor. Upper-level courses in Biology and CSE used to fulfill the minor may not be used to fulfill another major or minor in Arts & Sciences. A minimum grade of C– is required for all courses to count toward the minor.

Note: Biol 280 DNA Workshop will provide students with the grounding in molecular biology (DNA, RNA, proteins) and Mendelian genetics that will enable them to participate in the upper-level courses in the bioinformatics minor. Biol 280 is not appropriate for biology majors or premedicine students, but is designed to serve the needs of students in the physical sciences, math or engineering who wish to pursue this minor. Students from the humanities, social sciences and business also are welcome in this course. Students will be expected to earn a minimum grade of B in Biol 280 (or the Biol 2960–2970 sequence) to advance in the minor. Permission of the instructor will be required to use this course to satisfy the prerequisites for upper-level biology courses to insure that this standard has been met satisfactorily.

Computer Science and Engineering

E81 CSE 104 Web Development

This comprehensive course does not assume prior programming background or web design experience. Explores elementary principles that go into designing, creating and publishing an effective website. Topics include the production process, design metaphors, interface/information design, page layout concepts, graphics preparation, color theory, development tools, HTML, style sheets, basic scripting techniques, search engine optimization and site maintenance/marketing strategies. Credit 3 units. EN: DU, SU, TU

E81 CSE 131 Computer Science I

An introduction to software concepts and implementation, emphasizing problem solving through abstraction and decomposition. Introduces processes and algorithms, procedural abstraction, data abstraction, encapsulation and object-oriented programming. Recursion, iteration and simple data structures are covered. Concepts and skills are mastered through programming projects, many of which employ graphics to enhance conceptual understanding. Java, an object-oriented programming language, is the vehicle of exploration. Active-learning sessions are conducted in a studio setting in which students interact with each other and the professor to solve problems collaboratively. Prerequisites: comfort with algebra and geometry at the high school level is assumed. Patience, good planning and organization promote success. This course assumes no prior experience with programming. Credit 3 units. EN: DU, SU, TU

E81 CSE 131R Seminar: Computer Science I

A seminar and discussion session that complements the material studied in CSE 131. Provides background and breadth for the disciplines of computer science and computer engineering. Features guest lectures and highly interactive discussions of diverse computer science topics. Highly recommended for majors and for any student seeking a broader view of computer science or computer engineering. Pass/fail only. Credit 1 unit.

E81 CSE 132 Computer Science II

CSE 132 builds on CSE 131’s introduction to software systems as collections of communicating components. CSE 132 emphasizes more sophisticated uses of object-oriented concepts (inheritance, polymorphism, method overloading and multiple inheritance of interfaces) and techniques for managing communication among software components. An introduction to packages, file I/O, parsing, graphical user interfaces, exception handling, threads, concurrency, synchronization and network programming is provided. Algorithms and data structures are presented as needed to support discussion of these topics. Concepts and skills are mastered through software projects, many of which employ graphics to enhance conceptual understanding. Java, an object-oriented programming language, is the vehicle of exploration. Prerequisite: CSE 131 or equivalent.
E81 CSE 200 Engineering and Scientific Computing
This course provides an introduction to numerical methods for scientific computation that are relevant to engineering problems. Topics addressed include interpolation, integration, linear systems, least-squares fitting, nonlinear equations and optimization and initial value problems. Basic procedural programming concepts (procedural and data abstraction, iteration, recursion) are covered using MATLAB. C is briefly covered so the students understand that the algorithms and programming concepts apply in both. Prerequisite: Math 132.
Credit 3 units. EN: DU, SU, TU

E81 CSE 220S Software Design and Development Studio
This is a lab course that provides practical experience in designing, implementing, testing, documenting and supporting a medium-sized software application. Topics covered include application and user interface specification, module and API design, code re-use, code review, software maintenance and support, unit and integration testing, and debugging procedures. Students gain experience in the application of common algorithms, design patterns and data structures to novel problems. Students have a choice of working in Java or C++, and work both individually and in groups. Specific application areas vary by semester. Prerequisites: sophomore standing and CSE 132. CSE 241 is recommended.
Credit 3 units. EN: DU, SU, TU

E81 CSE 232 Programming Skills Workshop
This course provides an overview of practical implementation skills. Topics include compilation and linking, memory management, pointers and references, using code libraries, testing and debugging. Prerequisites: CSE 132.
Credit 1 unit.

E81 CSE 240 Logic and Discrete Mathematics
Introduces elements of logic and discrete mathematics that allow reasoning about computational structures and processes. Generally, the areas of discrete structures, proof techniques and computational models are covered. Topics typically include propositional and predicate logic; sets, relations, functions and graphs; proof by contradiction, induction and reduction; and finite state machines and regular languages. Prerequisite: CSE 131 or other introductory programming background.
Credit 3 units. EN: DU, SU, TU

E81 CSE 241 Algorithms and Data Structures
Study of fundamental algorithms, data structures and their effective use in a variety of applications. Emphasizes importance of data structure choice and implementation for obtaining the most efficient algorithm for solving a given problem. A key component of this course is worst-case asymptotic analysis, which provides a quick and simple method for determining the scalability and effectiveness of an algorithm. Other topics covered generally include: divide-and-conquer algorithms, sorting algorithms, decision tree lower-bound technique, hashing, binary heaps, skip lists, B-trees, basic graph algorithms. Prerequisites: CSE 131, CSE 240 (or some basic discrete mathematics background) is strongly recommended.
Credit 3 units. EN: DU, SU, TU

E81 CSE 260M Introduction to Digital Logic and Computer Design
Introduction to design methods for digital logic and fundamentals of computer architecture. Boolean algebra and logic minimization techniques; sources of delay in combinational circuits and effect on circuit performance; survey of common combinational circuit components; sequential circuit design and analysis; timing analysis of sequential circuits; use of computer-aided design tools for digital logic design (schematic capture, hardware description languages, simulation); design of simple processors and memory subsystems; program execution in simple processors; basic techniques for enhancing processor performance; configurable logic devices. Prerequisites: CSE 131 or comparable programming experience.
Credit 3 units. EN: DU, SU, TU

E81 CSE 320S Software Design and Development Studio
This is a lab course that provides practical experience in designing, implementing, testing, documenting and supporting a medium-sized software application. Topics covered include application and user interface specification, module and API design, code re-use, code review, software maintenance and support, unit and integration testing, and debugging procedures. Students gain experience in the application of common algorithms, design patterns and data structures to novel problems. Students have a choice of working in Java or C++, and work both individually and in groups. Specific application areas vary by semester. Prerequisites: junior standing and CSE 132. CSE 241 is recommended.
Same as CSE 220S
Credit 3 units. EN: DU, SU, TU

E81 CSE 330S Rapid Prototype Development and Creative Programming
This course introduces aspects of the rapid prototype development and creative thinking. Through this course, students acquire necessary skills to develop modern applications for the new world of Web 2.0 and beyond. The concepts covered include: LAMP (Linux, Apache, MySQL, PHP), AJAX (Asynchronous Javascript and XML), XML-RPC (Remote Procedure Calls), script languages for rapid prototyping (Perl, Python), CMSs (Content Management Systems), current web APIs and the new development tools and libraries. The course is
in an interactive studio format, i.e., after a formal presentation of
a topic, students develop a related project under the supervision
of the instructor. Prerequisite: CSE 132 or equivalent.
Credit 3 units. EN : DU, SU, TU

E81 CSE 332S Object-Oriented Software Development Laboratory
Intensive focus on practical aspects of designing, implementing
and debugging object-oriented software. Topics covered include
developing, documenting and testing representative applications
using object-oriented and generic frameworks and C++. Design
and implementation based on frameworks are central themes
to enable the construction of reusable, extensible, efficient and
maintainable software. Prerequisites: CSE 132 and 241.
Credit 3 units. EN : DU, SU, TU

E81 CSE 361S Introduction to Systems Software
Introduction to the hardware and software foundations
of computer processing systems. Examines the process
whereby computer systems manage, interpret and execute
applications. Covers fundamental algorithms for numerical
computation, memory organization and access, storage
allocation, and the sequencing and control of peripheral devices.
Weekly laboratories, exercises and a final laboratory project.
Prerequisite: CSE 131.
Credit 3 units. EN : DU, SU, TU

E81 CSE 362M Computer Architecture
Study of interaction and design philosophy of hardware and
software for digital computer systems. Processor architecture,
instruction set architecture, assembly language, memory
hierarchy design, I/O considerations. Comparison of computer
architectures. Prerequisite: CSE 260M.
Credit 3 units. EN : DU, SU, TU

E81 CSE 400 Independent Study
Investigation of a topic in computer science and engineering of
mutual interest to the student and a mentor. Interested students
are encouraged to approach and engage faculty to develop a
topic of interest. A form declaring the agreement must be filed
in the departmental office. This course carries university credit,
but does not count toward a CSE major or minor. To arrange for
CSE major or minor credit for independent study, a student must
enroll in CSE 400E instead of CSE 400. See also: CSE 400E.
Credit -6 unit.

E81 CSE 422S Operating Systems Organization
Exploration of operating systems as managers of shared
resources. Using UNIX and Windows XP as experimental
frameworks, students study algorithms and data structures that
support essential operating systems services. Concepts are
reinforced through programming exercises and comparative
studies. Topics include: proportional sharing and real-time
scheduling of processes and threads, I/O facilities, memory
management, virtual memory, device management, concurrent
programming, file system organization and distributed object
computing. Prerequisites: CSE 332S and CSE 361S.
Credit 3 units. EN : DU, SU, TU

E81 CSE 425S Programming Systems and Languages
A systematic study of the principles, concepts and mechanisms
of computer programming languages: their syntax, semantics
and pragmatics; the processing and interpretation of computer
programs; programming paradigms; and language design.
Illustrative examples are selected from a variety of programming
language paradigms. Prerequisites: CSE 132, CSE 240 and
CSE 241.
Credit 3 units. EN : DU, SU, TU

E81 CSE 431S Translation of Computer Languages
The theory of language recognition and translation is introduced
in support of compiler construction for modern programming
languages. Topics include syntactic and semantic analysis,
symbol table management, code generation and runtime
libraries. A variety of parsing methods is covered, including
top-down and bottom-up. Machine problems culminate in the
course project, for which students construct a working compiler.
Prerequisites: CSE 132, CSE 240 and CSE 241.
Credit 3 units. EN : DU, SU, TU

E81 CSE 432S Pattern-Oriented Software Design and
Development
Intensive focus on design and implementation of software using
design patterns. Particular emphasis on successive refinement
based on identification of unresolved design forces at each
step of the design process, and on application of patterns to
guide design refinement. Design implementations are conducted
in Java and C++ in a team setting, with weekly presentations
and critiques of design and implementation decisions and
outcomes throughout the course. Prerequisites: CSE 332S or
graduate standing, and proficiency in Java and C++ software
development.
Credit 3 units. EN : DU, TU
E81 CSE 436S Software Engineering Workshop
An introduction and exploration of concepts and issues related to large-scale software systems development. Areas of exploration include technical complexities, organization issues, and communication techniques for large-scale development. Students participate through teams emulating industrial development. The projects cover the principal system development lifecycle phases from requirements analysis, to software design, and to final implementation. Issues relating to real-time control systems, human factors, reliability, performance, operating costs, maintainability and others are addressed and resolved in a reasonable manner. Prerequisite: CSE 332S.
Credit 3 units. EN : DU, SU, TU

E81 CSE 441T Advanced Algorithms
Provides a broad coverage of fundamental algorithm design techniques with the focus on developing efficient algorithms for solving combinatorial and optimization problems. The topics covered include: greedy algorithms, dynamic programming, linear programming, NP-completeness, approximation algorithms, lower-bound techniques and online algorithms. Throughout this course there is an emphasis on correctness proofs and the ability to apply the techniques taught to design efficient algorithms for problems from a wide variety of application areas. Prerequisites: CSE 240 and CSE 241.
Credit 3 units. EN : DU, SU, TU

E81 CSE 450A Video Game Programming
This course teaches the core aspects of a video game developer’s toolkit. Students work in groups and with a large game software engine to make a full-featured video game. Students have the opportunity to work on topics in graphics, artificial intelligence, networking, physics, user interface design and other topics. Prerequisite: CSE 332S.
Credit 3 units. EN : DU, SU, TU

E81 CSE 452A Computer Graphics
Introduction to computer graphics. Input, representation, manipulation and display of geometric information. Two-dimensional display of three-dimensional objects: perspective, hidden surface, shading, animation. Display and input devices. Issues in designing interactive graphics systems. Issues in building three-dimensional renderers. Students develop interactive graphics programs with a standard graphics package and using various graphics input and output devices. Prerequisite: CSE 332S.
Credit 3 units. EN : DU, SU, TU

E81 CSE 460T Switching Theory
Advanced topics in switching theory as employed in the synthesis, analysis and design of information processing systems. Combinational techniques: minimization, multiple output networks, state identification and fault detection, hazards, testability and design for test are examined. Sequential techniques: synchronous circuits, machine minimization, optimal state assignment, asynchronous circuits and built-in self-test techniques. Prerequisite: CSE 260M or equivalent.
Credit 3 units. EN : DU, SU, TU

E81 CSE 462M Computer Systems Design
Introduction to modern design practices, including the use of FPGA design methodologies. Students use a commercial CAE/CAD system for VHDL-based design and simulation while designing a selected computation system. Prerequisites: CSE 361S and 362M.
Credit 3 units. EN : DU, SU, TU

E81 CSE 463M Digital Integrated Circuit Design and Architecture
This is a project-oriented course on digital VLSI design. The course material focuses on bottom-up design of digital integrated circuits, starting from CMOS transistors, CMOS inverters, combinational circuits and sequential logic designs. Important design aspect of digital integrated circuits such as propagation delay, noise margins and power dissipation are covered in the class, as well as design challenges in submicron technology are addressed. The students design combinational and sequential circuits at various levels of abstraction using state-of-the-art CAD environment provided by Cadence Design Systems. The goal of the class is to design a microprocessor in 0.5-micron technology that can be fabricated by a semiconductor foundry. Prerequisites: CSE 260 and ESE 232.
Credit 3 units. EN : DU, SU, TU

E81 CSE 464M Digital Systems Engineering
Design and characterization of digital circuits, reliable and predictable interconnection of digital devices, and information transfer over busses and other connections. Topics include: review of MOSFET operation; CMOS logic gate electrical characteristics; system and single-point noise margin and noise budgets; figures of merit for noise-margin and power-delay product, and trade-off between noise margin and propagation delay; transmission-line driving including reflection, termination, nonzero transition time, lumped and distributed capacitance loads, nonlinear terminations, and applicable conditions for lumped approximations; coupled transmission lines, forward and backward crosstalk, short line approximations, ground bounce, and simultaneous switching noise; timing, clocking and clock distribution for digital circuits; prediction of metastability error rates and design for acceptable probability of failure. Examples and design exercises using systems and interconnections selected from current Computer Engineering practice such as RAMBUS, PCI bus, GTL, LVDS and others. Prerequisites: ESE 232 and CSE 362M.
Credit 3 units. EN : DU, SU, TU
Introduction of a substantive project on an individual basis, involving one or more major areas in computer science. Problems pursued under this framework may be predominantly analytical, involving exploration and extension of theoretical structures, or may pivot around the design/development of solutions for particular applications drawn from areas throughout the University and/or community. In either case, the project serves as a focal point for crystallizing the concepts, techniques and methodologies encountered throughout the curriculum.

Students intending to take CSE 497-498 must submit a project proposal for approval by the department during the spring semester of the junior year. Prerequisite: senior standing. Credit 3 units.

E81 CSE 498 Senior Project II
Implementation of a substantive project on an individual basis, involving one or more major areas in computer science. Problems pursued under this framework may be predominantly analytical, involving exploration and extension of theoretical structures, or may pivot around the design/development of solutions for particular applications drawn from areas throughout the University and/or community. In either case, the project serves as a focal point for crystallizing the concepts, techniques and methodologies encountered throughout the curriculum.

Students intending to take CSE 497-498 must submit a project proposal for approval by the department during the spring semester of the junior year. Prerequisite: senior standing. Credit 3 units.

E81 CSE 499 Undergraduate Honors Thesis
Working closely with a faculty member, the student investigates an original idea (algorithm, model technique, etc.), including a study of its possible implications, its potential application and its relationship to previous related work reported in the literature. Contributions and results from this investigation are synthesized and compiled into a publication-quality research paper presenting the new idea. Prerequisites: a strong academic record and permission of instructor. Credit 3 units.

E81 CSE 500 Independent Study
Credit -3 unit.

E81 CSE 501N Programming Concepts and Practice
This introductory course assumes no prior programming background and is intended for graduate students who desire significant programming and program design experience within a modern programming paradigm. Exploration of the enterprise of software design, creation, maintenance, and reuse. Abstraction as a vehicle for reducing the complexity of problems. Concepts of object-oriented programming. Internet-related programming including threads. Design and implementation of nontrivial algorithms in selected application areas. Prerequisite: none. Same as CSE 131
Credit 3 units. EN : DU, SU, TU

E81 CSE 502N Fundamentals of Computer Science
Formerly CS 514N. This course, intended for graduate students without a computer science background, covers the core components seen in a computer science undergraduate curriculum on which our graduate level courses rely. Topics include fundamental algorithms, data structures, proof
techniques, computational models, machine organization, and software design and implementation. Prerequisites: graduate standing, CSE 501N or prior programming experience, some mathematical sophistication highly desirable. No credit toward CSE graduate degree.
Same as CSE 241
Credit 3 units. EN : DU, SU, TU

E81 CSE 503N Rapid Prototype Development and Creative Programming
This course introduces aspects of the rapid prototype development and creative thinking. Through this course, students acquire necessary skills to develop modern applications for the new world of Web 2.0 and beyond. The concepts covered include: LAMP (Linux, Apache, MySQL, PHP), AJAX (Asynchronous Javascript and XML), XML-RPC (Remote Procedure Calls), script languages for rapid prototyping (Perl, Python), CMSs (Content Management Systems), current web APIs and the new development tools and libraries. The course is in an interactive studio format, i.e., after a formal presentation of a topic, students develop a related project under the supervision of the instructor. Prerequisite: CSE 132 or equivalent.
Same as CSE 330S
Credit 3 units. EN : DU, SU, TU

E81 CSE 504N Object-Oriented Software Development Laboratory
Intensive focus on practical aspects of designing, implementing and debugging object-oriented software. Topics covered include developing, documenting, and testing representative applications using object-oriented frameworks and C++. Design and implementation are central themes to enable the construction of reusable, extensible, efficient, and maintainable software. Prerequisites: CSE 132/CS 102G and 241. No credit toward CSE graduate degree.
Same as CSE 332S
Credit 3 units. EN : DU, SU, TU

E81 CSE 506M Principle and Methods of Micro- and Nano-fabrication
An introduction to the fundamentals of micro- and nano-fabrication processes with emphasis on cleanroom practices. The physical principles of optical lithography, electron-beam lithography, alternative nanolithography techniques, and thin film deposition and metrology methods. The physical and chemical processes of wet and dry etching. Cleanroom concepts and safety protocols. Sequential micro-fabrication processes involved in the manufacture of microelectronic and photonic devices. Imaging and characterization of micro- and nano-structures. Examples of practical existing and emerging micro- and nano-devices. Prerequisite: Chem 111A or consent from instructor.

Credit 4 units.

E81 CSE 507A Technology Entrepreneurship
This is a course for students who plan to be, or work with, entrepreneurs. An entrepreneurial mindset is needed to create or grow economically viable enterprises, be they new companies, new groups within companies, or new University laboratories. This course aims to cultivate an entrepreneurial perspective with particular emphasis on information technology-related activities. The course is jointly offered for business and CSE students, allowing for acculturation between these disciplines. In addition to an introductory treatment of business and technology fundamentals, course topics include: business ethics, opportunity assessment, team formation, financing, intellectual property, and University technology transfer. The course features significant participant and guest instruction from experienced practitioners. Prerequisites: none.
Credit 3 units.

E81 CSE 511A Introduction to Artificial Intelligence
The discipline of artificial intelligence (AI) is concerned with building systems that think and act like humans or rationally on some absolute scale. This course is an introduction to the field, with special emphasis on sound modern methods. The topics include knowledge representation, problem solving via search, game playing, logical and probabilistic reasoning, planning, machine learning (decision trees, neural nets, reinforcement learning, and genetic algorithms) and machine vision. Programming exercises concretize the key methods. The course targets graduate students and advanced undergraduates. Evaluation is based on written and programming assignments, a midterm exam, and a final exam. Prerequisite: CSE 132, CSE 240 and CSE 241, or permission of the instructor.
Credit 3 units.

E81 CSE 512A Statistical Computing for Scientific Research
Provides students a solid understanding of statistical computing issues that concern empirical researchers in different sciences. Topics covered include: computer architecture, Monte Carlo simulation, bootstrapping and jackknifing, nonparametric smoothing, and Markov chain Monte Carlo methods. Prerequisite: basic statistics or permission of the instructor.
Students are assumed to be familiar with: basic calculus, probability, regression, MLE theory and simple programming.
Credit 3 units.

E81 CSE 514A Data Mining
Many scientific computing problems are, by nature, statistical. Such problems appear in many domains, such as text analysis, data mining on the web, computational biology and various medical applications. Another source of the statistical nature of such problems is the lack of sufficient information of the problem domains as well as the specific problems at hand. What
is available for a typical application is usually a set of data from observation or experiments. The main objective of this course is to gain experience of dealing with statistical data analysis problems by studying various statistical methods that can be used to make sense out of data, by reading and reviewing literature as well as by working on a specific statistical problem in a selected application domain. Prerequisites: CSE 241 and ESE 326 (or Math 3200) or their equivalent, or permission of the instructor.
Credit 3 units. EN : DU, SU, TU

E81 CSE 517A Machine Learning
The field of machine learning is concerned with the question of how to construct computer programs that automatically improve with experience. Recently, many successful machine learning applications have been developed, ranging from data-mining programs that learn to detect fraudulent credit card transactions, to information-filtering systems that learn users’ reading preferences, to autonomous vehicles that learn to drive. There also have been important advances in the theory and algorithms that form the foundation of this field. This course provides a broad introduction to the field of machine learning. Prerequisite: CSE 241.
Credit 3 units. EN : DU, SU, TU

E81 CSE 519T Advanced Machine Learning
This course provides a close look at advanced machine learning algorithms—their theoretical guarantees (computational learning theory) and tricks to make them work in practice. In addition, this course focuses on more specialized learning settings, including unsupervised learning, semi-supervised learning, domain adaptation, multitask learning, structured prediction, metric learning and learning of data representations. Learning approaches may include graphical models, nonparametric Bayesian statistics, and technical topics such as sampling, approximate inference and nonlinear function optimization. Mathematical maturity and general familiarity of machine learning is required. Prerequisites: CSE 517A or 511A or 7100 and approval by instructor.
Credit 3 units.

E81 CSE 520S Real-Time Systems
This course covers software technologies for real-time systems and networking such as distributed multimedia, telecommunication management, automobiles, avionics and smart manufacturing. Topics include real-time scheduling, distributed embedded middleware, adaptive performance management and real-time wireless sensor networks. Prior knowledge on embedded and real-time systems is not required. Prerequisite: CSE 422S or equivalent.
Credit 3 units. EN : DU, SU, TU

E81 CSE 521S Wireless Sensor Networks
Dense collections of smart sensors networked to form self-configuring pervasive computing systems provide a basis for a new computing paradigm that challenges many classical approaches to distributed computing. Naming, wireless networking protocols, data management and approaches to dependability, real-time, security and middleware services all fundamentally change when confronted with this new environment. Embedded sensor networks and pervasive computing are among the most exciting research areas with many open research questions. This class studies a large number of research papers that deal with various aspects of wireless sensor networks. Students perform a project on a real wireless sensor network comprised of tiny devices each consisted of sensors, a radio transceiver and a microcontroller. Prerequisite: CSE 422S.
Credit 3 units. EN : DU, SU, TU

E81 CSE 522S Advanced Operating Systems
This course explores the core OS abstractions, mechanisms, and policies and how they impact support for general purpose, embedded and real-time operating environments. Resource management is covered in detail including CPU scheduling, I/O scheduling, interprocess communication models (message passing, remote procedure call and shared memory); virtualization models and techniques; synchronization models and techniques; and resource allocation strategies. Prerequisites: CSE 422S and significant C/C++ programming experience.
Credit 3 units. EN : DU, SU, TU

E81 CSE 528S Software Project Management
An introduction to the issues and basic methods used in managing software development projects. The course includes factors affecting software projects, lifecycle models, project scheduling, size and staffing, progress tracking, software metrics, managing people, and crisis management. The course includes lectures, hands-on training in selected project management tools, and case studies. In addition, each student plans and manages a simulated software project. The course is designed to familiarize software engineers and computer scientists to the issues and problems involved in managing software projects. Prerequisite: CSE 436S, significant industrial software development, or permission of instructor.
Credit 3 units.

E81 CSE 530A Database Management Systems
A study of data models and the database management systems that support these data models. The design theory for databases is developed and various tools are utilized to apply the theory. General query languages are studied and techniques for query optimization are investigated. Integrity and security requirements are studied in the context of concurrent operations on a database, where the database may be distributed over one or
more locations. The unique requirements for engineering design databases, image databases and long transaction systems are analyzed. Prerequisite: CSE 241.
Credit 3 units.

E81 CSE 531S Theory of Compiling and Language Translation

Algorithms and intermediate representations for automatic program analysis are examined, with an emphasis on practical methods and efficient engineering of program optimization and transformations. The course includes a thorough treatment of monotone data flow frameworks: a mathematical model in which most optimization problems can be specified and solved. The course primarily covers optimizations that are applicable to any target architecture; however, optimizations specific to parallel, distributed and storage-hierarchical systems also are discussed. Prerequisite: CSE 431S or CSE 425S.
Credit 3 units. EN : DU, SU, TU

E81 CSE 532S Advanced Multiparadigm Software Development

Intensive focus on advanced design and implementation of distributed object computing (DOC) software. Topics covered include reuse of design patterns and software architectures, and developing representative applications using object-oriented and generic frameworks in C++. Design and implementation based on design patterns and frameworks are central themes to enable the construction of reusable, extensible, efficient and maintainable DOC software. Prerequisites: CSE 332S or graduate standing; familiarity with C++, CSE 432S, and CSE 422S or CSE 522S.
Credit 3 units. EN : DU, SU, TU

E81 CSE 535T Programming Language Theory

This course presents the theoretical foundations of programming languages, using formal techniques. We study how to define programming languages in a formal way, and how to prove meta-theoretic properties about them. Type theory, including powerful typing constructs such as polymorphic and recursive types, receives particular attention. The work for the course includes theoretical exercises as well as a project in which students implement selected aspects of advanced programming languages. Prerequisites: CSE 240 and CSE 241.
Credit 3 units.

E81 CSE 536S Distributed System Design: Models and Languages

Modern computing environments are highly distributed. This has been the result of major advances in networking technology and their rapid assimilation by a society that functions in a highly distributed and decentralized manner. The goal of this course is to familiarize students with basic concepts, models and languages that shaped recent developments in distributed computing. The focus is on exploring new ways of thinking about computing and communication that made the development of distributed software systems possible. Competing concepts and design strategies are examined both from a theoretical and a practical perspective. Prerequisite: CSE 240 and CSE 241.
Credit 3 units. EN : DU, SU, TU

E81 CSE 541T Advanced Algorithms

Formerly CS 539T. Provides a broad coverage of fundamental algorithm design techniques with the focus on developing efficient algorithms for solving combinatorial and optimization problems. The topics covered include: greedy algorithms, dynamic programming, linear programming, NP-completeness, approximation algorithms, lower-bound techniques and online algorithms. Throughout this course there is an emphasis on correctness proofs and the ability to apply the techniques taught to design efficient algorithms for problems from a wide variety of application areas. CSE 541T students are given more challenging problems to work than those given to CSE 441T students. Prerequisites: CSE 240/CS 201 and CSE 241. Same as CSE 441T
Credit 3 units. EN : DU, SU, TU

E81 CSE 542T Advanced Data Structures and Algorithms

This course is concerned with the design and analysis of efficient algorithms, focusing principally on algorithms for combinatorial optimization problems. A key element in the course is the role of data structures in algorithm design and the use of amortized complexity analysis to determine how data structures affect performance. The course is organized around a set of core problems and algorithms, including the classical network optimization algorithms, as well as newer and more efficient algorithms. This core is supplemented by algorithms selected from the recent technical literature. Prerequisite: CSE 241.
Credit 3 units.

E81 CSE 543T Algorithms for Nonlinear Optimization

The course provides an in-depth coverage of modern algorithms for the numerical solution of multidimensional optimization problems. Unconstrained optimization techniques including gradient methods, Newton's methods, Quasi-Newton methods, and conjugate methods are introduced. The emphasis is on constrained optimization techniques: Lagrange theory, Lagrangian methods, penalty methods, sequential quadratic programming, primal-dual methods, duality theory, nondifferentiable dual methods and decomposition methods. The course also discusses applications in engineering systems and use of state-of-the-art computer codes. Special topics may include large-scale systems, parallel optimization and convex optimization.
Credit 3 units.
E81 CSE 544T Special Topics in Computer Science Theory
Cake-cutting algorithms consider the division of resources among a set of participants such that the recipients believe they have been treated fairly. In some cases, a given resource can be divided without loss of value, while in other cases, dividing a resource may lessen its value, perhaps significantly. Notions of fairness include proportionality, envy-freeness and equitability. This course is organized around a rich set of fair-division problems, studying the correctness, complexity, and applicability of algorithms for solving such problems. The problems and algorithms studied span millennia and include recent technical literature. Credit 3 units.

E81 CSE 546T Computational Geometry
Computational geometry is the algorithmic study of problems that involve geometric shapes such as points, lines and polygons. Such problems appear in computer graphics, vision, robotics, animation, visualization, molecular biology and geographic information systems. This course covers data structures that are unique to geometric computing, such as convex hull, Voronoi diagram, Delaunay triangulation, arrangement, range searching, KD-trees and segment trees. Also covered are algorithms for polygon triangulation, shortest paths, the post office problem and the art gallery problem. Prerequisite: CSE 241. Credit 3 units.

E81 CSE 547T Introduction to Formal Languages and Automata
An introduction to the mathematical theory of languages and grammars. Topics include deterministic and nondeterministic finite state machines, push-down automata, and Turing machines; regular, context-free and recursive languages; closure properties of languages; the concepts of computability and undecidability. Prerequisite: CSE 240. Credit 3 units.

E81 CSE 548T Concurrent Systems: Design and Verification
Formerly CS 563T. Concurrency presents programmers with unprecedented complexity further exacerbated by our limited ability to reason about concurrent computations. Yet, concurrent algorithms are central to the development of software executing on modern multiprocessors or across computer networks. This course reviews several important classes of concurrent algorithms and presents a formal method for specifying, reasoning about, verifying and deriving concurrent algorithms. The selected algorithms are judged to have made significant contributions to our understanding of concurrency. Rigorous treatment of the design and programming process is emphasized. Students entering this course must be familiar with predicate calculus and sequential algorithms. Upon completion of this course students are able to reason completely formally about small concurrent programs and to apply systematically and correctly their formal skills to larger problems. Prerequisites: CSE 240 and CSE 241. Credit 3 units.

E81 CSE 549T Theory of Parallel Systems
The course covers parallel programming models, languages and algorithms. We cover both classic and recent results in parallel computing. The list of topics includes scheduling theory, parallel algorithms (in various models such as PRAM, log P, etc.), cache-coherence protocols and external memory algorithms. The focus is on design and performance analysis of algorithms. Credit 3 units.

E81 CSE 550A Mobile Robotics
An introduction to the design and implementation of intelligent mobile robot systems. This course covers the fundamental elements of mobile robot systems from a computational standpoint. Issues such as software control architectures, sensor interpretation, map building and navigation are covered, drawing from current research in the field. Students also design and build a small mobile robot and program it to perform simple tasks in real-world environments. Prerequisites: CSE 241 and either ESE 326 or Math 3200. Credit 3 units. EN: DU, SU, TU

E81 CSE 552A Advanced Computer Graphics
This course covers advanced topics in graphics in the areas of modeling, rendering, volume rendering, image-based rendering and image processing. Topics include, but are not limited to, subdivision surfaces, splines, mesh simplification, implicit or blobby modeling, radiosity, procedural textures, filtering, BRDFs and procedural modeling. The class has several structured programming assignments and an optional final group project. Students are exposed to the wide variety of techniques available in graphics and also pick one area to study in depth. Prerequisite: CSE 332S and CSE 452A. Credit 3 units. EN: DU, SU, TU

E81 CSE 553S Advanced Mobile Robotics
This course covers advanced topics from the theory and practice of mobile robotics. Students read, present and discuss papers from the current research literature. There is a substantial programming project, in which students implement and test ideas from the current research literature on one of the department's research robot platforms. Credit 3 units. EN: DU, SU, TU

E81 CSE 554A Geometric Computing for Biomedicine
With the advance of imaging technologies deployed in medicine, engineering and science, there is a rapidly increasing amount of spatial data sets (images, volumes, point clouds, etc.) that
need to be processed, visualized and analyzed. This course focuses on a number of geometry-related computing problems that are essential in the knowledge discovery process in various spatial-data-driven biomedical applications. These problems include visualization, segmentation, mesh construction and processing, shape representation and analysis. The course consists of lectures that cover theories and algorithms, and a series of hands-on programming projects using real-world data collected by various imaging techniques (CT, MRI, electron cryo-microscopy, etc.). Prerequisite: CSE 332 and CSE 452, or approval by instructor. Credit 3 units. EN: SU, TU

E81 CSE 556A Human-Computer Interaction Methods
This course is designed to introduce tools and methods from Human-Computer Interaction that enable you to create effective user interfaces. We cover techniques that can be used at different stages in the software development cycle and techniques that can be used both with and without involving users. We study how to maximize interface usability and efficiency as well as how to design for, and measure, things like fun and persuasiveness. You gain experience applying HCI techniques through a group design, development and evaluation project. Prerequisites: CSE 132 and at least one additional systems course. Students who enroll in this course are expected to be comfortable with the process of building user interfaces using Java JFC/Swing. Credit 3 units. EN: DU, SU, TU

E81 CSE 558A Motion Planning
This course studies the general motion planning problem: computing a sequence of motions that transforms a given (initial) arrangement of physical objects to another (goal) arrangement of those objects. Many motion planning methods were developed in the realm of robotics research. For example, a typical problem might be to find a sequence of motions (called a path) to move a robot from one position to another without colliding with any objects in its workspace. However, the general motion planning problem studied arises in many other application domains as well. For example, assembly planning (e.g., finding a valid order for adding the parts when building an engine), mechanical CAD studies (e.g., can you remove a certain part from an engine without taking the engine apart), artificial life simulations (e.g., moving a herd of animals from one location to another), and medicine (e.g., can a drug molecule reach a protein molecule). Prerequisite: CSE 241. Credit 3 units. EN: DU, SU, TU

E81 CSE 559A Computer Vision
Computer vision is the process of automatically extracting information from images and video. This course covers imaging geometry (camera calibration, stereo and panoramic image stitching) and algorithms for video surveillance (motion detection and tracking), segmentation and object recognition. Final projects for the course explore challenges in analysis of real-world data. Students with nonstandard backgrounds (such as video art, or the use of imaging in physics and biology) are encouraged to contact the instructor. Prerequisites: CSE 241 and linear algebra. Credit 3 units. EN: DU, SU, TU

E81 CSE 560M Computer Systems Architecture I
An exploration of the central issues in computer architecture: instruction set design, addressing and register set design, control unit design, microprogramming, memory hierarchies (cache and main memories, mass storage, virtual memory), pipelining, bus organization, Reduced Instruction Set Computers (RISC), and Complex Instruction Set Computers (CISC). Architecture modeling and evaluation using VHDL and/or instruction set simulation. Prerequisites: CSE 361S and CSE 260M. Credit 3 units. EN: DU, SU, TU

E81 CSE 561M Computer Systems Architecture II
Advanced techniques in computer system design. Selected topics from: processor and system-on-chip design (multicore organization, system-level integration), run-time systems, memory systems (topics in locality and special-purpose memories), I/O subsystems and devices, systems security, and power considerations. Prerequisite: CSE 560M or permission of instructor. Credit 3 units. EN: DU, SU, TU

E81 CSE 563M Digital Integrated Circuit Design and Architecture
This is a project-oriented course on digital VLSI design. The course material focuses on bottom-up design of digital integrated circuits, starting from CMOS transistors, CMOS inverters, combinational circuits and sequential logic designs. Important design aspect of digital integrated circuits such as propagation delay, noise margins and power dissipation are covered in the class, and design challenges in submicron technology are addressed. The students design combinational and sequential circuits at various levels of abstraction using state-of-the-art CAD environment provided by Cadence Design Systems. The goal of the class is to design a microprocessor in 0.5 micron technology that can be fabricated by a semiconductor foundry. Prerequisites: CSE 260 and ESE 232. Same as CSE 463M. Credit 3 units. EN: DU, SU, TU

E81 CSE 564M Advanced Digital Systems Engineering
This course focuses on advance sensor design. The class covers various basic analog and digital building blocks that are common in most sensor integrated circuits. The class extensively uses state-of-the-art CAD program Cadence to simulate and
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analyze various circuit blocks. The first half of the course focuses on analyzing various operational amplifiers, analog filters, analog memory and analog to digital converters. The second half of the course focuses on understanding the basic building blocks of imaging sensors. The class has a final project consisting of designing a smart sensor using Cadence tools. Prerequisites: CSE 232 and CSE 362M.

Credit 3 units. EN: DU, SU, TU

E81 CSE 568M Imaging Sensors
This course covers topics on digital imaging sensors including basic operations of silicon photodetectors; CCD and CMOS passive and active sensor operation; temporal and spatial noise in CMOS sensors; spatial resolution and MTF; SNR and dynamic range; high dynamic range architectures and application specific imaging sensors such as polarization imaging and fluorescent imaging sensors.

Credit 3 units.

E81 CSE 569M Parallel Architectures and Algorithms
A number of contemporary parallel computer architectures are reviewed and compared. The problems of process synchronization and load balancing in parallel systems are studied. Several selected applications problems are investigated and parallel algorithms for their solution are considered. Selected parallel algorithms are implemented in both a shared memory and distributed memory parallel programming environment.

Prerequisites: graduate standing and knowledge of the C programming language.

Credit 3 units.

E81 CSE 571S Network Security
A comprehensive treatment of network security. Topics include virus, root kits, malware, TCP/IP security attacks, operating systems security, secret key cryptography, modes of operation, hashes and message digests, public key algorithms, authentication systems, Kerberos, Public Key Infrastructures (PKI), Internet Key Exchange (IKE), Secure Socket Layer (SSL), Transport Layer Security (TLS), e-mail security, virtual private networks, authentication, authorization, accounting (AAA), WiFi security, Domain Name System security (DNSSEC), intrusion detection systems. Prerequisite: CSE 473S.

Credit 3 units. EN: DU, SU, TU

E81 CSE 573S Protocols for Computer Networks
An introduction to the design, performance analysis and implementation of existing and emerging computer network protocols. Protocols include multiple access protocols (e.g., CSMA/CD, token ring), internet, working with the internet protocol (IP), transport protocols (e.g., UDP, TCP), high-speed bulk transfer protocols, and routing protocols (e.g., BGP, OSPF). General topics include error control, flow control, packet switching, mechanisms for reliable, ordered and bounded-time packet delivery, host-network interfacing and protocol implementation models. Substantial programming exercises
supplement lecture topics. Prerequisite: CSE 473S or permission of the instructor. Credit 3 units. EN: DU, SU, TU

E81 CSE 574S Wireless and Mobile Networking
First course in wireless networking providing a comprehensive treatment of wireless data and telecommunication networks. Topics include wireless networking trends, key wireless physical layer concepts, wireless local area networks, wireless personal area networks, WiMAX (physical layer, media access control, mobility and networking), IEEE 802.22 wireless regional area networks, IEEE 802.21 media independent handover, wireless cellular networks: 1G and 2G, 2.5G, 3G and 4G, Mobile IPv4, Mobile IPv6, TCP over wireless networks, ad hoc networks — issues and routing, wireless sensor networks, wireless mesh and multi-hop relay networks, radio frequency identification (RFID). Prerequisites: CSE 473S or permission of the instructor. Credit 3 units. EN: SU, TU

E81 CSE 577M Design and Analysis of Switching Systems
Switching is a core technology in a wide variety of communication networks, including the Internet, circuit-switched telephone networks and optical fiber transmission networks. The past decade has been a time of rapid development for switching technology in the Internet. Backbone routers with 10 Gb/s links and aggregate capacities of hundreds of gigabits per second are becoming common, and advances in technology are now making multi-terabit routers practical. This course is concerned with the design of practical switching systems and evaluation of their performance and complexity. Prerequisites: CSE 241, 260M and ESE 326. Credit 3 units. EN: DU, SU, TU

E81 CSE 583A Topics in Computational Molecular Biology
Formerly CS 543T. In-depth discussion of problems and methods in Computational Molecular biology. Each year three topics are covered and those change yearly. Prerequisite: Biol 5495 or instructor's consent. Same as Biol 5497 Credit 2 units.

E81 CSE 584A Algorithms for Biosequence Comparison
This course surveys fundamental algorithms for comparing and organizing biological sequences. Emphasis is placed on techniques that are useful for implementing biosequence databases and comparing long sequences, such as entire genomes. Many of these techniques are also of interest for more general string processing and for building and mining of textual databases. Algorithms are presented rigorously, including proofs of correctness and running time where feasible. Topics include classical string matching, suffix trees, exclusion methods, multiple alignments and the design of BLAST and related biosequence comparison tools. Students complete written assignments and implement advanced comparison algorithms to address problems in bioinformatics. This course does not require a biology background. Prerequisites: CSE 241, graduate standing or permission of instructor. Credit 3 units. EN: DU, SU, TU

E81 CSE 587A Algorithms for Computational Biology
This course focuses on how to sequence and analyze a genome, emphasizing computational and algorithmic issues. After taking this course, you should be able to parachute into a genome informatics group, understand what’s going on, and do something useful on your first day. Topics covered include: the essential biology, the essential probability theory, base calling and quality clipping, genome assembly (including aspects of sequence alignment), predicting protein-coding genes (including Hidden Markov Models and comparative genomics approaches), predicting gene function by comparing to proteins of known function, and advanced topics in sequence alignment. This course includes a combination of paper-and pencil homework assignments and programming labs in C. Prerequisites: CSE 241 or CSE 502N or Biol 5495. Credit 3 units.

Sample Schedules for Computer Engineering Degree Options

Bachelor of Science in Computer Engineering (B.S.Co.E.)

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Engineering

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<td>Computer Systems Design or Operating Systems Organization (CSE 462M or CSE 422S)</td>
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<td><strong>Dual Degree of B.S.Co.E. and B.S.E.E.</strong></td>
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<tr>
<td>(also shows starting the calculus sequence with Math 131)</td>
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<td><strong>Spring</strong></td>
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<td>First Year</td>
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<td>Calculus II, III (Math 132, 233)</td>
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Engineering

| Humanities/social sciences electives | 3 | 3 |
| Introduction to Electrical Engineering (ESE 103) | — | 1 |
| **Second Year** | | |
| Differential Equations (Math 217) | 3 | — |
| Introduction to Systems Software (CSE 361S) | 3 | — |
| Introduction to Electrical and Electronic Circuits (ESE 230) | 4 | — |
| General Chemistry I (Chem 111A) | 3 | — |
| General Chemistry Laboratory I (Chem 151) | 2 | — |
| Logic and Discrete Mathematics (CSE 240) | — | 3 |
| Introduction to Electronic Circuits (ESE 232) | — | 3 |
| Engineering Mathematics (ESE 317) | — | 4 |
| Writing 1 (E Comp 100) | — | 3 |
| Introduction to Digital Logic and Computer Design (CSE 260M) | — | 3 |
| **Third Year** | | |
| Computer Architecture (CSE 362M) | 3 | — |
| Algorithms and Data Structures (CSE 241) | 3 | — |
| Technical Writing (ENGR 310) | 3 | — |
| Signals and Systems (ESE 351) | 3 | — |
| Probability and Statistics for Engineering (ESE 326) | 3 | — |
| Humanities/social sciences electives | — | 3 |
| Computer Systems Design (CSE 462M) | — | 3 |
| CoE/EE elective | — | 3 |
| Engineering Electromagnetics Principles (ESE 330) | — | 3 |
| Free elective | — | 5 |
| **Fourth Year** | | |
| CoE/EE elective | 3 | 3 |
| Humanities/social sciences electives | 3 | 6 |
| Electronics Laboratory or Signals and Systems Laboratory (ESE 331 or ESE 488) | 3 | — |
| Digital Systems Laboratory (CSE 465M) | 3 | — |
| Senior Project I (CSE 497) | 3 | — |
| Free elective | — | 3 |
| Electrical Engineering Design Projects (ESE 498) | — | 3 |

Note: At least 6 of the 18 units of humanities/social sciences electives must be a humanities course and at least 6 of the 18 units must be a social sciences course. All elective courses are assumed to be 3 units unless otherwise stated. A CoE/CS elective is a course that can be used as both a CoE and CS elective. Likewise, a CoE/EE elective is a course that can be used as both a CoE and EE elective.

Sample Schedules for Computer Science Degree Options

Bachelor of Science in Computer Science (B.S.C.S)

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<tr>
<td>Introduction to Digital Logic and Computer Design or Introduction to Systems Software (CSE 260M or CSE 361S)</td>
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### Bachelor of Science (B.S.) with a major in Computer Science (starting freshman year)

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<tr>
<td>Probability and Statistics for Engineering or Elementary to Intermediate Statistics and Data Analysis (ESE 326 or Math 3200)</td>
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# Bachelor of Science (B.S.) with a major in Computer Science (for a premedical student)

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<td>Logic and Discrete Mathematics (CSE 240)</td>
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<td>Principles of Biology II (Biol 2970)</td>
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<td>General Physics I, II (Physics 117A, 118A)</td>
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<td>English Literature course (fills a humanities/social sciences elective)</td>
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<td>Physiological Control Systems (Biol 3058)</td>
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<td>Algorithms and Data Structures (CSE 241)</td>
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<td>Object-Oriented Software Development Laboratory (CSE 332S)</td>
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<td>Organic Chemistry II with Lab (Chem 262)</td>
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<tr>
<td>Probability and Statistics for Engineering or Elementary to Intermediate Statistics and Data Analysis (ESE 326 or Math 3200)</td>
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<tr>
<td>Operating Systems Organization or Programming Systems and Languages (CSE 422S or CSE 425S)</td>
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<tr>
<td>CSE electives</td>
<td>6</td>
<td>9</td>
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<tr>
<td>Technical Writing (Engr 310)</td>
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<td><strong>Total</strong></td>
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</table>
Electrical and Systems Engineering

About Electrical and Systems Engineering

The mission of our undergraduate programs is to instill in students the knowledge and perspective, appropriate both for a professional career and for the pursuit of advanced degrees, in fields that rely on key electrical engineering and systems principles and practices. Such principles and practices include rigorous quantitative reasoning and robust engineering design. This mission is accomplished by ensuring that students achieve both depth and breadth of knowledge in their studies and by maintaining a high degree of flexibility in the curriculum. Our programs also seek to provide good preparation for life, including the ability to communicate in written and oral forms and a desire to continue learning throughout life. In addition, they aim to provide the opportunity and training for students to acquire the skills and attitudes to become leaders.

The department offers courses of study leading to degrees in both electrical engineering and systems science and engineering. Opportunities for study and research currently available in the department include solid-state engineering (semiconductor theory and devices, plasma processing and nonlinear plasma theory, optoelectronics, microwave and magnetic information devices and systems), communication theory and systems, information theory, signal and image processing, linear and nonlinear dynamics and control, scheduling and transportation systems, robotics, automation, identification and estimation, multisensor fusion and navigation, machine vision and control, computational mathematics, finite elements, optimal control, mathematics of large-scale power systems, and intelligent systems. Students are encouraged to participate in research activities as soon as they have received training in the fundamentals appropriate for a given research area.

Electrical engineering is the profession for those intrigued with electrical phenomena and eager to contribute their skills to a society increasingly dependent on electricity and sophisticated electronic devices. It is a profession of broad scope with many specialty careers designed for engineers who seek an endless diversity of career paths on the cutting edge of technology. The Institute of Electrical and Electronics Engineers publishes transactions on about 60 different topics, from aerospace and electronic systems to visualization and computer graphics. This is a breadth so great that no single electrical engineering department can hope to span it. Moreover, those fields themselves encompass still more fascinating specialties. We give the basics; the future is yours to shape.

Systems science and engineering is based on an approach that views an entire system of components as an entity rather than simply as an assembly of individual parts; each component is designed to fit properly with the other components rather than to function by itself. The engineering and mathematics of systems is a rapidly developing field. It is one of the most modern segments of applied mathematics, as well as an engineering discipline. It is concerned with the identification, modeling, analysis, design and control of systems that are potentially as large and complex as the U.S. economy or as precise and vital as a space voyage. Its interests run from fundamental theoretical questions to the implementation of operational systems. It draws on the most modern and advanced areas of mathematics. A very important characteristic of the systems field is that its practitioners must, of necessity, interact within a wide interdisciplinary environment, not only with various engineers and scientists but also with economists, biologists or sociologists. Such interaction is both emphasized and practiced in the programs.

Our Department of Electrical and Systems Engineering offers a challenging basic curriculum, a broadly qualified faculty and modern facilities so that you can receive a contemporary preparation for a career in electrical or systems engineering.

Undergraduate Degree Programs

The Department of Electrical and Systems Engineering (ESE) offers four undergraduate degree programs: two professional degrees and two nonprofessional degrees. The two professional degrees are the Bachelor of Science in Electrical Engineering (B.S.E.E.) and the Bachelor of Science in Systems Science and Engineering (B.S.S.S.E.). These two programs are accredited by the Accreditation Board for Engineering and Technology (ABET). The two nonprofessional degrees are the Bachelor of Science in Applied Science (Electrical Engineering) and the Bachelor of Science in Applied Science (Systems Science and Engineering). All programs have flexible curricula as well as specific requirements, and students may elect programs of study tailored to individual interests and professional goals.

In the professional B.S.E.E. curriculum, there are required courses in electrical circuits, signals and systems, digital systems and electromagnetic fields, along with laboratory and design courses, which provide students with a common core of experience. Subsequently, one may orient the program toward breadth, so that many disciplines within the profession are spanned or toward a specialty with more emphasis on depth in one or more disciplines. Areas of specialization include modern electronics, applied physics, telecommunications, control systems, and signal and image processing.

Students in the professional B.S.S.S.E. degree program take required courses in engineering mathematics, signals and systems, operations research, and automatic control systems, along with laboratory and design courses. This program emphasizes the importance of real-world applications of systems theory, and accordingly students are required to take a concentration of courses in one of the traditional areas of
engineering or science. There are numerous elective courses in control theory and systems, signal processing, optimization, robotics, probability and stochastic processes, and applied mathematics.

Students enrolled in any of the ESE undergraduate degree programs have a variety of opportunities to augment their educational experience at Washington University. Students may participate in the Premedical Engineering program or in the Cooperative Education program. Some students pursue double majors, in which two sets of degree requirements, either within or outside the ESE department, are satisfied concurrently. The Process Control Systems program is one such double-degree program, involving the degrees Bachelor of Science in Systems Science and Engineering (B.S.S.S.E.) and Bachelor of Science in Chemical Engineering (B.S.Ch.E). Finally, students may earn both an undergraduate and a graduate degree through the school’s five-year B.S.–M.S. program.

Students who seek a broad undergraduate education in electrical engineering or systems science and engineering but plan on careers outside of engineering, may pursue the nonprofessional degrees: Bachelor of Science in Applied Science (Electrical Engineering) and Bachelor of Science in Applied Science (Systems Science and Engineering). These programs of study are appropriate for students planning to enter a medical, law or business school, and desire a more technical undergraduate experience than what otherwise may be available to them.

The ESE department also offers a variety of educational opportunities for students enrolled in other departments. These include the Second Major in Systems Science and the Second Major in Electrical Science, which are open to students inside as well as outside of the School of Engineering & Applied Science, such as the College of Arts & Sciences and the School of Business. They also include the Minor in Electrical Engineering, the Minor in Energy Engineering, the Minor in Mechatronics, the Minor in Robotics and the Minor in Systems Science and Engineering.

**B.S.–M.S. Programs in Electrical and Systems Engineering**

Students enrolled in any of the professional undergraduate degree programs in the School of Engineering & Applied Science may choose to extend their educational experience by enrolling in the five-year B.S.–M.S. program. The Master of Science in Electrical Engineering (M.S.E.E.) and Master of Science in Systems Science and Mathematics (M.S.S.S.M.) degrees are participating graduate degrees, and these may be combined with any undergraduate degree that provides the appropriate background.

**Common Requirements for the B.S.–M.S. Programs**

General requirements for the B.S.–M.S. programs include the residency and other applicable requirements of the university and the School of Engineering & Applied Science, which are found elsewhere in this catalog. In summary, students must complete all the degree requirements for both the undergraduate and graduate degrees (at least 120 units plus 30 units, 150 units) but are not required to complete all the undergraduate degree requirements first.

**Requirements for the B.S.–M.S.E.E. Degree**

The requirements for the M.S.E.E. degree include a total of 30 units, with 15 units being in graduate-level electrical engineering courses (ESE 513, ESE 516, ESE 520–589), and the other 15 units being in technical electives (not necessarily from the ESE department but approved by the ESE department) at the senior level or above. A maximum of one 500-level cross-listed ESE course whose home department is outside of ESE may be applied toward the 15-credit graduate-level course requirement. At least 15 units of the 30 total units applied toward the M.S.E.E. degree must be in ESE courses which, if cross-listed, have as the home department the Department of Electrical and Systems Engineering. Both a thesis option and a course option are available.

**Requirements for the B.S.–M.S.S.S.M. Program**

Students in the joint B.S.–M.S. program seeking the degree of the M.S. in Systems Science and Mathematics are required to fulfill the following additional requirements: a total of 30 units, with at least 15 units at the graduate level, and the remaining units at the senior level or above. Required courses (15 units) for the M.S. degree include: ESE 520, 551, 552, 553 and either ESE 415, 516 or 556. The remaining courses in the program may be selected from senior- or graduate-level courses in Electrical and Systems Engineering or elsewhere in the university. Courses outside of Electrical and Systems Engineering must be in technical subjects relevant to systems science and mathematics and require the department’s approval.

**Contact Information**

Phone: 314/935-5565  
Departmental website: [http://ese.wustl.edu/undergraduateprograms/Pages/default.aspx](http://ese.wustl.edu/undergraduateprograms/Pages/default.aspx)

Chair and Eugene and Martha Lohman Professor of Electrical Engineering  
Arye Nehorai  
PhD, Stanford University
Engineering

Signal processing, imaging, biomedicine, communications

**Associate Chair and Professor**

**Hiroaki Mukai**  
PhD, University of California–Berkeley  
Theory and computational methods for optimization, optimal control, systems theory, electric power system operations, differential games

**Endowed Professors**

**R. Martin Arthur**  
Newton R. and Sarah Louisa Glasgow Wilson  
PhD, University of Pennsylvania  
Ultrasonic imaging, electrocardiography

**Joseph A. O’Sullivan**  
Samuel C. Sachs Professor of Electrical Engineering and Dean, UMSL/WUSTL Joint Undergraduate Engineering Program  
PhD, Notre Dame University  
Information theory, statistical signal processing, imaging science, data processing for data storage systems, recognition theory and systems, and tomographic, spectral and optical imaging

**Professors**

**I. Norman Katz**  
PhD, Massachusetts Institute of Technology  
Numerical analysis, differential equations, finite element methods, locational equilibrium problems, algorithms for parallel computations

**Daniel L. Rode**  
PhD, Case Western Reserve University  
Optoelectronics and fiber optics, semiconductor materials, light-emitting diodes (LEDs) and lasers, semiconductor processing, electronics

**Barry E. Spielman**  
PhD, Syracuse University  
High-frequency/high-speed devices, RF & MW integrated circuits, computational electromagnetics

**Associate Professors**

**Jr-Shin Li**  
PhD, Harvard University  
Mathematical control theory, optimization, quantum control, biomedical applications

**Paul S. Min**  
PhD, University of Michigan  
Routing and control of telecommunication networks, fault tolerance and reliability, software systems, network management

**Robert E. Morley Jr.**  
DSc, Washington University  
Computer and communication systems, VLSI design, digital signal processing

**Heinz M. Schättler**  
PhD, Rutgers University  
Optimal control, nonlinear systems, mathematical models in biomedicine

**Lan Yang**  
PhD, California Institute of Technology

**Assistant Professor**

**Jung-Tsung Shen**  
PhD, Massachusetts Institute of Technology  
Theoretical and numerical investigations on nano-photonics, opto-electronics, plasmonics, metamaterials

**Senior Professors**

**William F. Pickard**  
PhD, Harvard University  
Biological transport, electrobiology, energy engineering

**Ervin Y. Rodin**  
PhD, University of Texas–Austin  
Optimization, differential games, artificial intelligence, mathematical modeling

**Barbara A. Shrauner**  
PhD, Harvard University (Radcliffe)  
Plasma processing, semiconductor transport, symmetries of nonlinear differential equations

**Donald L. Snyder**  
PhD, Massachusetts Institute of Technology  
Communication theory, random process theory, signal processing, biomedical engineering, image processing, radar

**Tzyh Jong Tarn**  
DSc, Washington University  
Quantum mechanical systems, bilinear and nonlinear systems, robotics and automation, life science automation

**Professor of Practice**

**Dennis Mell**  
MS, University of Missouri–Rolla

**Senior Lecturer**

**Martha Hasting**  
PhD, St. Louis University

**Lecturers**

**Randall Brown**  
PhD, Washington University

**Vladimir Kurenok**  
PhD, Belarus State University (Minsk, Belarus)

**Jason Trobaugh**  
DSc, Washington University
Professors Emeriti

William M. Boothby
PhD, University of Michigan
Differential geometry and Lie groups, mathematical system theory

Lloyd R. Brown
DSc, Washington University
Automatic control, electronic instrumentation

David L. Elliott
PhD, University of California–Los Angeles
Mathematical theory of systems, nonlinear difference, differential equations

Marvin J. Fisher
PhD, University of Illinois
Energy conversion, power electronics

Robert O. Gregory
DSc, Washington University
Electronic instrumentation, microwave theory, circuit design

Raymond M. Kline
PhD, Purdue University
Computer engineering, computer-aided design, control systems

Bachelor of Science in Electrical Engineering

Educational Objectives of the B.S.E.E. Degree Program

• Graduates will be technically competent within electrical engineering, including the ability to analyze and solve electrical engineering problems by applying basic principles of mathematics, science and engineering sciences. They will be able to use modern engineering techniques, skills and tools, particularly recognizing the role that computer programs play in engineering. They will be able to identify, formulate and solve novel electrical engineering problems that are subject to realistic constraints.

• Graduates will be able to apply the knowledge and skills from a broad education with sensitivity to the global, societal and environmental issues.

• Graduates will be prepared for professional practice in engineering as well as for graduate research programs. They will have an understanding of ethical, social and professional responsibility; recognize the need for, and have the ability to engage in, lifelong learning; and have the ability to function and communicate effectively, both individually and within multidisciplinary teams.

B.S.E.E. Degree Requirements

To obtain the degree Bachelor of Science in Electrical Engineering, students must complete a minimum of 120 units consistent with the residency and other applicable requirements of Washington University and the School of Engineering, and subject to the following program requirements.

1. Common Studies program of the School of Engineering:
   This includes courses in engineering, mathematics, chemistry, humanities, social sciences and technical writing. The required chemistry sequence is Chem 111A-151, although Chem 111A-112A–151–152 is recommended.

2. Engineering Ethics and Sustainability (ENGR 4501) (1 unit).


4. Engineering and science breadth requirements: 9 units in engineering or science outside of electrical engineering. These units must be taken in the following areas: biomedical engineering, chemical engineering, civil engineering, computer science and engineering, mechanical engineering, economics, mathematics, physics, biology, chemistry, earth and planetary sciences, and premedicine. These units must be at the level 200 or higher and shall not be used to satisfy the Common Studies requirements (item 1 above) or the CS requirement (item 3). Courses in other fields can be arranged with special departmental approval.


5. 26 units of required ESE courses. ESE 230, ESE 232, ESE 260, ESE 317, ESE 326, ESE 330, ESE 351, ESE 498.

6. Two upper-level laboratory courses (6 units) from the following list: ESE 331, ESE 435, ESE 447, ESE 448, ESE 465, ESE 488.

8. The entire course sequence for the B.S.E.E. containing engineering topics of at least 45 units. The numbers of engineering topic units assigned to undergraduate courses in the School of Engineering & Applied Science vary from none (0) to the number of credits given to the course. For the precise number for each course, please look at the table of Topics Units — Engineering Courses provided by Engineering Student Services.

9. Limitations. No more than 3 credits of ESE 400 Independent Study and no more than 3 credits of 500-level courses may be applied toward the B.S.E.E. degree.

10. Limitations. No more than 6 units of the combined units of ESE 400 Independent Study and ESE 497 Undergraduate Research may be applied toward the EE elective requirement (Item 7) of the B.S.E.E. degree. The balance of combined units, if there are any left, are allowed as free electives to satisfy the requirement on the total number of units.

11. The courses taken to satisfy the following B.S.E.E. degree requirements must be taken for a letter grade and not on a pass/fail basis: Item 5 (required ESE courses), Item 6 (upper-level laboratory courses) and Item 7 (elective ESE courses). Most students acquire more than the number of 120 credit units. See a typical sequence of subjects for the Bachelor of Science in Electrical Engineering degree.

This professional degree is accredited by the Accreditation Board for Engineering and Technology (ABET).

Click here for a sample Electrical Engineering curriculum. (p. 820)

Click here for a sample Pre-Med Electrical Engineering curriculum (p. 820).

For more information on B.S. in Electrical Engineering curriculums, please visit: http://ese.wustl.edu/undergraduateprograms/Pages/bs-in-ee.aspx.

Bachelor of Science in Systems Science and Engineering

Objectives and requirements

Key points:

- Systems Engineering: how to integrate different components in engineering systems.
- Pre-financial Engineering: the best preparation for the M.S. in Financial Engineering.
- Applied Mathematics
- Control Engineering: how to control jet airplanes, electric power grids, and the nation’s economy.
- Ideal for students strong in math and physics.
- Ideal for students interested in engineering and business.
- Ideal for students interested in a second major.
- The most mathematical program in the School of Engineering & Applied Science.
- The most flexible professional program in the School of Engineering & Applied Science.

This program educates students in the engineering and science of systems. Graduates are expected to have mathematical competence and knowledge of systems analysis, control, design methods, numerical methods, differential equations, dynamic systems theory, automatic control theory, system stability, estimation, optimization, modeling, identification, simulation and basic computer programming. You will have an engineering outlook and engineer’s competence of your own and be able to interact fully with other engineers. You also will possess sufficient proficiency in computer use to design algorithms for simulation, estimation, control and optimization.

The engineering departments of high-technology industries are staffed by large numbers of engineers with this type of expertise. However, graduates are by no means restricted to careers in traditional industry or in high-technology industries. Within the outlined framework, a salient feature of the program is its flexibility and interdisciplinary nature. It is possible for you to orient study toward preparation for systems science and engineering work in large complex systems such as transportation or power or communications networks or in societal systems such as the economy, ecology, the cities or biological systems. You may wish to prepare for work along theoretical or professional lines. There is ample room in the program structure to accommodate all these interests and to make your preparation at the B.S. level ideally suited for your future plans and interests. This professional degree is accredited by the Accreditation Board for Engineering and Technology (ABET).

Educational Objectives of the B.S.S.S.E. Degree Program

- Graduates will be technically competent in systems engineering including control engineering and operations research. They will have the ability to model, analyze, design, simulate and optimize engineering and socioeconomic systems by applying basic principles and methodology of advanced mathematics, natural science and engineering sciences. They will be able to use modern engineering techniques, skills and tools, particularly recognizing the role that computer programs play in systems engineering. They will be able to identify, formulate and solve novel engineering problems that are subject to realistic constraints from the overall system’s point of view.
Graduates will be able to apply the knowledge and skills from a broad education with sensitivity to the global, societal and environmental issues.

Graduates will be prepared for professional practice in engineering as well as for graduate research programs. They will have an understanding of ethical, social and professional responsibility; recognize the need for, and have the ability to engage in, lifelong learning; and have the ability to function and communicate effectively, both individually and within multidisciplinary teams.

**B.S.S.S.E. Degree Requirements**

The course sequence designed to achieve the type of education outlined above requires at least 120 units, satisfies the residency and other applicable requirements of Washington University and the School of Engineering & Applied Science, and meets the following program requirements:

1. Common Studies program of the School of Engineering & Applied Science. This includes courses in engineering, mathematics, physics, chemistry, humanities, social sciences and technical writing. The required chemistry sequence is Chem 111A–151.
2. Engineering Ethics and Sustainability (ENGR 4501) (1 unit).
3. Required courses in systems science and engineering:
   - ESE 251 Introduction to Systems Science and Engineering (3 units);
   - Math 309 Matrix Algebra (3 units);
   - ESE 317 Engineering Mathematics (4 units);
   - ESE 326 Probability and Statistics for Engineering (3 units);
   - ESE 351 Signals and Systems (3 units);
   - ESE 403 Operations Research (3 units);
   - ESE 447 Control Systems (3 units);
   - ESE 448 Systems Engineering Laboratory (3 units);
   - and ESE 499 Systems Design Project (3 units).
4. Two of the following four computer science courses:
   - CSE 131 Computer Science I (3 units);
   - CSE 241 Algorithms and Data Structures (3 units);
   - CSE 132 Computer Science II (3 units);
   - CSE 200 Engineering and Scientific Computing (3 units).
   Students are encouraged to take CSE 131 Computer Science I and CSE 241 Algorithms and Data Structures. The other possible sequences are CSE 131 and CSE 132 or CSE 200 and CSE 131.
   Students interested in improving their job prospects by learning C++ may take CSE 131, 132, 241 and CSE 332S. Students interested in a Minor in Computer Science are recommended to take CSE 131 Computer Science I, CSE 132 Computer Science II, CSE 241 Algorithms and Data Structures (3 units), CSE 332S Object-oriented Software Development Laboratory (3 units) and CSE 436S Software Engineering Workshop (3 units).

5. One of the following three laboratory courses: ESE 447 Robotics Laboratory (3 units), ESE 449 Digital Process Control Laboratory (3 units), ESE 488 Signals and Systems Laboratory (3 units). ESE 449 is only recommended to students with a chemical engineering background.

6. 12 units in elective courses in systems science and engineering:
   - ESE 400 through 429; ESE 437; ESE 440 through 459; ESE 470 through 489; ESE 497; ESE 500 through 529; ESE 540 through 559. Up to 3 units of the following business courses may be part of the 12 units of SSE electives: OSCM 356 Operations Management, OSCM 458 Operations Planning and Control, OMM 576 Foundations of Supply Chain Management, OMM 577 Information Technology and Supply Chain Management.

7. 12 units in engineering concentration outside of systems science and engineering. These units must all be taken in one of the following engineering areas: Biomedical Engineering, Chemical Engineering, Computer Science and Engineering, Electrical Engineering (ESE 102; ESE 230 through 239; ESE 260 through 290; ESE 330 through 339; ESE 360 through 390; ESE 430 through 439; ESE 460 through 469; ESE 490 through 496; ESE 498; ESE 530 through 539; ESE 560 through 589), or Mechanical Engineering and Materials Science. Of the 12 units, 9 units must be at the level 200 or higher. Sequences for concentrations in economics, mathematics, physics, premedicine and other fields can be arranged with special departmental approval to meet your specific needs. When a nonengineering discipline is chosen as the outside concentration, the student needs to pay special attention to the next requirement, which is required of all students, and make sure that enough engineering contents are obtained from the other courses. The use of basic required courses to fulfill the requirement for an outside concentration requires special approval from the department.

8. The entire course sequence for the B.S.S.S.E. containing engineering topics of at least 45 units. The numbers of engineering topic units assigned to undergraduate courses in the School of Engineering & Applied Science vary from none (0) to the number of credits given to the course. For the precise number for each course, please look at the table of Topics Units — Engineering Courses provided by Engineering Student Services.

9. Limitations. No more than 6 units of the combined units of ESE 400 Independent Study and ESE 497 (including 497A and 497B) Undergraduate Research may be applied toward the SSE elective requirement (item 6) of the B.S.S.S.E. degree. Any remaining combined units are allowed as free electives to satisfy the requirement on the total number of units.
10. The courses taken to satisfy the following B.S.S.S.E. degree requirements must be taken for a letter grade and not on a pass/fail basis: item 3 (required ESE courses), item 5 (elective laboratory course) and item 6 (elective ESE courses).

The program requirements for the B.S. in Systems Science and Engineering allow a double major with another department. Changes in the program to accommodate such double majors may be made with departmental approval. See a sample program for the B.S. in Systems Science and Engineering.

Click here for a sample Systems Science and Engineering curriculum (p. 821).

Click here for a sample Pre-Med Systems Science and Engineering curriculum (p. 821).


Bachelor of Science in Applied Science (Electrical Engineering)

Students who do not plan to pursue a career in electrical engineering but seek a strong foundation in the principles of electrical engineering may choose the Bachelor of Science in Applied Science (Electrical Engineering). The program ensures that the student learns the foundations of electrical engineering through breadth requirements. In addition, there is flexibility in selecting upper-level courses to meet the student’s individual objectives. This program also may be attractive for students interested in obtaining multiple degrees because the requirements are less strict than for the B.S.E.E. degree.

Historically students have matched a degree in electrical engineering with degrees in other engineering disciplines, in the natural sciences, in music, in history and in business; other combinations are possible. This also may be an attractive option for students planning graduate studies in a variety of disciplines including medicine, law or business. This nonprofessional degree is not accredited by the Accreditation Board for Engineering and Technology (ABET).

The degree requirements include the residency and general requirements of the University and the School of Engineering and:

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<tbody>
<tr>
<td>Humanities and social sciences electives</td>
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<tr>
<td>Mathematics, science and engineering electives</td>
</tr>
<tr>
<td>Required courses in electrical engineering (ESE 230, 232 and 330 or 351)</td>
</tr>
<tr>
<td>Free electives</td>
</tr>
<tr>
<td>Total</td>
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The program must include at least 48 units at the 300 level or higher.

Bachelor of Science in Applied Science (Systems Science and Engineering)

This program provides you with the opportunity to prepare your academic career with maximum flexibility, but with enough organization to assure substantive, consistent training in systems science methodology and outlook. This program is recommended if you wish to pursue a program that does not follow conventional lines. It is an especially advantageous component for a double major in association with mathematics, physics, economics or another engineering discipline. The program can be planned to provide a desirable background for graduate work in biological, medical or management fields. This nonprofessional degree is not accredited by the Accreditation Board for Engineering and Technology (ABET).

The degree requirements include the residency and general requirements of the University and the School of Engineering and:

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<tbody>
<tr>
<td>Humanities and social sciences electives</td>
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<tr>
<td>Mathematics, science and engineering electives</td>
<td>24</td>
</tr>
<tr>
<td>Required courses: ESE 351, 403 or 404 and 441</td>
<td>9</td>
</tr>
<tr>
<td>Free electives</td>
<td>54</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
</tr>
</tbody>
</table>

The program must include at least 48 units at the 300 level or higher.

The Second Major in Electrical Engineering Science

A second major in Electrical Engineering Science is ideal for students majoring in many areas, such as mathematics, physics,
chemistry and biology. Students in the School of Engineering & Applied Science as well as the other undergraduate divisions at Washington University now have the opportunity to pursue a second major in Electrical Engineering Science. Students are not allowed to add this second major to either the B.S. in Electrical Engineering or the B.S. in Applied Science (Electrical Engineering).

**The requirements for a second major in Electrical Engineering Science are:**

- Seven 3-unit ESE courses in the Electrical Engineering area chosen from ESE 330-399, ESE 400, 405, 407, 409, 425, 430-499 and ESE 503-589.

**The above program assumes the completion of the following courses:**

- Math 132, 233 Calculus II, III, Math 217 Differential Equations
- Physics 117A, 118A General Physics I, II
- CSE 131 Computer Science I

Students may petition to substitute electrical science-oriented courses from other disciplines for up to two of the above 11 courses (for example, certain courses in physics or applied mathematics). When such substitutions are employed, the total number of units for non-Arts & Sciences courses is 31 or 32 units. Within this second major in Electrical Engineering Science, areas of concentration are possible in: applied physics, signal processing and control systems. The second major in the Electrical Engineering Science program comprises a total of 34 or 35 units. To design a customized program, contact the department chair or the director of the program Professor R. Martin Arthur at rma@wustl.edu.

**The Second Major in Systems Science**

A second major is ideal for study in many areas such as physics, chemistry, economics and computational biology. Students in the School of Engineering as well as the other undergraduate divisions at Washington University have the opportunity to pursue a second major in the Preston M. Green Department of Electrical and Systems Engineering in the School of Engineering & Applied Science. Students are not allowed to add this second major to either the B.S. in SSE or the B.S. in Applied Science (SSE).

The requirements for a second major in systems science are:

1. ESE 251 Introduction to Systems Science and Engineering;
2. Math 309 Matrix Algebra;
3. ESE 351 Signals and Systems;
4. ESE 403 Operations Research;
5. One of the following: ESE 317 Engineering Mathematics, ESE 326 Probability and Statistics for Engineering or ESE 441 Control Systems Design;
6. Eight 3-unit ESE courses in the Systems area chosen from ESE 317 through 326; ESE 400 through 429; ESE 437; ESE 440 through 459; ESE 470 through 489; 500 through 529; ESE 540 through 559.

Students may petition to substitute systems-oriented courses from other disciplines for two of these eight courses (for example, courses in computational physics, mathematical economics or computational mathematics). When such substitutions are employed, the total number of units for non-Arts & Science courses will be 30 units.

Within this second major in systems science, areas of concentration are possible in: robotics, control systems and operations research.

This totals 34 to 40 units of systems science, depending on students’ use of the substitution option for upper-level electives. To design a customized program, contact the departmental associate chair or the director of the program (Professor I. Norman Katz).

**The Minor in Electrical Engineering**

**Units required:** 16

**Required courses:**

- ESE 230 Introduction to Electrical and Electronic Circuits
- ESE 330 Engineering Electromagnetics Principles
- ESE 351 Signals and Systems

**Electives:** Students may select two electrical engineering elective courses from the following list:

- ESE 232 Introduction to Electronic Circuits
- ESE 260 Introduction to Digital Logic and Computer Design
- ESE 330–399
- ESE 430–499, with the exception of ESE 431.

For more information, contact the director for the minor or visit the minor web page.

**The Minor in Energy Engineering (ESE)**

This minor will provide students with course work that will enhance their background, knowledge and skills in the topical area of Energy Engineering. The minor covers classes in several fields of science and engineering, encompassing the Department of Energy, Environmental and Chemical Engineering, the Department of Electrical & Systems Engineering and the
Department of Mechanical Engineering & Materials Science. A minor in Energy Engineering requires the completion of 18 units. It is open to undergraduate students pursuing an engineering major, students from the sciences (Biology, Chemistry, Physics) in Arts & Sciences, and students pursuing the Environmental Studies major. The detailed requirements for the minor can be found on the Energy, Environmental and Chemical Engineering Minors page (p. 826). Questions regarding the minor should be directed to a member of the committee for the Energy Engineering Minor: Professor Pratim Biswas (EECE), Professor Hiro Mukai (ESE) or Professor David Peters (MEMS).

Committee to Oversee Energy Engineering Minor
Pratim Biswas (EECE, Coordinator)
Hiro Mukai (ESE)
David Peters (MEMS)
The committee ensures that any course added to the above lists contain a significant amount of energy topics and that the entire program be cohesive.

Visit the minor web page for more information.

The Minor in Mechatronics (ESE)
(Program Director: Heinz Schättler)
Advancements in power electronics, electronic sensors and computer hardware and software have led to an expanding role for “smart” systems, which combine electronic and mechanical components. Automotive examples illustrate this point. The replacement of carburetors by fuel injection systems is almost universal, and hybrid/electric cars are replacing traditional automobiles. Not only are auxiliary devices such as fuel pumps, air bags and air-conditioner compressors driven by electric motors controlled by microprocessors, but fundamental components such as intake and outtake valves soon will be driven in this way. The internal combustion engine itself may be replaced by fuel cells and motors. Medical devices, micro-electromechanical systems, robots, fly-by-wire aircraft and wind turbines also all rely on electronic sensing of mechanical parameters and actuation of motion. These examples suggest strongly that engineers who are adept in the design, analysis and simulation of electromechanical systems will be in demand. The Minor in Mechatronics is created to encourage our students to study this important subject and provide recognition to those who do so.

This program is primarily designed for students in the ESE and MEMS departments and has been approved by the two departments. It is available for others as well.
The proposed minor program consists of four required courses, two electives and one prerequisite:

Four required courses:
- MEMS 255 Engineering Mechanics II (Dynamics)
- MEMS 411 Mechanical Engineering Design Project (Mechatronics project)
- ESE 446 Robotics: Dynamics and Control
- ESE 444 Sensors and Actuators

Two electives from the following:
- MEMS 431 Structural Dynamics and Vibrations
- MEMS 5101 Analysis and Design of Fluid-Power Systems
- MEMS 4301 Modeling, Simulation and Control or MEMS 4302 Aircraft Flight Dynamics and Control or ESE 441 Control Systems
- ESE 336 Principles of Electronic Devices
- ESE 442 Digital Control Systems
- CSE 467S Embedded Computing Systems
- CSE 482 Digital Signal Processing
- CSE 550A Mobile Robotics

Prerequisite:
- Basic programming course: CSE 131 Computer Science I or CSE 200 Engineering and Scientific Computing.

Visit the minor web page for more information.

The Minor in Robotics
Robotic systems have wide application in modern technology and manufacturing. Robots can vary in complexity and use, from microrobots for surgical procedures to moderate-size robots common in manufacturing and undersea exploration to macrorobots used for disposal of nuclear wastes and as arms on space-station modules. The program designed for a minor in robotics provides a fundamental understanding of robotic operation and preliminary training in design and use of robots.

Prerequisites:
- Math 217 Differential Equations (Calculus)
- Physics 117A General Physics I, Physics 118A General Physics II
- CSE 131 Computer Science I or CSE 126 Introduction to Computer Programming or CSE 200 Engineering and Scientific Computing or MEMS 201 Numerical Methods and Matrix Algebra, or equivalent

Required courses:
- MEMS 255 Engineering Mechanics II
- ESE 351 Signals and Systems or MEMS 431 Structural Dynamics and Vibrations
- ESE 446 Robotics: Dynamics and Control
ESE 447 Robotics Laboratory

Two courses chosen with the approval of the director of the program for a minor in robotics. Suggested courses are:

CSE 313A Artificial Intelligence Laboratory
CSE 452A Computer Graphics
CSE 546T Computational Geometry
MEMS 311 Machine Elements

ESE 441 Control Systems
or MEMS 4301 Modeling, Simulation and Control
or MEMS 4302 Aircraft Flight Dynamics and Control
ESE 407 Analysis and Simulation of Discrete Event Systems
ESE 435 Electrical Energy Laboratory

To find out more about this minor, contact the director (Heinz Schaettler) of the program for the minor.

The Minor in Systems Science & Engineering

This minor consists of fundamental courses in control systems and operations research. In the area of control systems, students will be introduced to design techniques for controlling engineering and socioeconomic systems such as airplanes, automobiles, nuclear reactors, ecological systems, communication networks, the nation’s economy and biological systems. In the area of operations research, students are introduced to techniques for optimally managing business resources and controlling business networks such as supply chains.

Requirements:

Students who complete 15 units of course work in systems science and engineering subjects at Washington University as specified below may be awarded a minor in Systems Science & Engineering.

The required courses for the minor are:

ESE 251 Introduction to Systems Science and Engineering
ESE 351 Signals and Systems
ESE 403 Operations Research or ESE 404 Applied Operations Research
ESE 441 Control Systems

Students must select one systems science and engineering elective course from the following list: ESE 400 through 425 except 409; ESE 437; ESE 440 through 459 except 449; ESE 470 through 489.

Prerequisites:

A student who has finished engineering common studies courses needs to take only ESE 317 in addition to the above six courses. The student may start taking ESE 251 while taking Math 217 or Math 233.

For more information, contact the director (Norman Katz) for the minor.

Electrical and Systems Engineering

E35 ESE 100 Independent Study
Credit units.

E35 ESE 101 Introduction to Engineering Tools: MATLAB and Simulink
MATLAB and Simulink are important tools in quickly analyzing different designs in many engineering disciplines and are also perhaps the most used software in many engineering schools. Gain skills in the basics of the array-based language MATLAB to write programs, including scripts and functions, to calculate and display variables and images. Learn the basics of Simulink to build and simulate models from standard blocks. Discover both MATLAB and Simulink in an environment with supervised practice and hands-on experience. Practice problems are chosen from different engineering fields as well as from a few socio-economic fields so that students can see the software being exploited in real life applications. This is a pass/fail course. Prerequisite: freshman standing. Credit 1 unit. EN: DU, SU, TU

E35 ESE 103 Introduction to Electrical Engineering
A hands-on introduction to electrical engineering to put the FUN into the electrical engineering FUNdamentals. Experiments are designed to be easy to conduct and understand. Some of the technologies explored are used in a variety of applications including the iPod, ultrasound imaging, computed tomography, radar, DC motors and credit card readers. Students work in groups of two in the newly renovated Bryan 316 laboratory. Each station is equipped with a Quad-Core computer and an integrated data acquisition system. Using this lab equipment, students design and build solutions to the exercises. The students also learn to program the computer in LabVIEW to control the Data Acquisition system. Also, throughout the semester, presentations are given by the Electrical and Systems Engineering faculty about their research. Credit 1 unit. EN: DU, SU, TU

E35 ESE 141 Introductory Robotics
A hands-on introduction to robotics. Project-oriented course in which students build and program a robot guided by upper-division students. Friendly competition at the end of semester. Students gain electrical lab experience, programming experience and a guided introduction into the field of robotics. Recommended to freshmen and sophomores. This is a pass/fail course. Credit 1 unit. EN: DU, SU, TU
E35 ESE 151 Introduction to Systems Science and Engineering
Introduction to the methodology of systems engineering: mathematical modeling, deterministic and stochastic systems, optimization, utilization of scientific literature. Applications in engineering, environmental studies, sports, medicine, business, etc. Guest lecturers from various disciplines. Students are required to do mini research projects (in groups) and present their results. Grading is based on presentations and reports. (Not open to seniors or graduate students.) Prerequisites: Math 132, Physics 117A.
Same as ESE 251
Credit 3 units. EN: DU, SU, TU

E35 ESE 230 Introduction to Electrical and Electronic Circuits
Credit 4 units. EN: DU, SU, TU

E35 ESE 232 Introduction to Electronic Circuits Analysis and design of linear electronic circuits. Terminal characteristics of active semiconductor devices. Incremental and DC models for diodes, metal-oxide-semiconductor field effect transistors (MOSFETs) and bipolar junction transistors (BJTs). Design and analysis of single- and multistage amplifiers. Volatile and nonvolatile memories. Understanding of common application circuits (e.g., operational amplifier, memories) in integrated circuit chips. Semester-long design project. Prerequisite: ESE 230.
Credit 3 units. EN: DU, SU, TU

E35 ESE 297 Introduction to ESE Undergraduate Research Projects
This course is offered to students at all levels from all departments. The course is designed to give students some hands-on experience by implementing projects that use the lab PCs, the sbRIO robots from National Instruments, acoustic sensors, biomedical sensors and 3D cameras. These projects are implemented in LabVIEW and MATLAB and should prepare the students to work on topics that include the Robotic Sensing Undergraduate Research Projects (ESE 497) in subsequent semesters. Working in groups, students implement algorithms that run on PCs and our wireless robotic platforms to track a moving audio source. Also, they use an EEG system to implement a Brain Computer Interface (BCI) project and work with the new Kinect camera from Microsoft. Corequisite: CSE 131 or equivalent.
Credit 2 units.

E35 ESE 317 Engineering Mathematics
The Laplace transform and applications; series solutions of differential equations, Bessel's equation, Legendre's equation, special functions; matrices, eigenvalues and eigenfunctions; vector analysis and applications; boundary value problems and spectral representations; Fourier series and Fourier integrals; solution of partial differential equations of mathematical physics. Prerequisite: Math 217 or equivalent. Credit 4 units.

**E35 ESE 326 Probability and Statistics for Engineering**
Study of probability and statistics together with engineering applications. Probability and statistics: random variables, distribution functions, density functions, expectations, means, variances, combinatorial probability, geometric probability, normal random variables, joint distribution, independence, correlation, conditional probability, Bayes theorem, the law of large numbers, the central limit theorem. Applications: reliability, quality control, acceptance sampling, linear regression, design and analysis of experiments, estimation, hypothesis testing. Examples are taken from engineering applications. Prerequisites: Math 233 or equivalent. Credit 3 units. EN : DU, SU, TU

**E35 ESE 330 Engineering Electromagnetics Principles**
Electromagnetic theory as applied to electrical engineering: vector calculus; electrostatics and magnetostatics; Maxwell's equations, including Poynting's theorem and boundary conditions; uniform plane-wave propagation; transmission lines, TEM modes, including treatment of general lossless lines, and pulse propagation; introduction to guided waves; introduction to radiation and scattering concepts. Prerequisite: ESE 317 or equivalent. Credit 3 units. EN : DU, SU, TU

**E35 ESE 331 Electronics Laboratory**
Laboratory exercises provide students with a combination of hands-on experience in working with a variety of real instruments and in working in a simulated "virtual" laboratory setting. A sequence of lab experiments provide hands-on experience with grounding and shielding techniques, signal analysis, realistic operation amplifier (op amp) characterization, op amp-based active filters characterization, MOSFET chopper/amplifier behavior, measurement of pulses propagating on a transmission line with various terminations, experience with both AM and FM modulation. Students gain experience in working with: sampling oscilloscopes, various signal generators, frequency counters, digital multimeters, spectrum analyzers and contemporary connection boards. The course concludes with a hands-on project to design and demonstrate an electronic component. Prerequisite: ESE 230. Credit 3 units. EN : DU, SU, TU

**E35 ESE 332 Power, Energy and Polyphase Circuits**
Fundamental concepts of power and energy; electrical measurements; physical and electrical arrangement of electrical power systems; polyphase circuit theory and calculations; principal elements of electrical systems such as transformers, rotating machines, control and protective devices, their description and characteristics; elements of industrial power system design. Prerequisite: ESE 230. Credit 3 units. EN : DU, SU, TU

**E35 ESE 336 Principles of Electronic Devices**
Introduction to the solid-state physics of electronic materials and devices, including semiconductors, metals, insulators, diodes and transistors. Crystal growth technology and fundamental properties of crystals. Electronic properties and band structure of electronic materials, and electron transport in semiconductor materials. Fabrication of PN junction diodes, metal-semiconductor junctions, and transistors and integrated-circuit chips. Fundamental electrical properties of rectifying diodes and light-emitting diodes, bipolar transistors and field-effect transistors. Device physics of diodes and transistors, large-signal electrical behavior and high-frequency properties. Prerequisite: Physics 118A. Credit 3 units. EN : DU, SU, TU

**E35 ESE 337 Electronic Devices and Circuits**

**E35 ESE 351 Signals and Systems**
the notion of Matrix algebra and Math 217 or equivalent, Physics 117A–118A. Corequisite: ESE 317.  
Credit 3 units.  EN : DU, SU, TU

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<th>Course Code</th>
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<th>Credit Units</th>
<th>Additional Notes</th>
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<tr>
<td>E35 ESE 352</td>
<td>Introduction to Signals and Systems Lab</td>
<td>Corequisite: ESE 351.</td>
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<td>Introduction to physical and computational aspects of</td>
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<td>signals and systems. Weekly laboratory experiments</td>
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<td>complement the theoretical treatment in ESE 351 Signals</td>
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<td>and Systems. Experiments illustrate fundamental concepts</td>
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<td>of linear systems, including state-space and input-output</td>
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<td>models, impulse response and convolution, transient and</td>
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<td>steady-state responses, time- and frequency-domain</td>
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<td>representations, system frequency response, and sampling,</td>
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<td>filtering and modulation. MATLAB and/or LabView are used</td>
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<td>for experiments and analysis of mechanical systems,</td>
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<td>electrical circuits, signals and communication systems.</td>
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<tr>
<td>E35 ESE 362</td>
<td>Computer Architecture</td>
<td>Same as CSE 362M</td>
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<td>E35 ESE 400</td>
<td>Independent Study</td>
<td>Opportunities to acquire experience outside the classroom setting and to work</td>
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<td>closely with individual members of the faculty. A final report must be</td>
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<td>submitted to the department. Not open to first-year or graduate students.</td>
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<td>Consult adviser. Hours and credit to be arranged.</td>
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<td>E35 ESE 403</td>
<td>Operations Research</td>
<td>Introduction to the mathematical aspects of various areas of operations</td>
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<td>research, with additional emphasis on problem formulation. This is a course</td>
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<td>of broad scope, emphasizing both the fundamental mathematical concepts</td>
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<td>involved, and also aspects of the translation of real-world problems to an</td>
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<td>appropriate mathematical model. Subjects covered include linear and integer</td>
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<td>programming, network problems and dynamic programming. Prerequisites: Math</td>
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<td>217 and familiarity with matrix or linear algebra, or permission of</td>
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<td>instructor.</td>
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<tr>
<td>E35 ESE 404</td>
<td>Applied Operations Research</td>
<td>Application of deterministic and stochastic operations research techniques</td>
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<td></td>
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<td>to real-world problems. Emphasis is given to linear programming and</td>
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<td>simulation. The nature of the problems ranges from logistics and planning</td>
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<td>to operations management. The systems examined are transportation systems,</td>
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<td>supply chain systems, medical care delivery systems, urban service</td>
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<td>systems, management systems, manufacturing systems. Emphasis is placed on</td>
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<td>the problem formulation of real-world problems, the</td>
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<tr>
<td>E35 ESE 405</td>
<td>Reliability and Quality Control</td>
<td>An integrated analysis of reliability and quality control function in</td>
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<td>manufacturing. Statistical process control, acceptance sampling, process</td>
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<td>capability analysis, reliability prediction, design, testing, failure</td>
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<td>analysis and prevention, maintainability, availability, and safety are</td>
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<td>discussed and related. Qualitative and quantitative aspects of statistical</td>
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<td>quality control and reliability are introduced in the context of manufacturing.</td>
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<td>Prerequisite: ESE 326 or equivalent.</td>
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<tr>
<td>E35 ESE 407</td>
<td>Analysis and Simulation of Discrete Event Systems</td>
<td>Study of the dynamic behavior of discrete event systems and techniques for</td>
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<td>analyzing and optimizing the performance of such systems. Covers both</td>
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<td>classical and recent approaches. Classical topics include Markov chains,</td>
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<td>queueing theory, networks of queues, related algorithms and simulation</td>
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<td>methods. Recent approaches include decomposition and aggregation,</td>
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<td>approximation, and perturbation analysis of nonclassical systems. Applications</td>
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<td>are drawn from various areas, including production systems. Prerequisites:</td>
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<td>Math 217, ESE 326 or equivalent, CSE 126 or equivalent.</td>
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<tr>
<td>E35 ESE 408</td>
<td>A System Dynamics Approach to Designing Sustainable</td>
<td>Principles and practice of modeling dynamic systems in the sciences,</td>
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<td>Policies and Programs</td>
<td>engineering, social sciences and business. Model structure and its</td>
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<td>relationships to prior knowledge and assumptions, measurable quantities</td>
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<td>and ultimate use in solving problems in application areas. Problems</td>
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<td>considered are in the areas of intervention, policy making, business and</td>
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<td>engineering systems. Model verification. The basic theory and practice of</td>
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<td>system dynamics. Quantitative methods are emphasized. Senior or graduate</td>
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<td>standing.</td>
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<tr>
<td>E35 ESE 415</td>
<td>Optimization</td>
<td>Optimization problems with and without constraints. The projection theorem,</td>
<td>3</td>
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<td>Convexity, separating hyperplane theorems; Lagrange multipliers,</td>
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<td>Kuhn-Tucker-type conditions, duality; computational procedures. Optimal</td>
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<td>control of linear dynamic systems; maximum principles. Use of optimization</td>
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<td>techniques in engineering design. Prerequisite: ESE 309 or permission of</td>
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E35 ESE 428 Probability
Same as Math 493
Credit 3 units. A&S : NS A&S : IQ, NSM FA : NSM

E35 ESE 433 Radio Frequency and Microwave Technology for Wireless Systems
Focus is on the components and associated techniques employed to implement analog and digital radio frequency (RF) and microwave (MW) transceivers for wireless applications, including: cell phones; pagers; wireless local area networks; global positioning satellite-based devices; and RF identification systems. A brief overview of system-level considerations is provided, including modulation and detection approaches for analog and digital systems; multiple-access techniques and wireless standards; and transceiver architectures. Focus is on RF and MW: transmission lines; filter design; active component modeling; matching and biasing networks; amplifier design; and mixer design. Prerequisite: ESE 330.
Credit 3 units. EN : DU, SU, TU

E35 ESE 434 Solid-State Power Circuits and Applications
Study of the strategies and applications power control using solid-state semiconductor devices. Survey of generic power electronic converters. Applications to power supplies, motor drives and consumer electronics. Introduction to power diodes, thyristors and MOSFETs. Prerequisites: ESE 232, 351.
Credit 3 units. EN : DU, SU, TU

E35 ESE 435 Electrical Energy Laboratory
Experimental studies of principles important in modern electrical energy systems. Topics include: AC power measurements, electric lighting, photovoltaic cells and arrays, batteries, DC-DC and DC-AC converters, and three-phase circuits. Each experiment requires analysis, simulation with MultiSim, and measurement via LabView and the Elvis II platform. Prerequisites: ESE 230 and 351.
Credit 3 units. EN : DU, SU, TU

E35 ESE 436 Advanced Electronic Devices
The physics of state-of-the-art electronic devices. Devices studied include novel diode structures (light-emitting diodes, semiconductor laser diodes), high-power devices (SCRs, TRIACs and power transistors), and high-speed devices. High-speed devices include heterojunction bipolar (HBT), heterojunction field-effect (HFET) and high electron mobility (HEMT) transistors used in very high-speed systems (up to 100 GHz). Advanced bipolar transistors (poly-Si), used in high-speed microprocessors, examined; also materials properties, transport mechanisms, band structure and physics of these devices. Prerequisite: ESE 336.
Credit 3 units. EN : DU, SU, TU

E35 ESE 437 Sustainable Energy Systems
We survey the field of sustainable energy and explore contributions within electrical and systems engineering. Topics include introductory electric power systems, smart grids and the roles of heat engines, photovoltaics, wind power and energy storage, as well as analysis and optimization of energy systems. The course consists of lectures, review and discussion of literature, and student projects. Prerequisites: ESE 317 and junior or senior standing.
Credit 3 units. EN : DU, SU, TU

E35 ESE 438 Applied Optics
Topics relevant to the engineering and physics of conventional as well as experimental optical systems and applications explored. Items addressed include geometrical optics, Fourier optics such as diffraction and holography, polarization and optical birefringence such as liquid crystals, and nonlinear optical phenomena and devices. Prerequisite: ESE 330 or equivalent.
Credit 3 units. EN : DU, SU, TU

E35 ESE 441 Control Systems
Credit 3 units. EN : DU, SU, TU

E35 ESE 442 Digital Control Systems
The control of physical systems with digital computer, microprocessor or special-purpose digital hardware is becoming very common. Course continues ESE 441 to develop models and mathematical tools needed to analyze and design these digital feedback-control systems. Linear, discrete dynamic systems. The Z-transform. Discrete equivalents to continuous transfer functions. Sampled-data control systems. Digital control systems design using transfer and state-space methods. Systems composed of digital and continuous subsystems. Quantization effects. System identification. Multivariable and optimum control. Prerequisites: ESE 351 and 441 (or MEMS 431) or permission of instructor.
Credit 3 units. EN : DU, SU, TU

E35 ESE 444 Sensors and Actuators
The course provides engineering students with basic understanding of two of the main components of any modern
electrical or electromechanical system; sensors as inputs and actuators as outputs. The covered topics include transfer functions, frequency responses and feedback control. Component matching and bandwidth issues. Performance specification and analysis. Sensors: analog and digital motion sensors, optical sensors, temperature sensors, magnetic and electromagnetic sensors, acoustic sensors, chemical sensors, radiation sensors, torque, force and tactile sensors. Actuators: stepper motors, DC and AC motors, hydraulic actuators, magnet and electromagnetic actuators, acoustic actuators. Introduction to interfacing methods: bridge circuits, A/D and D/A converters, microcontrollers. This course is useful for those students interested in control engineering, robotics and systems engineering. Prerequisites: one of the following four conditions: (1) prerequisite of ESE 230 and corequisite of ESE 351; (2) prerequisites of ESE 230, ESE 317 and MEMS 255 (Mechanics II); (3) prerequisites of ESE 105/251 and ESE 351; (4) permission of instructor. Credit 3 units. EN: DU, SU, TU

E35 ESE 446 Robotics: Dynamics and Control
Homogeneous coordinates and transformation matrices. Kinematic equations and the inverse kinematic solutions for manipulators, the manipulator Jacobian and the inverse Jacobian. General model for robot arm dynamics, complete dynamic coefficients for six-link manipulator. Synthesis of manipulation control, motion trajectories, control of single- and multiple-link manipulators, linear optimal regulator. Model reference adaptive control, feedback control law for the perturbation equations along a desired motion trajectory. Design of the control system for robotics. Prerequisites: ESE 317, ESE 351 or ESE 441, and knowledge of a programming language. Credit 3 units. EN: DU, SU, TU

E35 ESE 447 Robotics Laboratory
Introduces the students to various concepts such as modeling, identification, model validation and control of robotic systems. The course focuses on the implementation of identification and control algorithms on a two-link robotic manipulator (the so-called pendubot) that is used as an experimental testbed. Topics include: introduction to the mathematical modeling of robotic systems; nonlinear model, linearized model; identification of the linearized model: input-output and state-space techniques; introduction to the identification of the nonlinear model: energy-based techniques; model validation and simulation; stabilization using linear control techniques; a closer look at the dynamics; stabilization using nonlinear control techniques. Prerequisite: ESE 351 or MEMS 417. Credit 3 units. EN: DU, SU, TU

E35 ESE 448 Systems Engineering Laboratory
Experimental study of real and simulated systems and their control. Identification, input-output analysis, design and implementation of control systems. Noise effects. Design and implementation of control laws for specific engineering problems. Corequisite: ESE 441 and knowledge of a programming language. Credit 3 units. EN: DU, SU, TU

E35 ESE 449 Digital Process Control Laboratory
Applications of digital control principles to laboratory experiments supported by a networked distributed control system. Lecture material reviews background of real-time programming, data acquisition, process dynamics and process control. Exercises in data acquisition and feedback control design using simple and advanced control strategies. Experiments in flow, liquid level, temperature and pressure control. Term project. Prerequisite: ESE/MEMS 441 or equivalent. Corequisite: ChE 462 or equivalent. Same as ChE 433 Credit 3 units. EN: DU, SU, TU

E35 ESE 460 Switching Theory
Same as CSE 460T Credit 3 units. EN: DU, SU, TU

E35 ESE 462 Computer Systems Design
Same as CSE 462M Credit 3 units. EN: DU, SU, TU

E35 ESE 463 Digital Integrated Circuit Design and Architecture
Same as CSE 463M Credit 3 units. EN: DU, SU, TU

E35 ESE 464 Digital Systems Engineering
Same as CSE 464M Credit 3 units. EN: DU, SU, TU

E35 ESE 465 Digital Systems Laboratory
Same as CSE 465M Credit 3 units. EN: DU, SU, TU

E35 ESE 467 Embedded Computing Systems
Same as CSE 467S Credit 3 units. EN: DU, SU, TU

E35 ESE 471 Communications Theory and Systems
Introduction to the concepts of transmission of information via communication channels. Amplitude and angle modulation for the transmission of continuous-time signals. Analog-to-digital
conversion and pulse code modulation. Transmission of digital data. Introduction to random signals and noise and their effects on communication. Optimum detection systems in the presence of noise. Elementary information theory. Overview of various communication technologies such as radio, television, telephone networks, data communication, satellites, optical fiber and cellular radio. Prerequisite: ESE 351 and ESE 326. Credit 3 units. EN : DU, SU, TU

E35 ESE 482 Digital Signal Processing

E35 ESE 483 Medical Imaging
Introduction to the mathematical, physical and engineering principles underlying modern medical imaging systems including x-ray computed tomography, ultrasonic imaging and magnetic resonance imaging. Mathematical tools including Fourier analysis and the sampling theorem; the Radon transform and related transforms; reconstruction algorithms for computed tomography; tomographic imaging with diffracting sources; Bloch equations; free induction decay, spin echoes and gradient echoes; one-dimensional Fourier magnetic resonance imaging; three-dimensional magnetic resonance imaging and slice excitation. Prerequisite: ESE 351. Credit 3 units. EN : DU, SU, TU

E35 ESE 488 Signals and Systems Laboratory
A laboratory course designed to complement the traditional EE course offerings in signal processing, communication theory and automatic control. Signals and systems fundamentals: continuous-time and discrete-time linear time-invariant systems, impulse and step response, frequency response, A/D and D/A conversion. Digital signal processing: FIR and IIR digital filter design, implementation and application of the Fast Fourier Transform. Communication theory: baseband, digital communication, amplitude modulation, frequency modulation, bandpass digital communication. Automatic control: system modeling, feedback control systems, closed-loop transient and frequency response. Laboratory experiments involve analog and digital electronics, and mechanical systems. Computer workstations and modern computational software used extensively for system simulation, real-time signal processing and discrete-time automatic control. Prerequisite: ESE 351. Credit 3 units. EN : DU, SU, TU

E35 ESE 497 Undergraduate Research
Undergraduate research under the supervision of a faculty member. The scope and depth of the research must be approved by the faculty member prior to enrollment. A written final report and a web page describing the research are required. Credit -3 unit.

E35 ESE 497B Undergraduate Research
Undergraduate research in the summer under the supervision of Dr. Arye Nehorai. Prerequisite: undergraduate standing. Credit -3 unit.

E35 ESE 498 Electrical Engineering Design Projects
Working in teams, students address design tasks assigned by faculty. Each student participates in one or more design projects in a semester. Projects are chosen to emphasize the design process, with the designers choosing one of several paths to a possible result. Collaboration with industry and all divisions of the University is encouraged. A written report, a web page and an oral presentation are required. Prerequisite: senior standing. Credit 3 units. EN : DU, SU, TU

E35 ESE 499 Systems Design Project
Term design project, directed by a faculty adviser, requiring use of systems theory, techniques, engineering and concepts. This project is carried out in cooperation with either local industry or university laboratories. The solution of a real technological or societal problem is carried through completely, starting from the stage of initial specification, proceeding with the application of systems engineering methods and terminating with an actual solution. Required documents are a written proposal and a final report on the project. An oral presentation of the project and a web page are required. Prerequisite: SSE senior standing. Credit 3 units. EN : DU, SU, TU

E35 ESE 500 Independent Study
Opportunities for graduate students to explore possible areas of interest with individual faculty members. Coordinated study programs dealing with areas not covered by formal course work are possible. Independent study credit can be changed to research credit (ESE 599) any time during the semester if enrollment is appropriate. A final report must be submitted to the department. Credit -3 unit.

E35 ESE 501 Mathematics of Modern Engineering I
Vectors and vector spaces, Matrix operations, system of linear equations, eigenvalues and eigenvectors, vector fields, line and surface integrals, solutions to ordinary and partial differential equations. Credit 3 units. EN : DU, SU, TU
equations, series expansions, Fourier series. Prerequisite: ESE 317 or equivalent, or consent of instructor. Credit 3 units. EN: DU, SU, TU

E35 ESE 502 Mathematics of Modern Engineering II
Techniques of solving ordinary differential equations with constant coefficients, Laplace's Transform, solutions for the heat and wave equations, Laplace's Equation, Legendre and Bessel Function, Introduction to function of a complex variable, conformal mapping, contour integrals. Prerequisite: ESE 317 or equivalent, or consent of instructor. Credit 3 units. EN: DU, SU, TU

E35 ESE 503 Operations Research
Introduction to the mathematical aspects of various areas of operations research, with additional emphasis on problem formulation. This is a course of broad scope, emphasizing both the fundamental mathematical concepts involved and also aspects of the translation of real-world problems to an appropriate mathematical model. Subjects covered include linear and integer programming, network problems and dynamic programming. Prerequisites: Math 217 and familiarity with matrix or linear algebra, or permission of instructor. Credit 3 units.

E35 ESE 512 Advanced Numerical Analysis
Special topics chosen from numerical solution of partial differential equations, uniform and least-squares approximation spline approximation, Galerkin methods and finite element approximation, functional analysis applied to numerical mathematics, and other topics of interest. Prerequisite: ESE 511 or consent of instructor. Credit 3 units. EN: DU, SU, TU

E35 ESE 514 Calculus of Variations
Introduction to the theory and applications of the calculus of variations. Theory of functionals; variational problems for an unknown function; Euler's equation; variable end-point problems; variational problems with subsidiary conditions; sufficient conditions for extrema: applications to optimum control and/or to other fields. A term project is required. Prerequisite: ESE 317 or equivalent. Credit 3 units.

E35 ESE 516 Optimization in Function Space

E35 ESE 517 Partial Differential Equations
Linear and nonlinear first order equations. Characteristics. Classification of equations. Theory of the potential linear and nonlinear diffusion theory. Linear and nonlinear wave equations. Initial and boundary value problems. Transform methods. Integral equations in boundary value problems. Prerequisite: ESE 317 or equivalent or consent of instructor. Credit 3 units. EN: DU, SU, TU

E35 ESE 520 Probability and Stochastic Processes
Review of probability theory; models for random signals and noise; calculus of random processes; noise in linear and nonlinear systems; representation of random signals by sampling and orthonormal expansions. Poisson, Gaussian and Markov processes as models for engineering problems. Prerequisite: ESE 326. Credit 3 units. EN: DU, SU, TU

E35 ESE 521 Random Variables and Stochastic Processes I
Mathematical foundations of probability theory, including constructions of measures, Lebesque-measure, Lebesque-integral, Banach space property of Lp, basic Hilbert-space theory, conditional expectation. Kolmogorov's theorems on existence and sample-path continuity of stochastic processes. An in-depth look at the Wiener process. Filtrations and stopping times. Markov processes and diffusions, including semigroup properties and the Kolmogorov forward and backward equations. Prerequisites: ESE 520 or equivalent, Math 411. Credit 3 units.

E35 ESE 523 Information Theory
Discrete source and channel model, definition of information rate and channel capacity, coding theorems for sources and channels, encoding and decoding of data for transmission over noisy channels. Corequisite: ESE 520. Credit 3 units. EN: DU, SU, TU

E35 ESE 524 Detection and Estimation Theory
Study of detection, estimation and modulation theory; detection of signals in noise; estimation of signal parameters; linear estimation theory. Kalman-Bucy and Wiener filters, nonlinear modulation theory, optimum angle modulation. Prerequisite: ESE 520. Credit 3 units. EN: DU, SU, TU
E35 ESE 525 Random Processes and Kalman Filtering
Review of probability and random variables; random processes; linear dynamic system response to stochastic inputs; mean square estimation; discrete and continuous Kalman filters; extended Kalman filter for nonlinear systems; maximum likelihood; Wiener filtering and special factorization, LQG/LTR control; topics in system identification; particle filters. Control, estimation (Kalman filter), and system identification problems using MATLAB. Prerequisite: ESE 326 or equivalent. Credit 3 units.

E35 ESE 529 Special Topics in Information Theory and Applied Probability
Credit 3 units.

E35 ESE 531 Nano and Micro Photonics
This course focuses on theory, design, fabrication and application of photonic materials and micro/nano photonic devices. Interaction of light and matter, propagation of light in waveguide, nonlinear optical effect and optical properties of nano/micro structure, the device principles of silicon-based waveguide, filter, photodetector, modulator and laser devices. Prerequisite: ESE 330. Credit 3 units.

E35 ESE 532 Introduction to Nano-Photonic Devices
Introduction to photon transport in nano-photonic devices. This course focuses on the following topics: light and photons, statistical properties of photon sources, temporal and spatial correlations, light-matter interactions, optical nonlinearity, atoms and quantum dots, single- and two-photon devices, optical devices, and applications of nano-photonic devices in quantum and classical computing and communication. Prerequisites: ESE 330 and Physics 217, or permission of instructor. Credit 3 units. EN: DU, SU, TU

E35 ESE 537 Advanced Electromagnetic Theory
Solution of electromagnetic boundary value problems, applications to engineering analysis and design. First semester: mathematical methods for electrostatics, magnetostatics and electrodynamics, emphasizing Green’s function techniques. Second semester: radiation and diffraction; waveguides, antennas and optics. Vector boundary conditions, Green’s dyadics, variational techniques. Prerequisite: advanced calculus, ESE 430 or equivalent. Credit 3 units. EN: DU, SU, TU

E35 ESE 538 Advanced Electromagnetic Engineering
This course begins with a brief review of prerequisite topics. The following topics are treated for guided-wave systems: solution for and use of mode sets in planar and cylindrical guided-wave systems; use of alternative mode sets for inhomogeneous guided-wave systems; dielectric-based and surface-guided wave systems. Methods for launching waves in systems are studied, including: modal expansions, current-based launchers using electric or magnetic coupling techniques, and aperture excitation. Perturbational and variational methods are studied for representing important characteristics of guided-wave and resonator systems. Modal expansions are related to a one- and two-port microwave network treatment of obstacles and circuit elements and junctions in guide-wave systems. The course then shifts to the study of modern numerical methods for developing frequency- and time-domain solutions for guided-wave and two-dimensional radiation and scattering problems encountered in electromagnetic engineering applications. The methods learned are applied to a project selected and carried out by each student. Prerequisites: equivalent of ESE 330, ESE 430 and ESE 537, or instructor permission. Credit 3 units.

E35 ESE 539 Advanced Electromagnetics: Radiation and Scattering
This course begins with a brief review of fundamental concepts including: wave behavior, the generalized source concept, basics of radiation, duality, uniqueness, image theory, the equivalence principle and reciprocity. The focus then turns to important definitions of antenna parameters and qualities. Important antenna types are addressed, including resonant and traveling-wave types. Linear and two-dimensional arrays are treated. Phased-array and active-aperture systems are described. Finally, smart antenna concepts are presented. Prerequisites: ESE 330 or equivalent. Credit 3 units.

E35 ESE 543 Control Systems Design by State Space Methods
Advanced design and analysis of control systems by state-space methods: review of linear algebra (vector space, change of basis, diagonal and Jordan forms), linear dynamic systems (modes, stability, controllability, state feedback, observability, observers, canonical forms, output feedback, separation principle and decoupling), nonlinear dynamic systems (stability, Lyapunov methods, approximate linearization, feedback linearization). Design exercises with CAD (computer-aided design) packages for engineering problems. Prerequisite: MEMS 417, ESE 351 or permission of instructor. Credit 3 units. EN: DU, SU, TU

E35 ESE 544 Optimization and Optimal Control
Constrained and unconstrained optimization theory. Continuous time as well as discrete-time optimal control theory. Time-optimal control, bang-bang controls and the structure of the reachable set for linear problems. Dynamic programming, the Pontryagin maximum principle, the Hamiltonian-Jacobi-Bellman equation and the Riccati partial differential equation. Existence of classical
and viscosity solutions. Application to time optimal control, regulator problems, calculus of variations, optimal filtering and specific problems of engineering interest. Prerequisites: ESE 551, ESE 552. Credit 3 units. EN : DU, SU, TU

E35 ESE 545 Stochastic Control

E35 ESE 549 Special Topics in Control
Credit 3 units.

E35 ESE 551 Linear Dynamic Systems I
Input-output and state-space description of linear dynamic systems. Solution of the state equations and the transition matrix. Controllability, observability, realizations, pole-assignment, observers and decoupling of linear dynamic systems. Prerequisite: ESE 351. Credit 3 units. EN : DU, SU, TU

E35 ESE 552 Linear Dynamic Systems II

E35 ESE 553 Nonlinear Dynamic Systems
State space and functional analysis approaches to nonlinear systems. Questions of existence, uniqueness, and stability; Lyapunov and frequency-domain criteria; w-limits and invariance, center manifold theory and applications to stability, steady-state response and singular perturbations. Poincare-Bendixson theory, the van der Pol oscillator, and the Hopf Bifurcation theorem. Prerequisite: ESE 551. Credit 3 units. EN : DU, SU, TU

E35 ESE 554 Advanced Nonlinear Dynamic Systems

E35 ESE 559 Special Topics in Systems
Credit 3 units.

E35 ESE 560 Computer Systems Architecture I
Same as CSE 560M
Credit 3 units. EN : DU, SU, TU

E35 ESE 561 Computer Systems Architecture II
Same as CSE 561M
Credit 3 units. EN : DU, SU, TU

E35 ESE 565 Acceleration of Algorithms in Reconfigurable Logic
Same as CSE 565M
Credit 3 units. EN : DU, SU, TU

E35 ESE 567 Computer Systems Analysis
Same as CSE 567M
Credit 3 units. EN : DU, SU, TU

E35 ESE 569 Parallel Architectures and Algorithms
Same as CSE 569M
Credit 3 units. EN : DU, SU, TU

E35 ESE 570 Coding Theory
Introduction to the algebra of finite fields. Linear block codes, cyclic codes, BCH and related codes for error detection and correction. Encoder and decoder circuits and algorithms. Spectral descriptions of codes and decoding algorithms. Code performances. Credit 3 units. EN : DU, SU, TU

E35 ESE 571 Transmission Systems and Multiplexing
Transmission and multiplexing systems are essential to providing efficient point-to-point communication over distance. This course introduces the principles underlying modern analog and digital transmission and multiplexing systems and covers a variety of system examples. Credit 3 units. EN : DU, SU, TU

E35 ESE 572 Signaling and Control in Communication Networks
The operation of modern communications networks is highly dependent on sophisticated control mechanisms that direct the flow of information through the network and oversee the allocation of resources to meet the communication demands of end users. This course covers the structure and operation of modern signaling systems and addresses the major design trade-offs that center on the competing demands of performance and service flexibility. Specific topics covered include protocols and algorithms for connection establishment and transformation, routing algorithms, overload and failure recovery and networking dimensioning. Case studies provide concrete examples and reveal the key design issues. Prerequisites: graduate standing and permission of instructor.
Credit 3 units. EN: DU, SU, TU

E35 ESE 574 Digital Communications
Representation of signals by orthonormal expansion, spectral characteristic of digitally modulated signals, channel models, source models, results from information theory, efficient signaling with coded waveforms, intersymbol interference, equalization, optimum demodulation, decoding (including Viterbi decoder), probability of error, carrier and symbol synchronization, spread-spectrum methods. Corequisite: ESE 520.
Credit 3 units. EN: DU, SU, TU

E35 ESE 575 Fiber-Optic Communications
Introduction to optical communications via glass-fiber media. Pulse-code modulation and digital transmission methods, coding laws, receivers, bit-error rates. Types and properties of optical fibers; attenuation, dispersion, modes, numerical aperture. Light-emitting diodes and semiconductor laser sources; device structure, speed, brightness, modes, electrical properties, optical and spectral characteristics. Prerequisites: ESE 330, 336.
Credit 3 units. EN: DU, SU, TU

E35 ESE 577 Design and Analysis of Switching Systems
Same as CSE 577M
Credit 3 units. EN: DU, SU, TU

E35 ESE 584 Statistical Signal Processing for Sensor Arrays
Methods for signal processing and statistical inference for data acquired by an array of sensors, such as those found in radar, sonar and wireless communications systems. Multivariate statistical theory with emphasis on the complex multivariate normal distribution. Signal estimation and detection in noise with known statistics, signal estimation and detection in noise with unknown statistics, direction finding, spatial spectrum estimation, beam forming, parametric maximum-likelihood techniques. Subspace techniques, including MUSIC and ESPRIT. Performance analysis of various algorithms. Advanced topics may include structured covariance estimation, wideband array processing, array calibration, array processing with polarization diversity, and space-time adaptive processing (STAP). Prerequisites: ESE 520, ESE 524, linear algebra, computer programming.
Credit 3 units. EN: DU, SU, TU

E35 ESE 585 Optical Imaging
A modern introduction to optical imaging. Topics include: propagation of waves, diffraction, scattering theory, multiple scattering and radiative transport, diffuse light, inverse scattering and other inverse problems, near-field optics. Applications to biomedical problems are discussed. Prerequisites: ESE 330 and ESE 351.
Credit 3 units. EN: DU, SU, TU

E35 ESE 586 Tomographic Systems
Credit 3 units. EN: DU, SU, TU

E35 ESE 587 Ultrasonic Imaging
Propagation of ultrasound in homogeneous media, near-field and far-field descriptions, refraction and diffraction, dispersive media models, acoustic wave equation formulations and solutions. Basic elements of transducer, pulser and receiver design. The use of linear versus logarithmic amplifiers. Time-gain compensation, scan conversion and image generation in

E35 ESE 589 Biological Imaging Technology
This class develops a fundamental understanding of the physics and mathematical methods that underlie biological imaging and critically examine case studies of seminal biological imaging technology literature. The physics section examines how electromagnetic and acoustic waves interact with tissues and cells, how waves can be used to image the biological structure and function, image formation methods, and diffraction limited imaging. The math section examines image decomposition using basis functions (e.g., Fourier transforms), synthesis of measurement data, image analysis for feature extraction, reduction of multidimensional imaging datasets, multivariate regression, and statistical image analysis. Original literature on electron, confocal and two photon microscopy, ultrasound, computed tomography, functional and structural magnetic resonance imaging and other emerging imaging technology are critiqued. Credit 3 units. EN: DU, SU, TU

E35 ESE 590 Electrical and Systems Engineering Graduate Seminar
This pass/fail course is required for the M.Sc., D.Sc. and Ph.D. degrees in Electrical and Systems Engineering. A passing grade is required for each semester of enrollment and is received by attendance at regularly scheduled ESE seminars. M.Sc. students must attend at least four seminars per semester. D.Sc. and Ph.D. students must attend at least seven seminars per semester. Part-time students are exempt except during their year of residency. Any student under continuing status also is exempt. Seminars missed in a given semester may be made up during the subsequent semester. Credit units.

E35 ESE 591 Special Topics: Biomedical Optics I: Principles
This course covers the principles of optical photon transport in biological tissue. Topics include a brief introduction to biomedical optics, single-scatterer theories, Monte Carlo modeling of photon transport, convolution for broad-beam responses, radiative transfer equation and diffusion theory, hybrid Monte Carlo method and diffusion theory, and sensing of optical properties and spectroscopy. Prerequisite: Differential equations. Same as BME 591 Credit 3 units.

E35 ESE 592 Special Topics: Biomedical Optics II: Imaging
This course covers optical imaging technologies. Topics include ballistic imaging, optical coherence tomography, Mueller optical coherence tomography, diffuse optical tomography, photoacoustic tomography and ultrasound-modulated optical tomography. Prerequisites: Differential equations, Biomedical Optics I: Principles. Same as BME 592 Credit 3 units.

E35 ESE 596 Seminar in Imaging Science and Engineering
This seminar course consists of a series of tutorial lectures on Imaging Science and Engineering with emphasis on applications of imaging technology. Students are exposed to a variety of imaging applications that vary depending on the semester, but may include multispectral remote sensing, astronomical imaging, microscopic imaging, ultrasound imaging and tomographic imaging. Guest lecturers come from several parts of the university. This course is required of all students in the Imaging Science and Engineering program; the only requirement is attendance. This course is graded Pass/fail. Prerequisite: admission to Imaging Science and Engineering Program. Same as CSE 596 (when offered) and BME 506. Credit 1 unit.

E35 ESE 597 Practicum in Imaging Science and Engineering
This course provides students in the Imaging Science and Engineering program with opportunities to participate, early in their graduate studies, in projects involving imaging data. A list of IS&E faculty having potential projects of interest is provided. It is the student’s responsibility to interview with such faculty in order to identify a project for themselves to be completed in one semester. A written report documenting the project goals, relevant literature and results obtained is required at the end of the project. To receive credit for completing the practicum, the report must be accepted by the supervisor of the project and a committee of IS&E faculty. This course is graded pass/fail. Prerequisite: admission to Imaging Science and Engineering Program. Credit 1 unit. EN: DU, SU, TU
### Electrical Engineering Sample Curriculum

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<th>Units</th>
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<td><strong>First Year</strong></td>
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<td>Humanities or social science elective</td>
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<td>Freshman Elective (ESE 101/103/141)</td>
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<td>General Physics I or Physics I (Physics 117A or Physics 197)</td>
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<td>Computer Science elective (CSE 131)</td>
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<td>Calculus II, III (Math 132, 233)</td>
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<td>General Physics II or Physics II (Physics 118A or Physics 198)</td>
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<td>Introduction to Digital Logic and Computer Design (ESE 260)</td>
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<td>Introduction to Electrical and Electronic Circuits (ESE 230)</td>
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<td>Engineering Ethics and Sustainability (Engr 4501)</td>
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<td>Electrical Engineering laboratory</td>
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<tr>
<td>Electrical Engineering Design Projects (ESE 498)</td>
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### Electrical Engineering Pre-Med Sample Curriculum

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<td><strong>First Year</strong></td>
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<tr>
<td>Calculus II, III (Math 132, 233)</td>
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<td>Humanities or social science elective</td>
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<tr>
<td>General Chemistry Laboratory I, II (Chem 151, 152)</td>
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<tr>
<td>General Chemistry I, II (Chem 111A, 112A)</td>
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<tr>
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<tr>
<td>Principles of Biology I (Biol 2960)</td>
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<td><strong>Second Year</strong></td>
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<tr>
<td>Differential Equations (Math 217)</td>
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</tr>
<tr>
<td>Computer Science elective (CSE 131)</td>
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<tr>
<td>Introduction to Electrical and Electronic Circuits (ESE 230)</td>
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<td>Principles of Biology II (Biol 2970)</td>
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<td>Physiological Control Systems (Biol 3058)</td>
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<tr>
<td>Engineering Mathematics (ESE 317)</td>
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<tr>
<td>Introduction to Digital Logic and Computer Design (ESE 260)</td>
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<td>Humanities or social science elective</td>
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<td>Introduction to Electronic Circuits (ESE 232)</td>
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<tr>
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<tr>
<td>Organic Chemistry I, II with Lab (Chem 261, Chem 262)</td>
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## Systems Science and Engineering Sample Curriculum

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<td><strong>First Year</strong></td>
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<tr>
<td>Calculus II, III (Math 132, 233)</td>
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<td>Freshman Elective</td>
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<td>Matrix Algebra (Math 309)</td>
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<tr>
<td>Introduction to Systems Science and Engineering (ESE 251)</td>
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<tr>
<td>General Physics II or Physics II (Physics 118A or Physics 198)</td>
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<tr>
<td><strong>Second Year</strong></td>
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<tr>
<td>General Chemistry Laboratory I (Chem 151)</td>
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<td>General Chemistry I (Chem 111A)</td>
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<td><strong>Third Year</strong></td>
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<td>Humanities or social sciences elective</td>
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<td>Operations Research (ESE 403)</td>
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<td>Control Systems (ESE 441)</td>
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<td>Systems science and engineering elective with engineering topics units</td>
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<td>Technical Writing (Engr 310)</td>
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<td>Elective lab (ESE 447)</td>
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<tr>
<td><strong>Fourth Year</strong></td>
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<td>Systems Design Project (ESE 499)</td>
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<td>Engineering Ethics and Sustainability (Engr 4501)</td>
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<td>Electives</td>
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<td>Systems science and engineering elective with engineering topics units</td>
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## Systems Science and Engineering Pre-Med Sample Curriculum

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<td><strong>First Year</strong></td>
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<tr>
<td>Calculus II, III (Math 132, 233)</td>
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<td>General Chemistry I, II (Chem 111A, 112A)</td>
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<td>Matrix Algebra (Math 309)</td>
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<td>General Chemistry Laboratory I (Chem 151)</td>
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<td>General Chemistry I (Chem 111A)</td>
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<td>Principles of Biology I (Biol 2960)</td>
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**Second Year**

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<tr>
<th>Course Description</th>
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<tbody>
<tr>
<td>Differential Equations (Math 217)</td>
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<td>Probability and Statistics for Engineering (ESE 326)</td>
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<td>Introduction to Systems Science and Engineering (ESE 251)</td>
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<td>Signals and Systems (ESE 351)</td>
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**Third Year**

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<tr>
<td>Organic Chemistry I, II with Lab (Chem 261, 262)</td>
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<td>Operations Research (ESE 403)</td>
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<td>SSE electives with engineering topics units</td>
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<tr>
<td>Technical Writing (Engr 310)</td>
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<td>Computer Science elective from the approved list (CSE 241)</td>
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<td>SSE elective laboratory (ESE 447)</td>
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<td>Humanities or social science elective</td>
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<tr>
<td>Control Systems (ESE 441)</td>
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**Fourth Year**

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<td>SSE electives with engineering topics units</td>
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Energy, Environmental and Chemical Engineering

About Energy, Environmental and Chemical Engineering

Our department focuses on environmental engineering, energy systems engineering and chemical engineering. We provide integrated and multidisciplinary programs of scientific education. Our mission is accomplished by: instilling a tradition of "lifelong learning"; a curriculum of fundamental education coupled with applications in advanced focal areas and strengthened by our breadth in other disciplinary areas; participation in cutting-edge research with faculty and industrial partners; and access to state-of-the-art facilities and instrumentation. Most undergraduate students in the department pursue the B.S. in Chemical Engineering degree. Other students pursue the B.S. in Applied Science degree with a major in Chemical Engineering. The department offers a minor in Environmental Engineering Science and, in collaboration with other engineering departments, we co-sponsor a minor in Energy Engineering. Graduate degrees (Master of Engineering and Doctor of Philosophy) in Energy, Environmental and Chemical Engineering are offered by the department.

Chemical engineers are involved in the transfer of scientific discoveries to modern technologies and novel products that benefit society and minimize the impact on the environment. They deal with multiscale aspects of generating clean energy, producing novel and superior materials, and utilizing the biological revolution to manufacture new products. They are involved in the development and manufacture of consumer products, as well as in design, operation and control of processes in a variety of industries (e.g., petroleum, petrochemical, chemical, consumer products, food, feed and pharmaceuticals). Their broad training in basic sciences (e.g., chemistry, physics, biology, mathematics) coupled with a strong foundation in chemical engineering principles (e.g., thermodynamics, mass and energy balances, transport phenomena, kinetics, separations, reaction engineering, control, product development and process design) makes them invaluable team members and leaders in any engineering enterprise. It also prepares them well for graduate studies in biochemical, biomedical, chemical, environmental and materials engineering. In addition, the B.S. degree in chemical engineering is a great starting point for pursuing a degree in business, law or medicine.

The curriculum is planned so as to provide students with a strong background in basic chemical engineering concepts, while allowing individual latitude to emphasize study in a specialized area or obtain added breadth both within and outside chemical engineering. The faculty devotes a considerable amount of time to individual advising. A contemporary approach to chemical engineering is focused on the multiscale aspects of the discipline, consistent with modern developments in computer-supported problem solving. Molecular-level understanding is utilized in product development and process design, which in turn are evaluated in terms of their impact on the environment and society according to the principles of green engineering.

Mission Statement

The mission of the department is to teach chemical engineering principles and their application in an inspiring learning environment and to prepare students for engineering careers by developing the skills of critical thinking, analytical abilities and communication proficiency and by instilling a sense of professional ethics and societal responsibility.

Program Objectives

Our Program Educational Objectives are as follows.

(a) After graduation, graduates employed in the chemical processing and product design, life sciences and manufacturing industries will have applied process design tools and product development concepts, assisted in plant operation and process control, and taken on managerial responsibilities.

(b) Graduates pursuing doctoral studies will demonstrate superior preparedness by making reasonable progress toward a degree, excelling in course work and conducting productive research.

(c) Graduates capitalizing on the versatility of our program will excel in diverse career paths such as business, law, consulting, government and education. After graduation, they will have taken concrete steps toward advancing their careers in such areas. Irrespective of the profession they choose, the graduates will benefit from critical thinking and problem-solving abilities, which we foster/emphasize throughout our curriculum.

(d) Graduates will demonstrate an appreciation for ethical behavior, social responsibility and diversity in their chosen professions.

(e) Graduates also will be engaged in lifelong learning through further graduate education, short courses or other training programs in their chosen professions.

Advising

The department takes pride in the mentoring of undergraduate students. Each student who declares chemical engineering as a (potential) major is assigned an academic adviser from the tenure-track department faculty. Typically, the same adviser follows the student’s academic progress and serves as a mentor from the freshman year through graduation.

Phone: 314/935-5545
Departmental website: http://eece.wustl.edu/undergraduateprograms/Pages/default.aspx
Chair
Pratim Biswas
Lucy and Stanley Lopata Professor
PhD, California Institute of Technology
Aerosol science and engineering, air quality and pollution control, nanotechnology, environmentally benign energy production

Endowed Professor
Richard L. Axelbaum
Stifel and Quinette Jens Professor
PhD, University of California–Davis
Combustion, advanced energy systems, clean coal, aerosols, nanoparticle synthesis, rechargeable battery materials, thermal science
Milorad P. Dudukovic
Laura and William Jens Professor
PhD, Illinois Institute of Technology
Chemical reaction engineering, multiphase reactors, visualization of multiphase flows, tracer methods, environmentally benign processing

Professors
Daren Chen
PhD, University of Minnesota
Particle identification and control, aerosol instrumentation
William P. Darby
PhD, Carnegie Mellon
Environmental planning and management
Rudolf B. Husar
PhD, University of Minnesota
Environmental informatics, aerosol science and engineering
Himadri Pakrasi
PhD, University of Missouri–Columbia
Systems biology, photosynthesis, metal homeostasis
P. A. Ramachandran
PhD, University of Bombay
Chemical reaction engineering, applied mathematics, process modeling, waste minimization, environmentally benign processing

Associate Professors
Daniel Giammar
PhD, California Institute of Technology
Aquatic chemistry, environmental engineering, water quality, water treatment
John T. Gleaves
PhD, University of Illinois
Heterogeneous catalysis, particle chemistry

Assistant Professors
Venkat Subramanian
PhD, University of South Carolina
Electrochemical energy storage, energy systems engineering, multiscale modeling and simulation
Jay R. Turner
DSc, Washington University
Air quality planning and management; aerosol science and engineering, life cycle assessments

Assistant Professors
John Fortner
PhD, Rice University
Environmental engineering, aquatic processes, water treatment, remediation, and environmental implications and applications of nanomaterials
Marcus Foston
PhD, Georgia Institute of Technology
Utilization of biomass resources for fuel and chemical production
Young-Shin Jun
PhD, Harvard University
Aquatic processes, molecular issues in chemical kinetics, environmental chemistry, surface/physical chemistry, environmental engineering, biogeochemistry, nanotechnology

Assistant Professors
Cynthia Lo
PhD, Massachusetts Institute of Technology
Solar energy conversion, materials, environmental interfaces, catalysis, computational chemistry and molecular modeling
Tae Seok Moon
PhD, Massachusetts Institute of Technology
Metabolic engineering and synthetic biology
Yinjie Tang
PhD, University of Washington
Metabolic engineering, bioremediation
Brent Williams
PhD, University of California
Aerosols, global climate issues, atmospheric sciences
Fuzhong Zhang
PhD, University of Toronto
Metabolic engineering, protein engineering, synthetic and chemical biology

Joint Faculty
Nathan Ravi
PhD, Virginia Polytechnic Institute
Cataract, ocular biomaterials
Shelly Sakiyama-Elbert
PhD, California Institute of Technology
Bioactive materials
Engineering

Professor of the Practice
Ruth Chen
PhD, University of Michigan
Environmental toxicology, risk assessment, risk management, public health

Adjunct Professors
Charles N. Carpenter
PhD, Ohio State University
Process design

Robert Heider
MME, Washington University
Process control and process design

Timothy Michels
MArch, Washington University
Energy economics, building construction and equipment sciences

Nicholas J. Nissing
BS, Washington University
Product development and process design

Robin L. Shepard
DSc, Washington University
Process safety, sustainable engineering in developing countries

Research Associates
Raymond Ehrhard
BS, University of Missouri–Rolla
Water and wastewater treatment technologies, process energy management

John Murphy
Certified Energy Manager, P.E., Missouri
MS Chemical Engineering, University of Missouri–Columbia
Drinking water treatment process, hydrology and hydraulics, energy management

Bachelor of Science in Chemical Engineering

The B.S. Ch.E. degree program is designed to provide students with comprehensive training in chemical engineering fundamentals. This degree program is accredited through the Accreditation Board for Engineering and Technology (ABET). Program objectives are stated in overview (p. 823). The B.S. Ch.E. degree requires satisfactory completion of a minimum of 126 units as indicated in Table 1. From the courses listed in Table 1, the humanities and social sciences courses (except ENGR 450X courses) may be taken pass/fail. A sample year-by-year B.S. Ch.E. curriculum is shown in Table 2.

The program of study consists of 26 units of physical and biological sciences (i.e., biology, chemistry and physics); 21 units of mathematics and engineering computing; 40 units of core chemical engineering courses; 21 units of humanities, social sciences and technical writing; and 18 units of chemical engineering electives. The chemical engineering electives permit students to tailor their studies toward specific goals such as obtaining more depth in a chemical engineering subdiscipline (e.g., materials) or increasing breadth by choosing courses from different subdisciplines. Some of these 18 units may be taken in other engineering departments or in the natural sciences or physical sciences. Students in collaboration with their advisers design a course of study (subject to certain requirements) for the chemical engineering electives. A draft plan is developed as early as possible and formally reviewed each semester by the student and adviser. Consult the EECE department website for more details, including the requirements that must be satisfied by these chemical engineering electives.

Click here for Table 1, describing the B.S. Ch.E. Requirements. (p. 835)

Click here for Table 2, a sample B.S. Ch.E. Curriculum (p. 835).

The curriculum is designed to provide opportunities for students to explore areas of interest within chemical engineering. In addition to the accredited B.S. degree in Chemical Engineering, another choice is to pursue the course of study leading to the B.S. degree in Applied Science with major in Chemical Engineering.

Double Majors and Premedical Program

Some students may be able to take more than the 126-unit minimum during a four-year program, especially if they have Advanced Placement units. This permits the choice of additional free electives from such areas as biology, computer science, humanities, social sciences or other engineering courses. It also provides an opportunity to pursue a double major. The rules for combining majors in engineering and multiple majors involving other university divisions are described in the general section (p. 751) on the School of Engineering & Applied Science. Particularly popular with chemical engineering students is the combined degree program in Process Control Systems.

Traditionally, the undergraduate chemical engineering degrees (both the accredited degree and the applied science option) have been popular with students interested in medicine because the curriculum automatically satisfies many of the premedical requirements. The additional needed courses are taken as electives.

Bachelor of Science in Applied Science (Chemical Engineering)

This degree serves students who wish to be exposed to key chemical engineering principles yet seek a more flexible...
curriculum. Consult the EECE department website for the specific requirements needed to earn this degree.

The Minor in Environmental Engineering Science

The EECE Department sponsors an undergraduate Minor in Environmental Engineering Science. This 20-21 unit program prepares the student to seek an entry-level position as an environmental engineer, scientist or analyst. The minor also provides a solid foundation for undertaking graduate study in environmental engineering. Consult the EECE department website for more information.

Units required: 21

Required courses:

Select from the following menus:

Introduction ¹ (3 units):
- ChE 146A Introduction to Energy, Environmental and Chemical Engineering
- ChE 262 Introduction to Environmental Engineering

Environmental Chemistry ² (3 units):
- EECE 448 Environmental Organic Chemistry
- EECE 543 Aquatic Chemistry
- EECE 547 Atmospheric Science and Climate

Green Engineering, Environmental Management and Risk Assessment (3 units):
- ChE 345 Pollution Abatement and Waste Minimization
- EECE 380A Sustainable Technologies for the Global Community
- ChE 438 Environmental Risk Assessment and Toxicology
- EECE 590 Special Topics: Energy and Environmental Economics and Risk Management Decision-Making

Environmental Engineering electives ² (6 units):
- ChE 408A Environmental Engineering Lab
- ChE 449 Sustainable Air Quality
- ChE 518 Aerosol Science and Technology
- EECE 401 International Experience in Energy, Environmental and Chemical Engineering
- EECE 534 Environmental Nanotechnology
- EECE 5404 Combustion Phenomena
- EECE 588 Physical and Chemical Processes for Water Treatment

Additional eligible courses (new courses, special offerings) will be posted on the EECE website as they become available.

Natural Science (3 units):
- Biol 381 Introduction to Ecology
- EPSc 323 Biogeochemistry
- EPSc 413 Introduction to Soil Science
- EPSc 429 Environmental Hydrogeology
- EPSc 444 Environmental Geochemistry

Environmental Policy and Social Science (3 units):
- Econ 451 Environmental Policy
- EnSt 539 Interdisciplinary Environmental Clinic
- Pol Sci 332 Environmental and Energy Issues

¹Freshmen potentially interested in majoring in Chemical Engineering should take ChE 146A; all other students working toward the Minor in Environmental Engineering Science should take ChE 262.

²Students taking both environmental chemistry courses can count one of them toward the Environmental Engineering Sciences.

The Minor in Energy Engineering

This minor will provide students with course work that will enhance their background, knowledge and skills in the topical area of Energy Engineering. The minor covers classes in several fields of science and engineering, encompassing the Department of Energy, Environmental and Chemical Engineering; the Department of Electrical and Systems Engineering; and the Department of Mechanical Engineering and Materials Science.

The Minor in Energy Engineering is open to undergraduate students pursuing an engineering major, students from the sciences (Biology, Chemistry, Physics) in Arts & Sciences, and the Environmental Studies major.

Units required: 18

Required courses:

Select from the following menus:

Basic and Applied Sciences (fundamental content) (two courses):
- ChE 320 Thermodynamics or MEMS 3410 Fluid Mechanics or ChE 367 Transport Phenomena I (Fluids)
- ChE 369 Energy Transfer Processes or MEMS 342 Heat Transfer (spring)
- ESE 332 Power, Energy and Polyphase Circuits (spring)

Social Science/Policy/Economics Elective (one course):
- EnSt 451 Environmental Policy (fall)
- EECE 590 Special Topics: Energy and Environmental Economics and Risk Management Decision-Making (spring)
- EnSt 332 Environmental and Energy Issues (spring)
- ESE 408 A System Dynamics Approach to Designing Sustainable Policies and Programs (fall)
Electives (Choose three courses. One of the courses is required to be chosen from outside your major degree department. A partner department may approve the use of a course listed under Basic and Applied Sciences as elective):

- EECE 401 International Experience in Energy, Environmental and Chemical Engineering (summer/fall)
- EECE 495 Special Topics: Energy and Buildings (fall)
- EECE/ MEMS 5404 Combustion Phenomena (fall)
- EECE 4830/ ChE 4830 Bioenergy (spring)
- EECE/ ChE 345 Pollution Abatement and Waste Minimization (fall)
- MEMS 5422 Solar Energy Thermal Processes (summer)
- MEMS 5420 HVAC Analysis and Design I (fall)
- MEMS 5421 HVAC Analysis and Design II (spring)
- MEMS 5705 Wind Energy Systems (spring)
- MEMS 412 Design of Thermal Systems (spring)
- ESE 434 Solid-State Power Circuits and Applications (fall)
- ESE 435 Electrical Energy Laboratory (spring)
- ESE 437 Sustainable Energy Systems (spring)

Committee to Oversee Energy Engineering Minor

Pratim Biswas (EECE, Coordinator)
Hiro Mukai (ESE)
David Peters (MEMS)

The committee ensures that any course added to the above lists contain a significant amount of energy topics and that the entire program be cohesive.

Visit the Energy Engineering Minor web page for more information.

Energy, Environmental and Chemical Engineering

E33 EECE 380A Sustainable Technologies for the Global Community
This course provides the engineering tools needed to solve problems in the developing world and within the global community. Emphasis is on learning and applying technology that are appropriate for varying communities and the challenges that must be overcome when implementing improvements.

Course work consists of lectures, case studies of intermediate and sustainable improvements throughout the world and hands-on learning.
Credit 3 units. EN: TU

E33 EECE 401 International Experience in Energy, Environmental and Chemical Engineering
This course provides undergraduate students with an international experience related to energy, environmental and/or chemical engineering. The country visited varies from year to year with one or more EECE faculty members developing the program in collaboration with McDonnell Global Energy and Environment Partnership (MAGEEP) universities. Example activities include conducting field or laboratory research, attending short courses taught by MAGEEP university faculty members, and visiting attractions relevant to the course focus (e.g., industrial facilities). Students also gain an understanding of the local culture and history of the country visited. Course content includes a seminar series in the spring semester prior to the international experience, a two-to-three week visit to the location of study, and a follow-up student project and presentations during the fall semester that draws upon the experience. Students enroll in EECE 401 for the fall semester following the trip.
Credit 3 units. EN: DU, SU, TU

E33 EECE 439 Advanced Energy Lab
Laboratory experiments to illustrate the application of engineering fundamentals to the study of advanced energy generation, storage, distribution and delivery systems. Modules include both lecture and laboratory components and explore topics such as fossil fuel combustion, solar PV and solar thermal systems, wind-derived energy, biofuels production, electrochemical energy storage. Extensive metering of energy use in Brauer Hall are used to study systems performance including energy efficiency. Prerequisites: ChE 320 or MEMS 301, and ChE 367 or MEMS 3410; or permission of instructor.
Credit 3 units. EN: SU, TU

E33 EECE 448 Environmental Organic Chemistry
Fundamental, physical-chemical examination of organic molecules (focused on anthropogenic pollutants) in aquatic (environmental) systems. Students learn to calculate and predict chemical properties that are influencing the partitioning of organic chemicals within air, water, sediments and biological systems. This knowledge is based on understanding intermolecular interactions and thermodynamic principles. Mechanisms of important thermochemical, hydrolytic, redox and biochemical transformation reactions also are investigated, leading to the development of techniques (such as structure-reactivity relationships) for assessing environmental fate or human exposure potential. Prerequisite: Chem 112A.
Credit 3 units.

E33 EECE 495 Special Topics: Energy and Buildings
There is a $2 trillion U.S. market in energy efficiency with paybacks of four to five years. This course is an introduction to energy use in the built environment and means and methods for evaluating and harvesting these financial benefits. It is based on fundamentals of energy usage in building systems. Building sciences for architectural envelope, heating and cooling systems, lighting, and controls. Building/weather interaction and
utility weather regression analyses. Building dynamics and rates of change in energy usage. Students work in groups to perform an energy audit for a building on campus. Prerequisite: senior or graduate student standing, or permission of instructor. Same as EECE 595 Credit 3 units.

E33 EECE 501 Transport Phenomena in Energy, Environmental and Chemical Engineering
The aim of the course is for students to develop skills in applying principles of momentum, heat and mass transport in an unified manner to problems encountered in the areas of energy, environmental and chemical processes. A systems approach is followed so that the general principles can be grasped and the skills to develop mathematical models of seemingly different processes is emphasized. This provides the students with a general tool which they can apply later in their chosen field of research. Credit 3 units.

E33 EECE 502 Mathematical Methods in Engineering
The course introduces students to mathematical principles essential for graduate study in any engineering discipline. Applied mathematical concepts are demonstrated by applications to various areas in energy, environmental, biomedical, chemical, mechanical, aerospace, electrical and civil engineering. Credit 3 units.

E33 EECE 503 Kinetics and Reaction Engineering Principles
The course is aimed at a modern multiscale treatment of kinetics of chemical and biochemical reactions and application of these fundamentals to analyze and design reactors. Application of reaction engineering principles in the areas related to energy generation, pollution prevention, chemical and biochemical processes are studied and illustrated with case studies and computer models. Description of the role of mass and heat transport in reacting systems also is provided with numerous examples. Credit 3 units.

E33 EECE 508 Research Rotation
First-year doctoral students in EECE should undertake research rotation as a requirement prior to choosing a permanent research adviser. The rotation requires the student to work under the guidance of a faculty member. Credit units.

E33 EECE 509 Seminar in Energy, Environmental and Chemical Engineering
All graduate students in EECE should attend the Departmental Seminar Series to gain exposure in various diverse fields of research. Students also are expected to participate in journal clubs and other discussion formats to discuss topical research areas. The course is required of all graduate students every semester of residency in the program. Credit 1 unit.

E33 EECE 534 Environmental Nanochemistry
This course involves the study of nanochemistry at various environmental interfaces, focusing on colloid, nanoparticle and surface reactions. The course also (1) examines the thermodynamics and kinetics of nanoscale reactions at solid-water interfaces in the presence of inorganic or organic compounds and microorganisms; (2) investigates how nanoscale interfacial reactions affect the fate and transport of contaminants; (3) introduces multidisciplinary techniques for obtaining fundamental information about the structure and reactivity of nanoparticles and thin films, and the speciation or chemical form of environmental pollutants at the molecular scale; (4) explores connections between environmental nanochemistry and environmental kinetic analysis at larger scales. This course helps students attain a better understanding of the relationship between nanoscience/technology and the environment — specifically how nanoscience could lead potentially to better water treatments, more effective contaminated-site remediation, or new energy alternatives. Credit 3 units. EN : DU, SU, TU

E33 EECE 5404 Combustion Phenomena
Introduction to fundamental aspects of combustion phenomena including relevant thermochemistry, fluid mechanics and transport processes. Emphasis is on elucidation of the physico-chemical processes, problem formulation and analytical techniques. Topics covered include ignition, extinction, diffusion flames, particle combustion, deflagrations and detonations. Prerequisites: graduate standing or permission of instructor. Credit 3 units. EN : DU, SU, TU

E33 EECE 544 Multiphase Flow
Multiphase flows are encountered in a broad range of engineering disciplines, a host of different technological contexts, and a wide spectrum of different scales. A fundamental understanding of multiphase flows plays an important role in the successful design and operation of processes and systems involving multiphase flows. Due to the vast field it is often difficult for students to determine the appropriate experimental or analytical methodologies for their studies in the field of multiphase flows. The aim of this course is to bring much of this fundamental understanding together and to present a unified approach to the fundamental ideas of multiphase flows. Prerequisite: ChE 367. Credit 3 units.

E33 EECE 547 Atmospheric Science and Climate
This course covers current research topics in atmospheric chemistry and climate change. Topics include atmospheric composition, chemistry, transport, dynamics, radiation, greenhouse gases, natural and anthropogenic primary pollution sources and secondary aerosol production, and measurement techniques. Focus is placed on how our atmosphere and climate are altered in a world of changing energy production and land use. Prerequisites: Chem 112A, Physics 118 or 198, and junior or higher standing.

Credit 3 units.

E33 EECE 548 Environmental Organic Chemistry
Same as EECE 448
Credit 3 units.

E33 EECE 588 Physical and Chemical Processes for Water Treatment
Theory and design of water treatment processes and systems. Emphasis on potable and industrial water supply. Coagulation, flocculation, sedimentation, filtration, disinfection, softening, ion exchange, adsorption, membrane separation and oxidation review of EPA regulations.
Credit 3 units.

E33 EECE 589 Electrochemical Engineering
This course teaches the fundamentals of electrochemistry and the application of the same for analyzing various electrochemical energy sources/devices. The theoretical frameworks of current-potential distributions, electrode kinetics, porous electrode and concentrated solution theory are presented in the context of modeling, simulation and analysis of electrochemical systems. Applications to batteries, fuel cells, capacitors, copper deposition are explored. Prerequisite/co-requisite: EECE 501-502 (or equivalent), or permission of instructor.
Credit 3 units.

E33 EECE 590 Special Topics: Energy and Environmental Economics and Risk Management Decision-Making
This course teaches economic principles in energy and environmental management decision-making. After evaluating public and private projects for selection based on economic considerations in resource allocation, students use principles of decision-making and risk assessment in case studies. Other tools are essentials of conditional probability, value of information and testing, and utility.
Credit 3 units.

E33 EECE 591 Computational Chemistry of Molecular and Nanoscale Systems
This course explores the structure, properties and reactivity of molecular and nanoscale systems in engineering using computational chemistry tools. The science behind density functional theory (DFT) calculations and molecular dynamics (MD) simulations are explained, and applied in the context of multiscale modeling. Special emphasis is placed on solid-state materials and aqueous/biological systems found in engineering. Students are encouraged to apply the methods discussed in class to their own research topics. Prerequisites: ChE 320 and 359, or permission of the instructor.
Credit 3 units.

EN : DU , SU , TU

E33 EECE 592A Advanced Topics in Aerosol Engineering
This course is focused on discussion of advanced topics in aerosol science and engineering and its applications in a variety of fields — materials science, chemical engineering, mechanical engineering and environmental engineering. Prerequisite: ChE 518.
Credit 3 units.

E33 EECE 594 Special Topics: Advanced Renewable Energy
A study of renewable energy technologies, including biomass, solar, thermal and wind energy collection and conversion. Introduction to hydrogen technologies and fuel cells. Course discusses analysis and technical design of renewable energy processes. Prerequisite: ChE 320 or equivalent or graduate standing.
Credit 3 units.

E33 EECE 595 Special Topics: Energy and Buildings
There is a $2 trillion U.S. market in energy efficiency with paybacks of four to five years. This course is an introduction to energy use in the built environment and means and methods for evaluating and harvesting these financial benefits. It is based on fundamentals of energy usage in building systems. Building sciences for architectural envelope, heating and cooling systems, lighting and controls. Building/weather interaction and utility weather regression analyses. Building dynamics and rates of change in energy usage. Students work in groups to perform an energy audit for a building on campus. Prerequisite: senior or graduate student standing or permission of instructor.
Credit 3 units.

E33 EECE 596 Special Topics: Metabolic Engineering
Metabolic engineering is the systematical practice of optimizing genetic and regulatory processes within cells to improve cellular performance. Metabolic engineering course gives an overview of the different concepts of metabolic engineering with a number of examples on how systems biology (i.e., omics tools) and molecular biology methods (i.e., genetic modification using recombinant DNA technology) have been applied to understand unique cellular metabolisms and to induce cellular production of useful compounds. The course can be divided by three parts: (1) systematic analysis of complex metabolic pathways; (2) ways of employing recombinant DNA techniques to alter cell behavior, metabolic patterns and product formation; and (3)
practical applications of metabolic engineering (i.e., “cell factory”) in chemical, energy, medical and environmental fields. Credit 3 units.

E33 EECE 597 Special Topics: EECE Project Management
An introduction to the theory and practice of engineering project management, with an emphasis on projects related to environmental protection and occupational health and safety. Topics include: project definition and justification; project evaluation and selection; financial analysis and cost estimation; project planning, including scheduling, resourcing and budgeting; project oversight, auditing and reporting; and effective project closure. Students are introduced to commonly used project management tools and systems, such as work breakdown structures, network diagrams, Gant charts and project management software. Topics include: project management in different organizational structures and philosophies; creating effective project teams; and managing projects in international settings. Prerequisites: enrollment in masters of engineering program; senior or higher standing. Credit 3 units.

E33 EECE 598 Special Topics: Chemical Kinetics and Catalysis
This course reflects the fast, contemporary progress being made in decoding kinetic complexity of chemical reactions, in particular heterogeneous catalytic reactions. New approaches to understanding relationships between observed kinetic behavior and reaction mechanism are explained. Present theoretical and methodological knowledge is illustrated by many examples taken from heterogeneous catalysis (complete and partial oxidation), combustion and enzyme processes. Prerequisite: senior or graduate student standing. Credit 3 units.

Chemical Engineering
E63 ChE 146A Introduction to Energy, Environmental and Chemical Engineering
Key technical issues that face our society and some of the emerging technologies that hold promise for the future are examined and discussed. Relationship to chemical engineering principles is emphasized. Credit 3 units. EN : SU, TU

E63 ChE 240 Independent Work
Prerequisite: sophomore standing. Credit -9 unit.

E63 ChE 262 Introduction to Environmental Engineering
The objective of this course is to introduce students to the field of environmental engineering. The course emphasizes basic principles of mass and energy conservation that govern physical, chemical and biological processes. Applications include the estimation of contaminant concentrations and the design of environmental controls. Credit 3 units. EN : DU, SU, TU

E63 ChE 275 Modeling and Computing in Chemical Engineering

E63 ChE 320 Thermodynamics
Classical thermodynamics. First and second laws, properties of pure substances, mixtures, and solutions. Phase equilibria, chemical reaction equilibria. Prerequisites: Chem 111A, Math 132 and Physics 117A. Credit 3 units. EN : DU, SU, TU

E63 ChE 325 Materials Science
Chemistry and physics of engineering materials. Emphasis on atomic and molecular interpretation of physical and chemical properties, the relationships between physical and chemical properties, and performance of an engineering material. Prerequisite: Math 217, Chem 111A. Credit 3 units. EN : DU, SU, TU

E63 ChE 344 Air Pollution
Generation, transport and fate of gaseous and particulate air pollutants. Meteorology and its coupling to air quality. Photochemical smog formation, visibility impairment, pollutant dispersion modeling, and source apportionment. Prerequisite: ChE 443 or permission of instructor. Credit 3 units. EN : DU, SU, TU

E63 ChE 345 Pollution Abatement and Waste Minimization
E63 ChE 351 Engineering Analysis of Chemical Systems
Introduction to the use of mathematics and methods of engineering in analysis of chemical and physical processes. Use of conservation balances and basic rate laws to describe processes with and without chemical reaction in both transient and steady state conditions. Prerequisites: Chem 112A, Math 233. Corequisites: ChE 320, Math 217. Credit 3 units. EN : DU, SU, TU

E63 ChE 357 Mass Transfer Operations
Stagewise and continuous mass transfer operations, including distillation, gas absorption, humidification, leaching, liquid extraction and membrane separations. Prerequisites: Math 217, ChE 351 and ChE 320. Credit 3 units. EN : DU, SU, TU

E63 ChE 359 Molecular Transport Processes and Chemical Kinetics
Molecular motions, kinetic theory of gases, kinetic theory of dense phases, chemical kinetics. Prerequisite: ChE 320. Credit 3 units. EN : SU, TU

E63 ChE 367 Transport Phenomena I
Development of pointwise conservation equations for mass, momentum and energy. Application in analysis of physical processes where molecular transport mechanisms are dominant. Prerequisites: ChE 320, ChE 275, Math 217, ESE 317 or permission of instructor. Credit 3 units. EN : DU, SU, TU

E63 ChE 368 Transport Phenomena II
Introduction to the concept of boundary layers and transition to turbulence. Application of pointwise mass, momentum and energy conservation equations in physical processes where convective transport mechanisms play a dominant role. Prerequisite: ChE 366 or 367. Credit 3 units. EN : DU, SU, TU

E63 ChE 369 Energy Transfer Processes
Introductory treatment of the principles of heat transfer by conduction, convection or radiation. Mathematical analysis of steady and unsteady conduction along with numerical methods. Analytical and semi-empirical methods of forced and natural convection systems. Boiling and condensation heat transfer. Radiation between black-body and real surfaces. Radiation network analysis. Corequisite: ChE 368 or equivalent. Credit 3 units. EN : DU, SU, TU

E63 ChE 400 Independent Study
Credit 3 units. EN : DU, SU, TU

E63 ChE 408A Environmental Engineering Lab
Laboratory experiments to illustrate the application of engineering fundamentals to environmental systems. Applications of experimental design and data analysis principles. Introduction to relevant analytical instrumentation and laboratory techniques. Laboratory work supported by theoretical analysis and modeling as appropriate. Prerequisites: ChE 443 or equivalent and consent of instructor. Credit 3 units. EN : DU, SU, TU

E63 ChE 431 Control Systems I
Same as ESE 441
Credit 3 units. EN : DU, SU, TU

E63 ChE 433 Digital Process Control Laboratory
Applications of digital control principles to laboratory experiments supported by a networked distributed control system. Lecture material reviews background of real-time programming, data acquisition, process dynamics and process control. Exercises in data acquisition and feedback control design using simple and advanced control strategies. Experiments in flow, liquid level, temperature and pressure control. Term project. Prerequisite: ESE/MEMS 441 or ChE 462, or equivalent. Credit 3 units. EN : DU, SU, TU

E63 ChE 438 Environmental Risk Assessment and Toxicology
Essentials of human and ecological toxicology. Relationship between toxicology and risk assessment. Concepts of environmental exposures and their practical applications. Qualitative and quantitative evaluation of human and animal studies. Estimations of individual risk and aggregate risk. Risk assessment methodology in regulatory decision making. Application of risk assessment in environmental exposures and evaluation of hazardous waste site. Risk communication and remediation. Prerequisites: senior or graduate standing, or permission of the instructor. Credit 3 units. EN : DU, SU, TU

E63 ChE 443 Environmental Chemistry
Introduction to the chemistry of air, water and soil systems. Emphasis on the application of chemical equilibrium principles to quantitatively describe environmental systems. Chemical basis for processes occurring in the natural environment and industrial pollution control systems. Prerequisite: Chem 112A. Credit 3 units. EN : DU, SU, TU

E63 ChE 449 Sustainable Air Quality
Introduction to sustainability and sustainable air quality. Systems science as an organizing principle for air quality management. Setting of air quality goals. Observing the status and trends. Establishing causal factors: energy use and chemical processing. Natural sources and variability. Corrective actions to reach air quality goals. Process design for emission reductions. Adoptive response to air pollution episodes. A web-based class project is conducted through the semester. Credit 3 units. EN: DU, SU, TU

E63 ChE 450 New Product and Process Development
An overview of product development, innovative solutions to technical problems, designed experimentation, evaluation of abstract data, product design and the basics of intellectual property. Prerequisites: junior standing and Chem 251, ChE 320, or by permission of the instructor. Credit 3 units. EN: DU, SU, TU

E63 ChE 453 Bioprocess Engineering I: Fundamentals and Applications
The course covers the fundamentals and provides the basic knowledge needed to understand and analyze processes in biotechnology in order to design, develop and operate them efficiently and economically. This knowledge is applied to understand various applications and bioprocesses, such as formation of desirable biological and chemical materials and products, production of bioenergy, food processing and waste treatment. The main objective of the course is to introduce the essential concepts and applications of bioprocessing to students of diverse backgrounds. An additional project is required to obtain graduate credit. Prerequisite: Biol 2960 or equivalent or permission of instructor. Credit 3 units. EN: DU, SU, TU

E63 ChE 462 Chemical Process Dynamics and Control
A state-of-the-art industrial virtual plant is used for the development of dynamic simulations, selection of instrumentation, statistical analysis of variability, and implementation of process control to improve process operation and efficiency. Prerequisites: Math 217 and ChE 351. Credit 3 units. EN: DU, SU, TU

E63 ChE 471 Chemical Reaction Engineering
Introduction to chemical reaction engineering principles and applications in process and product development. Evaluation of reaction rates from mechanisms and experimental data, quantification of pertinent transport effects and application to reactor and product design. Prerequisites: ChE 320, 351, 359, 367. Credit 3 units. EN: DU, SU, TU

E63 ChE 473A Chemical Engineering Laboratory
Laboratory experiments designed to illustrate the principles of transport (heat, mass and momentum), thermodynamics, kinetics and reaction engineering, and separations that apply to chemical and biological systems. Experiments include traditional chemical engineering unit operations and emerging areas such as biotechnology, bioenergy and materials. One laboratory period and one workshop are alternating once a week. Lecture session(s) on process engineering components and process safety are scheduled every week. Prerequisites: ChE 357, 367. Corequisite: ChE 471. Credit 4 units. EN: SU, TU

E63 ChE 476 Engineering Properties of Materials
A detailed look at the chemical, catalytic, optical, electronic, magnetic and thermal properties of materials. Topics include the catalytic properties of metals and oxides; corrosion of metals; the interaction of light with solids; luminescence; photoconductivity; lasers; electrical conduction; semiconductors; piezoelectric and ferroelectric materials; and diamagnetism, paramagnetism and ferromagnetism. Prerequisite: ChE 325. Credit 3 units. EN: DU, SU, TU

E63 ChE 478A Process and Product Design
Application of engineering science and design; fundamentals of process and product development; computational techniques; and economic principles to design of chemical and biological processes and procedures. A design project and/or an AIChE national design contest is included. Prerequisites: ChE 320, 357, 367, 471, 473A. Credit 3 units. EN: DU, SU, TU

E63 ChE 478B Honors Design Project for AIChE Student Contest Problem
Application of engineering science and design, fundamentals of process and product development, computational techniques and economic principles to design of chemical and biological processes and procedures in solving the AIChE national student contest problem. Up to two single and up to two group (two to three per group) solutions may be chosen for national competition. Concurrent with ChE 478A. Prerequisites: ChE 320, 357, 367, 471, 473A. Credit 1 unit. EN: DU, SU, TU

E63 ChE 479 Chemical Process Safety
**E63 ChE 480 Principles of Surface and Colloid Science**  
Interfacial phenomena play key roles in such industrial operations as emulsification, catalysis and detergency. Introduction to principles of surface science. Particular attention to describing the nature of the liquid/gas, liquid/liquid, solid/liquid and solid/gas interfaces. Specific topics include methods of measuring surface tension, interfacial adsorption, surface area and particle size determinations, dispersion stabilization/flocculation, emulsification and wetting. Prerequisite: ChE 320 or permission of instructor.  
Credit 3 units.

**E63 ChE 4830 Bioenergy**  
A broad overview of the flow of energy, captured from sunlight during photosynthesis biological systems, and current approaches to utilize the metabolic potentials of microbes and plants to produce biofuels and other valuable chemical products. An overall emphasis is placed on the use of large-scale genomic, transcriptomic and metabolomic datasets in biochemistry. The topics covered include photosynthesis, central metabolism, structure and degradation of plant lignocellulose, and microbial production of liquid alcohol, biodiesel, hydrogen and other advanced fuels. Course meets during the second half of the spring semester. Prerequisite: Biol 4810 or permission of instructor.  
Same as Biol 4830  
Credit 2 units.  
A&S : NS  A&S : IQ, NSM

**E63 ChE 499 Senior Thesis**  
Research project to be selected by the student with the permission and recommendation of a faculty supervisor and the approval of the department chair. At conclusion of project, student prepares a report in the form of a senior thesis.  
Credit -6 unit.

**E63 ChE 500 Independent Study**  
Credit -9 unit.

**E63 ChE 508A Environmental Engineering Lab**  
Laboratory experiments to illustrate the application of engineering fundamentals to environmental systems. Applications of experimental design and data analysis principles. Introduction to relevant analytical instrumentation and laboratory techniques. Laboratory work supported by theoretical analysis and modeling as appropriate. Prerequisites: ChE 443 or equivalent and consent of instructor.  
Same as ChE 408A  
Credit 3 units.  
EN : DU, SU, TU

**E63 ChE 510A Dynamics of Air Pollution**  
Physicochemical processes governing the dynamics of pollutants from point and nonpoint sources: generation, transport and decay. Application of fundamental thermodynamics, mass/heat transfer and fluid mechanics principles to environmental systems. Prerequisites: ChE 320, ESE 317 and ChE 443 or equivalent, or permission of instructor.  
Credit 3 units.

**E63 ChE 512 Transport Effects in Chemical Reactors**  
Mixing effects and nonideal flows in reactors and their characterization. Description and quantification of mass and heat transfer interactions with chemical reactions in gas-liquid, gas-solid catalyzed reactions and gas-solid noncatalytic reactions. Introduction to transport effects on reactor stability and outline of basic approaches to reactor design for heterogeneous systems. Prerequisites: ChE 471, ChE 368 or equivalent.  
Credit 3 units.  
EN : DU, SU, TU

**E63 ChE 518 Aerosol Science and Technology**  
Fundamental properties of particulate systems-physics of aerosols, size distributions, mechanics and transport of particles: diffusion, inertia, external force fields. Visibility and light scattering. Aerosol dynamics-coagulation, nucleation, condensation. Applications to engineered systems: nanoparticle synthesis, atmospheric aerosols, combustion aerosols, pharmaceutical aerosols. Prerequisite: ChE 366/367 or MEMS 3410 or permission of instructor.  
Credit 3 units.  
EN : DU, SU, TU

**E63 ChE 523 Biological Treatment Processes**  
Fundamental concepts of biological processes that are relevant for wastewater treatment engineering applications. The course tackles the stoichiometry and kinetics of biochemical reactions and then use the obtained knowledge to evaluate and model wastewater treatment systems. Prerequisites: CE 352A and CE 584; or equivalent, or permission of instructor.  
Credit 3 units.  
EN : DU, SU, TU

**E63 ChE 525 Industrial and Environmental Catalysis**  
Major industrial and environmental catalytic processes. Principal theories of heterogeneous catalysis. Experimental methods and techniques used to develop modern catalytic systems. Examples from the petrochemical industry, automotive exhaust systems and industrial emissions abatement. Prerequisites: Chem 112A, 261.  
Credit 3 units.  
EN : DU, SU, TU

**E63 ChE 526 Topics in Nanotechnology**  
This course is focused on discussion of topics in Nanotechnology — with a focus on nanoparticles and their applications in a variety of fields — Materials Science,
Chemical Engineering, Mechanical Engineering, Environmental Engineering, Medicine.
Credit 3 units. EN : DU, SU, TU

**E63 ChE 542 Interdisciplinary Environmental Clinic**
This course constitutes the technical component of an interdisciplinary environmental clinic based at the Law School. Engineering and environmental studies students participate in interdisciplinary teams with law students, handling environmental projects for public interest, environmental or community organizations or individuals. Projects may involve the following activities: representing clients in state and local administrative proceedings; supporting litigation filed by non-clinic counsel; drafting proposed legislation; commenting on proposed regulations, permits, environmental impact statements or environmental assessments, and similar documents; and evaluating matters for potential future action. The goal is that for each project, students have primary responsibility for handling the matter, and faculty plays a secondary, supervisory role. Engineering and environmental studies students may provide such technical support as investigating unknown facts, evaluating facts presented by other parties (such as in government reports), and working with law students to develop and present facts relevant to an understanding of and resolution of the matter. Engineering and environmental studies students must work at least an average of 12 hours per week on clinic matters, including attendance at and participation each week in; at least one individual meeting with the professor; one group meeting involving the student team assigned to each project and the professor(s); and a two-hour seminar for all students in the clinic. (Engineering and environmental studies students are excused from, but are still welcome at, specified seminar sessions focusing primarily on legal issues.) Prerequisites: CE 262, or ChE 443, or EPSc 323 and permission of instructor.
Credit 3 units. EN : DU, SU, TU

**E63 ChE 549 Sustainable Air Quality**
Introduction to sustainability and sustainable air quality. Systems science as an organizing principle for air quality management. Setting of air quality goals. Observing the status and trends. Establishing causal factors: energy use and chemical processing. Natural sources and variability. Corrective actions to reach air quality goals. Process design for emission reductions. Adapative response to air pollution episodes. A web-based class project is conducted through the semester.
Same as ChE 449
Credit 3 units. EN : DU, SU, TU

**E63 ChE 558 Biological Transport**
The principles of mass, momentum and energy transport are applied to the analysis of selected processes of biomedical and biotechnological interest. Topics include dynamics of blood flow, oxygen and solute transport, steady and transient diffusion in reacting systems, pharmacokinetic analysis, and heat transfer. Prerequisites: ChE 366 or ChE 367 or MEMS 370.
Same as BME 558
Credit 3 units. EN : DU, SU, TU

**E63 ChE 563 Measurement Techniques for Particle Characterization**
The purpose of this course is to introduce students to the principles and techniques of particle measurement and characterization. Practical applications of particle technology include air pollution measurement, clean manufacturing of semiconductors, air filtration, indoor air quality, particulate emission from combustion sources and so on. The course focuses on (1) integral moment measurement techniques, (2) particle sizing and size distribution measuring techniques, and (3) particle composition measurement techniques. The related issues such as particle sampling and transportation, the instrument calibration, and particle standards also are covered.
Credit 3 units. EN : DU, SU, TU

**E63 ChE 569 Chemical Process Safety**
Same as ChE 479
Credit 3 units. EN : DU, SU, TU

**E63 ChE 592A Advanced Topics in Aerosol Science and Engineering**
This course focuses on discussion of advanced topics in aerosol science and engineering and its applications in a variety of fields — Materials Science, Chemical Engineering, Mechanical Engineering and Environmental Engineering. Prerequisite: ChE 518.
Credit 3 units. EN : DU, SU, TU

**E63 ChE 599 Masters Research**
Credit -9 unit.
## B.S. Ch.E. Requirements

### Table 1

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<tr>
<th>Physical Sciences</th>
<th>Units</th>
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<tr>
<td>General Chemistry (Chem 111A, 112A)</td>
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<td>General Chemistry Laboratory (Chem 151, 152)</td>
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<td>General Physics (Physics 117A or 197, 118A or 198)</td>
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<td>Organic Chemistry I (Chem 261)</td>
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<td>Engineering Mathematics (ESE 317)</td>
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<td>Probability and Statistics for Engineers (ESE 326)</td>
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<td>Modeling and Computing in Chemical Engineering (ChE 275)</td>
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<td>Introduction to Energy, Environmental and Chemical Engineering (ChE 146A)</td>
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<tr>
<td>Thermodynamics (ChE 320)</td>
<td>3</td>
</tr>
<tr>
<td>Materials Science (ChE 325)</td>
<td>3</td>
</tr>
<tr>
<td>Analysis of Chemical Engineering Systems (ChE 351)</td>
<td>3</td>
</tr>
<tr>
<td>Mass Transfer Operations (ChE 357)</td>
<td>3</td>
</tr>
<tr>
<td>Molecular Transport Processes and Chemical Kinetics (ChE 359)</td>
<td>3</td>
</tr>
<tr>
<td>Transport I, II (ChE 367, 368)</td>
<td>6</td>
</tr>
<tr>
<td>Heat Transfer (ChE 369)</td>
<td>3</td>
</tr>
<tr>
<td>Process Dynamics and Control (ChE 462)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Unit Subtotal</strong></td>
<td><strong>40</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Other</th>
<th>Units</th>
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<tbody>
<tr>
<td>Chemical Engineering electives (some of these courses can be taken outside the EECE department)</td>
<td>18</td>
</tr>
<tr>
<td>Engineering Ethics and Sustainability (ENGR 4501)</td>
<td>1</td>
</tr>
<tr>
<td>Engineering Leadership and Team Building (ENGR 4502)</td>
<td>1</td>
</tr>
<tr>
<td>Conflict Management and Problem Solving in Engineering (ENGR 4503)</td>
<td>1</td>
</tr>
<tr>
<td>Humanities and social science electives*</td>
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<tr>
<td>Technical Writing (Engr 310)</td>
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<tr>
<td><strong>Unit Subtotal</strong></td>
<td><strong>42</strong></td>
</tr>
</tbody>
</table>

*ENGR 4501, 4502 and 4503 can be counted toward the 18 credits of social sciences electives.

### Sample Ch.E. Curriculum

#### Table 2

<table>
<thead>
<tr>
<th>Units</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Physics I or Physics I (Physics 117A or Physics 197)</td>
<td>4</td>
<td>—</td>
</tr>
<tr>
<td>Introduction to Computing Tools: MATLAB Skills (CSE 100B)*</td>
<td>1</td>
<td>—</td>
</tr>
<tr>
<td>General Chemistry I, II (Chem 111A, 112A)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>General Chemistry Laboratory I, II (Chem 151, 152)</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Calculus II, III (Math 132, 233)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Energy, Environmental and Chemical Engineering (ChE 146A)</td>
<td>3</td>
<td>—</td>
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<tr>
<td>General Physics II or Physics II (Physics 118A or Physics 198)</td>
<td>—</td>
<td>4</td>
</tr>
<tr>
<td>Humanities/social sciences elective</td>
<td>—</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

| **Second Year** | | |
| Organic Chemistry I with Lab (Chem 261) | 4 | — |
## Engineering Analysis of Chemical Systems (ChE 351)
- **3**

## Thermodynamics (ChE 320)
- **3**

## Humanities/social sciences elective
- **3**

## Differential Equations (Math 217)
- **4**

## Principles of Biology I (Biol 2960)
- **4**

## Engineering Mathematics (ESE 317)
- **4**

## Probability and Statistics for Engineering (ESE 326)
- **3**

## Molecular Transport Processes and Chemical Kinetics (ChE 359)
- **3**

## Modeling and Computing in Chemical Engineering (ChE 275)
- **3**

### Third Year

**Transport Phenomena I, II (ChE 367, 368)**
- **3**

**ChE elective**
- **3**

**Materials Science (ChE 325)**
- **3**

**Humanities/social sciences electives**
- **3**

**Mass Transfer Operations (ChE 357)**
- **3**

**Technical Writing (ENGR 310)**
- **3**

### Fourth Year

**Humanities/social sciences electives**
- **3**

**ChE electives**
- **3**

**Chemical Engineering Laboratory (ChE 473A)**
- **4**

**Chemical Reaction Engineering (ChE 471)**
- **3**

**Chemical Process Dynamics and Control (ChE 462)**
- **3**

**Process and Product Design (ChE 478A)**
- **3**

**Energy Transfer Processes (ChE 369)**
- **3**

### Total Hours

- **17**
- **17**

- **12**
- **18**

- **16**
- **15**

*Recommended but not required.

**ENGR 4501, 4502 and 4503 should be taken in the third year.*
Mechanical Engineering & Materials Science

The Department of Mechanical Engineering and Materials Science (MEMS) offers the Bachelor of Science degree in Mechanical Engineering (B.S.M.E.). In addition, minors in aerospace, robotics, mechatronics and energy engineering, and in related scientific and engineering fields, are available to students. The MEMS curriculum emphasizes the core principles of mechanics (the study of forces, materials and motion) that underlie mechanical engineering. The common curriculum during the student’s early academic development encourages breadth of understanding, interdisciplinary thinking and creativity. Undergraduates in MEMS learn to analyze, model, design and build a variety of mechanical systems such as automobile components, wind turbines and medical devices. Freshman, sophomore and early junior years are focused on learning fundamental concepts in statics, dynamics, fluid mechanics and thermodynamics. In the junior and senior years, students choose electives that emphasize their specific interests and prepare them for a particular professional or academic career. The undergraduate curriculum for the B.S.M.E. degree provides Mechanical Engineering and Materials Science students with a strong base in fundamental mathematics, science and engineering; exposes the students to diverse applications of mechanics and materials; and provides the flexibility to explore creative ideas through undergraduate research and project-based courses.

Mechanical engineering is critical in a variety of important emerging technologies. Mechanical engineers design and develop artificial organs, prosthetic limbs, robotic devices, adaptive materials, efficient propulsion mechanisms, high-performance aerospace structures and advanced renewable energy systems. The core concepts of mechanics, thermal systems and materials science are at the heart of these technologies.

Mission Statement

The Mechanical Engineering and Materials Science faculty is committed to providing the best possible undergraduate mechanical engineering education. The faculty strives to nurture the intellectual, professional and personal development of the students, to continually improve the curriculum, to remain current in their professional field and to maintain state-of-the-art facilities. The overarching goal is to prepare students for professional practice with a solid, scientifically grounded foundation in the major stems of mechanical engineering: mechanics, design, dynamics, control, fluid mechanics, thermal science and materials science.

Bachelor of Science Degree in Mechanical Engineering

The mission of the undergraduate program in mechanical engineering is to prepare students within the broad and evolving field of mechanical engineering. The program instills in students a capacity for creative design through critical and analytical thought. The B.S.M.E. is the first step toward a career in industry, academia or government; it encourages a commitment to independent, lifelong learning and professional development. In addition to their technical studies, students learn to communicate their ideas clearly and to conduct themselves in an ethical and socially responsible manner.

The curriculum is a four-year program leading to the first professional degree, Bachelor of Science in Mechanical Engineering, which is accredited by the Accreditation Board for Engineering and Technology (ABET). The curriculum prepares the student for professional practice or postgraduate education in a broad spectrum of mechanical and other engineering or professional fields. The curriculum provides critical knowledge in solid mechanics, fluid mechanics, thermodynamics and heat transfer, materials science, dynamics and control, and design. The curriculum is structured around a technical core of 102 units and 18 units of social science and humanities for a total degree requirement of 120 units. Core courses must be taken for credit (grade). The social science and humanities courses may be taken Pass/Fail.

The undergraduate program provides the necessary foundations in these areas, and the opportunity to specialize in topics of particular interest. Specialization is accomplished by judicious choice of engineering electives taken in 300-, 400- or 500-level courses approved by your adviser. At the end of the four-year program, the student is ready to go on to graduate education, research or professional practice.

Program Objectives

The faculty of our department aspire to make positive, substantive and lasting contributions to the lives of our students. This intent is embodied in the following program educational objectives:

- Graduates will be leaders in their field either as designers, analysts, managers, educators or researchers.
- Graduates will effectively use technical competencies gained at Washington University including the ability to analyze and solve mechanical engineering problems by applying basic principles of mathematics, science and engineering sciences. They will use modern engineering techniques. They will identify, formulate and find innovative solutions to problems of significance to society.
- Graduates will behave professionally, act ethically and be responsive to global, societal and environmental needs. They will constantly seek to keep their knowledge current and will
effectively communicate their knowledge and experience. They will be active in their professional communities and will collaborate with others.

**Bachelor of Science in Applied Science (Mechanical Engineering)**

The Bachelor of Science in Applied Science (Mechanical Engineering) degree program will offer a degree path for students to gain technical knowledge in mechanical engineering with more course selection flexibility. Students who do not desire to become licensed engineers but seek to acquire analytical engineering thinking skills may choose to pursue this program. The added degree flexibility will allow these students to pursue additional second majors and/or minors and increase their ability to participate in programs such as study abroad.

**Premedical Option**

Research and practice in the biological and medical sciences increasingly involves advanced technology, including mechanical engineering. For those interested in a career in medicine, the premedical option in Mechanical Engineering and Materials Science makes it possible to obtain an accredited Bachelor of Science and simultaneously meet the admission requirements of most medical and dental schools. The program also provides a foundation for graduate study and research in biomedical engineering.

The essential requirements of the premedical option are three semesters of general biology (Biol 2960, 2970 and 3050), two semesters of general chemistry with a laboratory and two semesters of organic chemistry with a laboratory (Chem 261, 262). One semester of organic chemistry may be counted as an upper-level MEMS elective; the student must take 6 units of other upper-level mechanical engineering electives to complete the 9-unit requirement. The premedical option is easier for those who have a high school background in biology or, by reason of advanced placement, have reduced requirements in the Common Studies portion of the curriculum.

For additional information on the premedical option, please refer to the premedical education section located in the introduction to the School of Engineering & Applied Science’s Undergraduate Programs (p. 751).

**Graduate Programs**

The department offers programs for graduate study at both the master's and doctoral levels. All programs are designed to direct advanced study into an area of specialization and original research that includes recent scientific and technological advances.

A graduate degree can provide significant advantages and rewards to a mechanical engineer, including increased income and a wider range of career options. Graduate programs include professional, course-option master’s degrees (M.S. and M.Eng.) and research-based master’s (M.S.) or doctoral (Ph.D.) degrees. The undergraduate curriculum provides an excellent foundation for graduate study, and a careful selection of electives in the third and fourth years can facilitate the transition to graduate work. The master’s degrees can be pursued on a part-time or full-time basis, while Ph.D. degrees are typically pursued by full-time students.

**Chair**

**Philip V. Bayly**

Lilyan and E. Lisle Hughes Professor of Mechanical Engineering

PhD, Duke University

Nonlinear dynamics, vibrations, biomechanics

**Associate Chair**

**Kenneth L. Jerina**

Earl E. and Myrtle E. Walker Professor of Engineering

DSc, Washington University

Materials, design, solid mechanics, fatigue and fracture

**Endowed Professors**

**Ramesh K. Agarwal**

William Palm Professor of Engineering

PhD, Stanford University

Computational fluid dynamics and computational physics

**Thomas G. Harmon**

Clifford W. Murphy Professor

PhD, Massachusetts Institute of Technology

Reinforced and prestressed concrete, structural design, fiber reinforced polymers

**Mark J. Jakiela**

Lee Hunter Professor of Mechanical Design

PhD, University of Michigan

Mechanical design, design for manufacturing, optimization, evolutionary computation

**David A. Peters**

McDonnell Douglas Professor of Engineering

PhD, Stanford University

Aeroelasticity, vibrations, helicopter dynamics

**Shankar M. L. Sastry**

Catherine M. and Christopher I. Byrnes Professor of Engineering

PhD, University of Toronto

Materials science, physical metallurgy

**Associate Professor**

**Guy M. Genin**

PhD, Harvard University
Engineering

Solid mechanics, fracture mechanics

Assistant Professors

Parag Banerjee
PhD, University of Maryland

Srikanth Singamaneni
PhD, Georgia Institute of Technology
Microstructures of cross-linked polymers

Professors of the Practice

Harold J. Brandon
DSc, Washington University
Energetics, thermal systems

Frederick Roos
PhD, University of Michigan
Aerodynamics, fluid mechanics

Joint Faculty — Professors

Richard L. Axelbaum (EECE)
PhD, University of California–Davis
Combustion, nanomaterials

Kenneth Kelton (Physics)
Arthur Holly Compton Professor of Arts and Sciences
PhD, Harvard University
Study and production of titanium-based quasicrystals and related phases

Hiro Mukai (ESE)
PhD, University of California–Berkeley
Optimization, control

Larry A. Taber (BME)
Dennis and Barbara Kessler Professor of Biomedical Engineering
PhD, Stanford University
Biomechanics, mechanics of development

Joint Faculty — Senior Research Associate

Ruth Okamoto
DSc, Washington University
Biomechanics, solid mechanics

Joint Faculty — Adjunct Professors

Ricardo L. Actis
DSc, Washington University
Finite element analysis, numerical simulation, aircraft structures

Xavier Avula
PhD, Iowa State University
Design, micro-electrical-mechanical systems

Warren Bergquist
MS, Washington University
Structural Design

Thomas L. Bever
BS, Washington University
Design, mechanical systems

Andrew Cary
PhD, University of Michigan
Computational fluid dynamics

Jerry Craig
MS, Kansas State University
Engineering graphics

Richard Dyer
PhD, Washington University
Propulsion, thermodynamics, fluids

Hanford Gross
BS, Washington University
Engineering project management

Raimo J. Hakkinen
PhD, California Institute of Technology
Aerodynamics, experimental methods in fluid dynamics

D.C. Look
PhD, University of Oklahoma
Thermodynamics

Gholam Masoumy
DSc, Washington University
Structural design

Ernst H. Petzold III
MS, Washington University
Structural engineering

Dale M. Pitt
DSc, Washington University
Aeroelasticity

Gary D. Renieri
PhD, Virginia Polytechnic Institute and State University
Structural applications, composite materials

Karl A. Spuhl
MS, Saint Louis University
Control systems

Hiroshi Tada
PhD, Lehigh University
Solid mechanics

Michael Wendl
DSc, Washington University
Mathematical theory and computational methods in biology, and engineering
Joint Faculty — Senior Professors

Phillip L. Gould
PhD, Northwestern University
Structural analysis and design, shell analysis and design, biomedical engineering

Salvatore P. Sutera
PhD, California Institute of Technology
Viscous flow, bioreheology

Barna A. Szabo
PhD, State University of New York–Buffalo
Numerical simulation of mechanical systems, finite-element methods

Professors Emeriti

Wallace B. Diboll Jr.
MSME, Rensselaer Polytechnic Institute
Dynamics, vibrations, engineering design

Paul C. Paris
PhD, Lehigh University
Classical mechanics, solid mechanics, dynamics, fracture mechanics, stochastic processes

Joint Faculty — Lecturer

Shaun Sellers
PhD, Johns Hopkins University
Mechanics and materials

Bachelor of Science in Mechanical Engineering

The Department of Mechanical Engineering and Materials Science offers a four-year curriculum leading to a professional baccalaureate degree, a Bachelor of Science in Mechanical Engineering (B.S.-M.E.). This degree is designed to prepare students for graduate school, a professional graduate program or industry; the program meets nationally recognized criteria for accreditation. The B.S.-M.E. curriculum is structured around a basic core of 58 units and a complementary mechanical engineering program of at least 62 units to complete the degree requirement of a total of 120 units.

Basic Core Courses

Humanities, Social Science and Writing Units

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>Engr 4501</td>
<td>Engineering Ethics and Sustainability</td>
<td>1</td>
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<tr>
<td>Engr 4502</td>
<td>Engineering Leadership and Team Building</td>
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</tr>
<tr>
<td>Engr 4503</td>
<td>Conflict Management and Problem Solving in Engineering</td>
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Engr 310    Technical Writing                3
Unit Subtotal 21

Mathematics and Computation

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<th>Course Code</th>
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<tbody>
<tr>
<td>Math 132</td>
<td>Calculus II</td>
<td>6</td>
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<tr>
<td>&amp; Math 233</td>
<td>and Calculus III</td>
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<tr>
<td>Math 217</td>
<td>Differential Equations</td>
<td>4</td>
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<tr>
<td>ESE 317</td>
<td>Engineering Mathematics</td>
<td>4</td>
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<td>ESE 326</td>
<td>Probability and Statistics for Engineering</td>
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<tr>
<td>CSE 200</td>
<td>Engineering and Scientific Computing</td>
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Advanced Mathematics 2
Unit Subtotal 22

Physical Sciences

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<tbody>
<tr>
<td>Chem 111A</td>
<td>General Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>Chem 151</td>
<td>General Chemistry Laboratory I</td>
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<tr>
<td>Physics 117A</td>
<td>General Physics I</td>
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<tr>
<td>or Physics 197</td>
<td>Physics I</td>
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</tr>
<tr>
<td>Physics 118A</td>
<td>General Physics II</td>
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<tr>
<td>or Physics 198</td>
<td>Physics II</td>
<td></td>
</tr>
<tr>
<td>Physical or Life Science (Biol, EPSc, EnSt, Physics, Chem)</td>
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Unit Subtotal 16

Mechanical Engineering Courses

<table>
<thead>
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<th>Course Code</th>
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<tbody>
<tr>
<td>MEMS 202</td>
<td>Computer-Aided Design</td>
<td>3</td>
</tr>
<tr>
<td>MEMS 253</td>
<td>Engineering Mechanics I</td>
<td>3</td>
</tr>
<tr>
<td>MEMS 255</td>
<td>Engineering Mechanics II</td>
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<tr>
<td>MEMS 301</td>
<td>Thermodynamics</td>
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<tr>
<td>MEMS 311</td>
<td>Machine Elements</td>
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<tr>
<td>MEMS 350</td>
<td>Engineering Mechanics III</td>
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<td>MEMS 361</td>
<td>Materials Science</td>
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<td>MEMS 3410</td>
<td>Fluid Mechanics</td>
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<td>MEMS 3411</td>
<td>Fluid Mechanics Laboratory</td>
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<tr>
<td>MEMS 342</td>
<td>Heat Transfer</td>
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<tr>
<td>MEMS 431</td>
<td>Structural Dynamics and Vibrations</td>
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<tr>
<td>ESE 230</td>
<td>Introduction to Electrical and Electronic Circuits</td>
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<tr>
<td>MEMS 411</td>
<td>Mechanical Engineering Design Project</td>
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<tr>
<td>MEMS 412</td>
<td>Design of Thermal Systems</td>
<td>3</td>
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<tr>
<td>MEMS 4301</td>
<td>Modeling, Simulation and Control</td>
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MEMS electives 9
Free electives 5
Unit Subtotal 62

Selected MEMS Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>MEMS 4101</td>
<td>Manufacturing Processes</td>
<td>3</td>
</tr>
<tr>
<td>MEMS 5101</td>
<td>Analysis and Design of Fluid-Power Systems</td>
<td>3</td>
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</table>

Unit Subtotal 62
### Bachelor of Science in Applied Science (Mechanical Engineering)

The Bachelor of Science in Applied Science (Mechanical Engineering) program provides substantive and consistent training in mechanical engineering with maximum flexibility. This program is advantageous if you wish to pursue a more flexible program than the accredited BSME degree program. It is especially suitable for a double major in combination with mathematics, physics, chemistry, biology, economics, or another engineering discipline. The program can be planned to provide a background for graduate work in biological, medical, or management fields. The BS in Applied Science is a non-professional degree and is not accredited by the Accreditation Board for Engineering and Technology (ABET). The degree requirements include the residency and general requirements of the University and the School.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEMS 5301</td>
<td>Nonlinear Vibrations</td>
<td>3</td>
</tr>
<tr>
<td>MEMS 5302</td>
<td>Theory of Vibrations</td>
<td>3</td>
</tr>
<tr>
<td>MEMS 5401</td>
<td>General Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>MEMS 5402</td>
<td>Radiation Heat Transfer</td>
<td>3</td>
</tr>
<tr>
<td>MEMS 5403</td>
<td>Conduction and Convection Heat Transfer</td>
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<tr>
<td>MEMS 5404</td>
<td>Combustion Phenomena</td>
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<tr>
<td>MEMS 5411</td>
<td>Fluid Dynamics II</td>
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<td>MEMS 5412</td>
<td>Computational Fluid Dynamics</td>
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<tr>
<td>MEMS 5420</td>
<td>HVAC Analysis and Design I</td>
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</tr>
<tr>
<td>MEMS 5421</td>
<td>HVAC Analysis and Design II</td>
<td>3</td>
</tr>
<tr>
<td>MEMS 5422</td>
<td>Solar Energy Thermal Processes</td>
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<tr>
<td>MEMS 5500</td>
<td>Elasticity</td>
<td>3</td>
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<tr>
<td>MEMS 5501</td>
<td>Mechanics of Continua</td>
<td>3</td>
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<tr>
<td>MEMS 5503</td>
<td>Structural Stability</td>
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<tr>
<td>MEMS 5504</td>
<td>Fracture Mechanics</td>
<td>3</td>
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<tr>
<td>MEMS 5510</td>
<td>Finite Element Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MEMS 5601</td>
<td>Mechanical Behavior of Materials</td>
<td>3</td>
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<tr>
<td>MEMS 5602</td>
<td>Non-metallics</td>
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<tr>
<td>MEMS 5603</td>
<td>Materials Characterization Techniques I</td>
<td>3</td>
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<tr>
<td>MEMS 5700</td>
<td>Aerodynamics</td>
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<tr>
<td>MEMS 5701</td>
<td>Aerospace Propulsion</td>
<td>3</td>
</tr>
<tr>
<td>MEMS 5703</td>
<td>Analysis of Rotary-Wing Systems</td>
<td>3</td>
</tr>
<tr>
<td>MEMS 5705</td>
<td>Wind Energy Systems</td>
<td>3</td>
</tr>
<tr>
<td>MEMS 5801</td>
<td>Micro-Electro-Mechanical Systems I</td>
<td>3</td>
</tr>
<tr>
<td>MEMS 5802</td>
<td>Micro-Electro-Mechanical Systems II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Free Electives:**
- MEMS 1001 Machine Shop Practicum 1
- MEMS 1003 Mechanical Engineering Design and Build 1
- MEMS 101 Introduction to Mechanical Engineering and Mechanical Design 3

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### The Minor in Aerospace Engineering

Whether you are intent on a career in aviation, or simply enthusiastic about space and flight, a minor in aerospace engineering can satisfy your scientific curiosity, prepare you for a job or uncover opportunities for technical contributions. The Minor in Aerospace Engineering is available to all undergraduates but is most attractive to those pursuing a degree in mechanical engineering. The Minor in Aerospace Engineering requires a minimum of 15 units of courses selected from the list below; it is possible to earn the minor without increasing the number of units (120) required for the B.S.M.E.

Aerospace engineering deals with the analysis, design and performance of flight vehicles such as transport and military aircraft, helicopters, missiles and launch vehicles, and spacecraft such as NASA’s Space Shuttle. Students learn about aerospace engineering by taking courses in aerodynamics, aerospace structures and propulsion, and spacecraft. Students also may have the opportunity to gain experience in aerospace engineering design through collaborative programs with local companies such as Boeing. Aerospace engineers from industry teach courses as adjunct instructors at Washington University, and many Washington University regular faculty members have extensive aerospace industry experience.

**Units required:** 15

**Required courses:**
- MEMS 4302 Aircraft Flight Dynamics and Control 3
- MEMS 5700 Aerodynamics 3
MEMS 5701  Aerospace Propulsion  3
MEMS 5704  Aircraft Structures  3

Select one of the following electives:
MEMS 5302  Theory of Vibrations  3
MEMS 5410  Fluid Dynamics I  3
MEMS 5411  Fluid Dynamics II  3
MEMS 5510  Finite Element Analysis  3
MEMS 5703  Analysis of Rotary-Wing Systems  3

To find out more about this minor, contact the department chair or the adviser for the Minor in Aerospace Engineering or visit the minor web page.

The Minor in Energy Engineering
This minor will provide students with course work that will enhance their background, knowledge and skills in the topical area of Energy Engineering. The minor covers classes in several fields of science and engineering, encompassing the Department of Energy, Environmental and Chemical Engineering, the Department of Electrical & Systems Engineering and the Department of Mechanical Engineering & Materials Science. A minor in Energy Engineering requires the completion of 18 units. It is open to undergraduate students pursuing an engineering major, students from the sciences (Biology, Chemistry, Physics) in Arts & Sciences, and students pursuing the Environmental Studies major. The detailed requirements for the minor can be found on the Energy, Environmental and Chemical Engineering Minors (p. 826) page. Questions regarding the minor should be directed to a member of the committee for the Energy Engineering Minor: Professor Pratim Biswas (EECE), Professor Hiro Mukai (ESE) or Professor David Peters (MEMS).

The Minor in Environmental Engineering Science
The Minor in Environmental Engineering Science may be earned by students receiving any of the Bachelor of Science degrees offered by the School of Engineering & Applied Science or the Environmental Studies degree or the Earth and Planetary Sciences degree offered by the College of Arts & Sciences. The 21–22 unit program prepares you to seek an entry-level position as an environmental engineer, scientist or analyst. The minor also provides a solid foundation for undertaking graduate study in environmental engineering. The detailed requirements for the minor can be found on the Energy, Environmental and Chemical Engineering Minors (p. 826) page. Questions regarding the minor should be directed to a member of the committee for the Energy Engineering Minor: Professor Pratim Biswas (EECE) or Professor Jay Turner (EECE).

The Minor in Robotics
Robotic systems have wide application in modern technology and manufacturing. Robots can vary in complexity and use, from microrobots for surgical procedures to moderate-size robots common in manufacturing and undersea exploration to macrorobots used for disposal of nuclear wastes or deployed as arms on space-station modules. The program designed for a Minor in Robotics provides a fundamental understanding of robotic operation and preliminary training in design and use of robots.

Units required: 18
Prerequisites:
- Math 217  Differential Equations  4
- Physics 117A  General Physics I  4
- Physics 118A  General Physics II  4
- CSE 131  Computer Science I  3
- CSE 200  Engineering and Scientific Computing  3

Required courses:
- MEMS 255  Engineering Mechanics II  3
- ESE 351  Signals and Systems  3
or MEMS 431  Structural Dynamics and Vibrations
- ESE 446  Robotics: Dynamics and Control  3
- ESE 447  Robotics Laboratory  3

Two courses chosen with the approval of the director of the program for a minor in robotics. Suggested courses are:
- CSE 452A  Computer Graphics  3
- CSE 546T  Computational Geometry  3
- MEMS 311  Machine Elements  4
- MEMS 411  Mechanical Engineering Design Project  3
or MEMS 4301  Modeling, Simulation and Control
or MEMS 4302  Aircraft Flight Dynamics and Control
- ESE 407  Analysis and Simulation of Discrete Event Systems  3
- ESE 435  Electrical Energy Laboratory  3

To find out more about this minor, contact the department chair or the adviser for the Minor in Robotics or visit the minor web page.

The Minor in Mechatronics
Advancements in power electronics, electronic sensors and computer hardware and software have led to an expanding role for “smart” systems, which combine electronic and mechanical components. Automotive examples illustrate this point. The replacement of carburetors by fuel injection systems is almost universal, and hybrid/electric cars are replacing traditional automobiles. Not only are auxiliary devices such as fuel pumps, air bags and air-conditioner compressors driven by electric motors controlled by microprocessors, but fundamental components such as intake and outtake valves soon will be driven in this way. The internal combustion engine itself may
be replaced by fuel cells and motors. Medical devices, micro-electromechanical systems, robots, fly-by-wire aircraft and wind turbines also all rely on electronic sensing of mechanical parameters and actuation of motion. These examples suggest strongly that engineers who are adept in the design, analysis and simulation of electromechanical systems will be in demand. The Minor in Mechatronics is created to encourage our students to study this important subject and provide recognition to those who do so.

The proposed minor program consists of four required courses, two electives and one prerequisite:

**Four required courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>MEMS 255</td>
<td>Engineering Mechanics II</td>
<td>3</td>
</tr>
<tr>
<td>MEMS 411</td>
<td>Mechanical Engineering Design Project</td>
<td>3</td>
</tr>
<tr>
<td>ESE 444</td>
<td>Sensors and Actuators</td>
<td>3</td>
</tr>
<tr>
<td>ESE 446</td>
<td>Robotics: Dynamics and Control</td>
<td>3</td>
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</table>

**Two electives from the following:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>MEMS 431</td>
<td>Structural Dynamics and Vibrations</td>
<td>4</td>
</tr>
<tr>
<td>MEMS 5101</td>
<td>Analysis and Design of Fluid-Power Systems</td>
<td>3</td>
</tr>
<tr>
<td>MEMS 4301</td>
<td>Modeling, Simulation and Control</td>
<td>3</td>
</tr>
<tr>
<td>or MEMS 4302</td>
<td>Aircraft Flight Dynamics and Control</td>
<td></td>
</tr>
<tr>
<td>or MEMS 411</td>
<td>Mechanical Engineering Design Project</td>
<td></td>
</tr>
<tr>
<td>ESE 336</td>
<td>Principles of Electronic Devices</td>
<td>3</td>
</tr>
<tr>
<td>ESE 442</td>
<td>Digital Control Systems</td>
<td>3</td>
</tr>
<tr>
<td>ESE 482</td>
<td>Digital Signal Processing</td>
<td>3</td>
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<tr>
<td>CSE 467S</td>
<td>Embedded Computing Systems</td>
<td>3</td>
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<tr>
<td>CSE 550A</td>
<td>Mobile Robotics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Prerequisite:**

Basic programming course: CSE 131 Computer Science I or CSE 200 Engineering and Scientific Computing.

To find out more about this minor, contact the department chair or the adviser for the Minor in Mechatronics or visit the minor web page.

**The Minor in Mechanical Engineering**

The Minor in Mechanical Engineering complements studies in a field related to mechanical engineering, such as biomedical engineering, electrical engineering, physics, chemistry or architecture. The minor is intended to provide students with a credential that could enhance their opportunities for employment or graduate study. Completion of the minor demonstrates that the student has pursued a structured program approved by the faculty of the Department of Mechanical Engineering and Materials Science.

Students pursuing the Minor in Mechanical Engineering must complete a total of 18 units of course work as described below. Courses selected for the minor program may count toward program requirements of the student’s major. The subjects selected for a Minor in Mechanical Engineering are expected to constitute a coherent program within the field of mechanical engineering. Courses taken under the pass/fail grading option cannot be used for a minor program.

**Required courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>MEMS 253</td>
<td>Engineering Mechanics I</td>
<td>3</td>
</tr>
<tr>
<td>or BME 240</td>
<td>Biomechanics</td>
<td></td>
</tr>
<tr>
<td>or MEMS 255</td>
<td>Engineering Mechanics II</td>
<td></td>
</tr>
<tr>
<td>or Physics 411</td>
<td>Mechanics</td>
<td></td>
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<tr>
<td>MEMS 350</td>
<td>Engineering Mechanics III</td>
<td>3</td>
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</table>

**Three electives from the following:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>MEMS 301</td>
<td>Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>or ChE 320</td>
<td>Thermodynamics</td>
<td></td>
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<tr>
<td>or BME 320B</td>
<td>Bioengineering Thermodynamics</td>
<td></td>
</tr>
<tr>
<td>MEMS 311</td>
<td>Machine Elements</td>
<td>4</td>
</tr>
<tr>
<td>MEMS 3410</td>
<td>Fluid Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>MEMS 361</td>
<td>Materials Science</td>
<td>4</td>
</tr>
<tr>
<td>MEMS 431</td>
<td>Structural Dynamics and Vibrations</td>
<td>4</td>
</tr>
</tbody>
</table>

To find out more about this minor, contact the department chair or the adviser for the Minor in Mechanical Engineering or visit the minor web page.

**Mechanical, Aerospace and Structural Engineering**

**E37 MEMS 1001 Machine Shop Practicum**

Operation of basic machine tools including: lathe, drill press, grinder and mill. Student shop privilege requires completion of this practicum.

Credit 1 unit. EN : DU, TU

**E37 MEMS 1003 Mechanical Engineering Design and Build**

The course provides an introduction to design and fabrication. Students formulate designs, build prototypes and compete in engineering exploration-based creative design projects. Emphasis is placed on producing working hardware and prototypes in response to design needs. Specialized learning modules focus on the knowledge required to complete projects, such as introductory topics in shop skills, machine elements, electronics, design, visualization and communication. Enrollment limited to engineering freshmen. CBTL course.

Credit 1 unit.

**E37 MEMS 101 Introduction to Mechanical Engineering and Mechanical Design**
A comprehensive introduction to mechanical engineering in the context of engineering design. In the first half of the course students complete a series of design-and-build experiments. Each of these focuses on a subtopic of mechanical engineering that is covered in more depth in later courses. These subtopics include statics, vibrations, energy and power, fluid mechanics, material behavior, and fabrication and manufacturing. In the second half of the course, students participate in a design contest in which they design and build a machine to address a design challenge. The course is strongly recommended for mechanical engineering majors. Students from other disciplines are welcome and encouraged to enroll.
Credit 3 units. EN: DU, SU, TU

E37 MEMS 102 Computer Aided Design - SketchUp
SketchUp 3D modeling software is widely used in diverse fields like Architecture, Engineering, Product Design, Theatre Production, Accident and Crime reconstruction. SketchUp allows fast three-dimensional modeling of design concepts, ground contours, animations, with lighting, shades and shadows, colors and textures. The course includes introduction, modeling shapes, modeling complex shapes, adding colors and textures, using library parts, animation, 2D dimensioned drawings and rendering 3D models. A SketchUp project allows students to work on designs in their field of interest.
Credit 1 unit. EN: SU, TU

E37 MEMS 103 Computer Aided Design - AutoCAD
AutoCAD is the most used two-dimensional drawing software for Architectural and Engineering production drawings. Introduction to AutoCAD, title blocks, drawing setup, absolute and relative coordinates, drawing entities, layouts, drafting geometry, dimensioning, plotting drawings to scale, sectional and other special views, isometric pictorial views. Classwork involves typical drawings from industry.
Credit 1 unit. EN: SU, TU

E37 MEMS 202 Computer-Aided Design
An introduction to computer-aided engineering design in the context of mechanical and structural engineering. Students learn the fundamentals of spatial reasoning and graphical representation. Freehand sketching skills, including pictorial and orthographic views, are applied to the design process. Computer modeling techniques provide accuracy, analysis and visualization tools necessary for the design of structures, devices and machines. Topics include: detailing design for production; fasteners; dimensioning; tolerancing; creation of part and assembly drawings; computer-aided design, analysis and optimization of parts and assemblies; solid modeling of complex surfaces; assembly modeling; assembly constraints; and interference checking.
Credit 3 units. EN: DU, SU, TU

E37 MEMS 203 Advanced CAD
Computer-aided design, analysis and optimization of parts and assemblies; solid modeling of complex surfaces, creation of detail drawings, dimensioning and tolerancing; assembly modeling, assembly constraints, interference checking; motion constraints, force and acceleration analysis, thermal analysis; part optimization for weight, strength and thermal characteristics using Unigraphics software. MEMS 203 is an extension of the basic course, MEMS 202.
Credit 3 units. EN: DU, SU, TU

E37 MEMS 253 Engineering Mechanics I
Credit 3 units. EN: DU, SU, TU

E37 MEMS 255 Engineering Mechanics II
Credit 3 units. EN: DU, SU, TU

E37 MEMS 301 Thermodynamics
Topics include: classical thermodynamics, thermodynamic properties, work and heat, first and second laws, entropy, irreversibility, availability, thermodynamic cycle analysis, mixtures of ideal gases, combustion processes and chemical equilibrium. Applications to engineering systems are discussed. Prerequisites: Chem 111A, Math 132, Physics 117A.
Credit 3 units. EN: DU, SU, TU

E37 MEMS 311 Machine Elements
Overview of the steps in the engineering design process and an introduction to several classes of machine elements such as bearings, gears, belts, brakes and springs. Underlying analytical models of the machine elements are presented along with guidelines about designing and choosing such elements for practical applications. A case study of the steps of the design process as well as the rationale for choosing particular machine elements. Prerequisites: MEMS 251 or 253, MEMS 361.
Credit 4 units. EN: DU, SU, TU

E37 MEMS 3410 Fluid Mechanics
Fundamental concepts of fluids as continua. Topics include: viscosity, flow fields, velocity, vorticity, streamlines, fluid statics,
hydrostatic forces, manometers, conservation of mass and momentum, incompressible inviscid flow, dimensional analysis and similitude, flow in pipes and ducts, flow measurement, boundary-layer concepts, flow in open channels. CBTL course. Prerequisites: ESE 317, MEMS 255. Credit 3 units. EN: DU, SU, TU

E37 MEMS 3411 Fluid Mechanics Laboratory
Physical laboratory exercises focusing on fluid properties and flow phenomena covered in MEMS 3410. Calibration and use of a variety of equipment; acquisition, processing and analysis of data by manual as well as automated methods; training in formal report writing. Prerequisite: MEMS 3410. Credit 1 unit. EN: DU, SU, TU

E37 MEMS 342 Heat Transfer
Introductory treatment of the principles of heat transfer by conduction, convection or radiation. Mathematical analysis of steady and unsteady conduction along with numerical methods. Analytical and semi empirical methods of forced and natural convection systems. Boiling and condensation heat transfer. Radiation between black-body and real surfaces. Radiation network analysis. Physical laboratory exercises focusing on heat-transfer phenomena. Calibration and use of a variety of laboratory instrumentation; acquisition, processing and analysis of data. Prerequisites: MEMS 341, ESE 317. Credit 4 units. EN: DU, SU, TU

E37 MEMS 350 Engineering Mechanics III
Selected topics in the mechanics of deformable solids, presented at a level intermediate between introductory strength of materials and advanced continuum mechanics. Lectures discuss structural stability, inelastic material behavior (plasticity, viscoelasticity), one-dimensional structures (cables, arches, curved beams), two-dimensional structures (plates, membranes, shells) and energy methods. Prerequisite: MEMS 252 or 253. Credit 3 units. EN: DU, SU, TU

E37 MEMS 3601 Materials Engineering
The application of fundamental materials science principles in engineering disciplines. Topics include: design of new materials having unique property combinations, selection of materials for use in specific service environment, prediction of materials performance under service conditions, development of processes to produce materials with improved properties, structural and functional use of metals, polymers, ceramics and composites. Credit 3 units. EN: DU, SU, TU

E37 MEMS 361 Materials Science
Introduction to the chemistry and physics of engineering materials. Topics include: atomic and molecular interpretation of physical and chemical properties, the relationships between physical and chemical properties, and performance of an engineering material. Laboratory exercises focus on the properties and structure of engineering materials. Prerequisite: Chem 111A. Credit 4 units. EN: DU, SU, TU

E37 MEMS 400 Independent Study
Independent investigation on topic of special interest. Prerequisites: junior or senior standing and permission of department chair. Students must complete the Independent Study Approval form available in the department office. CBTL course. Credit -6 unit.

E37 MEMS 4001 Fundamentals of Engineering Review
The topics found in most fundamentals of engineering exams are reviewed and illustrated using examples. A discussion of the importance of licensing exams and the strategies for taking these exams are discussed. The main topics for review include: engineering mathematics, basic chemistry, engineering mechanics, engineering economics, thermodynamics, electrical circuits and material science. Credit units.

E37 MEMS 4101 Manufacturing Processes
Manufacturing processes and machinery are explained and described. Topics include: analytical tools of machine science, heat transfer, vibrations and control theory are applied to the solution of manufacturing problems, analytical development and application of engineering theory to manufacturing problems, machine tools and automated production equipment. Credit 3 units. EN: DU, SU, TU

E37 MEMS 411 Mechanical Engineering Design Project
Feasibility study for a mechanical design project of an open-ended, original design or a creative redesign of a mechanical component or system requiring the application of engineering science principles. Feasibility is subject to economic, safety, legal, environmental, ethical, aesthetic and other constraints in a competitive manufacturing environment. Project teams perform the detailed design and optimization of the concept developed in the feasibility study. Presentations and reports with manufacturing drawings are completed by each team. Prerequisite: MEMS 311. Credit 3 units. EN: DU, SU, TU

E37 MEMS 412 Design of Thermal Systems
Analysis and design of advanced thermo-fluid systems. Student teams participate in the design process, which could involve research, design synthesis, codes, standards, engineering economics, a design project report and formal
presentations. Topics include: thermo-fluid systems and components such as: power, heating and refrigeration systems; pumps, fans, compressors, combustors, turbines, nozzles, coils, heat exchangers and piping. Prerequisite: MEMS 301 Thermodynamics.
Credit 3 units. EN: DU, SU, TU

E37 MEMS 422 Analysis and Design of Modern Structures II
Analysis and design of concrete elements and structures for strength and deformation. Design and use of concrete beams, beam-columns, long columns, one-way and two-way slab systems, and footings as used in indeterminate frames. Exercises focus on phenomena of structural behavior analysis and design. Prerequisites: MEMS 421.
Credit 3 units. EN: DU, SU, TU

E37 MEMS 423 Behavior and Design of Structural Systems
Analysis and design of realistic building and bridge structures with computer-aided design tools. Capstone use of analysis and design concepts in the design of "real-world" structures. Prerequisites: MEMS 422.
Credit 4 units. EN: DU, SU, TU

E37 MEMS 4301 Modeling, Simulation and Control
Introduction to simulation and control concepts. Topics include: block diagram representation of single- and multiloop systems; control system components; transient and steady-state performance; stability analysis; Nyquist, Bode and root locus diagrams; compensation using lead, lag and lead-lag networks; design synthesis by Bode plots and root-locus diagrams; state-variable technique; state-transition matrix; state-variable feedback. Prerequisite: ESE 317.
Credit 3 units. EN: DU, SU, TU

E37 MEMS 4302 Aircraft Flight Dynamics and Control
An integrated treatment of aircraft stability, flight control, aircraft dynamics, flying qualities and the application of control theory to the synthesis of automatic flight control systems. Topics include: flight stability and control, military and civilian aircraft, automatic control systems to provide stabilization, autopilots to aid in navigation and landing. Prerequisites: ESE 317, MEMS 341.
Credit 3 units. EN: DU, SU, TU

E37 MEMS 431 Structural Dynamics and Vibrations

E37 MEMS 4401 Combustion and Environment
Introduction to combustion and its application in devices. Topics include: chemical thermodynamics and kinetics; ignition and explosion; deflagration and detonation waves; transport phenomena and the governing equations for heat and mass transfer in chemically reacting flows; laminar and turbulent flame propagation; non-premixed flames; the emission of combustion-generated pollutants and subsequent interaction with the environment; toxic-waste incineration; and practical combustion devices. Prerequisites: MEMS 301, MEMS 342 or equivalent.
Credit 3 units. EN: DU, SU, TU

E37 MEMS 500 Independent Study
Independent investigation on topic of special interest. Prerequisites: graduate standing and permission of the department chair. Students must complete the Independent Study Approval Form available in the department office. Credit -6 unit.

E37 MEMS 5001 Optimization Methods in Engineering
Analytical methods in design. Topics include: mathematical methods; linear and nonlinear programming; optimality criteria; fully stressed techniques for the design of structures and machine components; topological optimization; search techniques; and genetic algorithms. Prerequisites: calculus and computer programming.
Credit 3 units. EN: DU, SU, TU

E37 MEMS 5101 Graduate Seminar
This is a required pass/fail course for masters and doctoral degrees. A passing grade is required for each semester of full-time enrollment. A passing grade is received by attendance at the weekly seminars.
Credit units.

E37 MEMS 5102 Materials Selection in Design
Analysis of the scientific bases of material behavior in the light of research contributions of the past 20 years. Development of a rational approach to the selection of materials to meet a wide range of design requirements for conventional and advanced applications. Although emphasis is placed on mechanical properties, acoustical, optical, thermal and other properties of interest in design are discussed.
Credit 3 units. EN: DU, SU, TU

E37 MEMS 5103 Advanced Machine Design
Advanced machine design topics including: stress, strain and strain energy in one dimension; applications to oil-well sucker rods, turbine, compressor and propeller and helicopter blades. Advanced beam theory applied to tie rods; beams on elastic foundation, hooks and curved bars. Helical, spiral and leaf springs. Design of thick cylinders, shrink fits and high-speed rotating disks. Analysis and design of circular and rectangular plates; effect of ribs. Torsion of shafting. Lubrication theory applied to bearings. High-speed ball bearings.
Credit 3 units. EN: DU, SU, TU

E37 MEMS 5201 Advanced Topics in Concrete Systems
Analysis and design of prestressed concrete members. Topics include: direct design of composite and noncomposite members for flexure, design of continuous beams, flexural strength, shear strength, and design of anchorage zone.
Credit 3 units. EN: DU, SU, TU

E37 MEMS 5202 Advanced Topics for Structural Systems
Advanced topics and current research on plastic design and analysis of space frames; plate and box girders; and torsion in structures. Prerequisite: permission of instructor.
Credit 3 units. EN: DU, SU, TU

E37 MEMS 5301 Nonlinear Vibrations
In this course, students are introduced to concepts in nonlinear dynamics and vibration and application of these concepts to nonlinear engineering problems. Specific topics include: modeling of lumped and continuous nonlinear systems (strings, beams and plates); vibrations of buckled structures; perturbation and other approximate analytical methods; the use and limitations of local linearization; properties of nonlinear behavior, such as dimension and Lyapunov exponents; stability of limit cycles; bifurcations; chaos and chaotic vibrations; experimental methods and data analysis for nonlinear systems. Concepts are reinforced with a number of examples from recently published research. Applications include aerelastic flutter, impact dynamics, machine-tool vibrations, cardiac arrhythmias and control of chaotic behavior.
Credit 3 units. EN: DU, SU, TU

E37 MEMS 5302 Theory of Vibrations
Analytical methods in vibrations. Topics include: Duhamel's integral, Laplace and Fourier transforms and Fourier series with applications to transient response, forced response and vibration isolation; Lagrange's equations for linear systems, discrete systems, degrees of freedom, reducible coordinates, holonomic constraints and virtual work; matrix methods and state variable approach with applications to frequencies and modes, stability and dynamic response in terms of real and complex modal expansions, dynamic response of continuous systems by theory of partial differential equations, Rayleigh-Ritz and Galerkin energy methods, finite difference and finite element algorithms.
Credit 3 units. EN: DU, SU, TU

E37 MEMS 5401 General Thermodynamics
General foundations of thermodynamics valid for small and large systems, and for equilibrium and nonequilibrium states. Topics include: definitions of state, work, energy, entropy, temperature, heat interaction and energy interaction. Applications to simple systems; phase rule; perfect and semi-perfect gas; bulk-flow systems; combustion, energy and entropy balances; availability analysis for thermo-mechanical power generation; and innovative energy-conversion schemes. Prerequisite: graduate standing or permission of instructor.
Credit 3 units. EN: DU, SU, TU

E37 MEMS 5402 Radiation Heat Transfer
Formulation of the governing equations of radiation heat transfer. Topics include: electromagnetic theory of radiation; properties of ideal and real surfaces; techniques for solutions of heat transfer between gray surfaces; radiation in absorbing, emitting and scattering media.
Credit 3 units. EN: DU, SU, TU

E37 MEMS 5403 Conduction and Convection Heat Transfer
Analytical solutions to homogeneous and nonhomogeneous conduction heat transfer problems in Cartesian, cylindrical and spherical coordinate systems are presented using the separation of variables and integral transform techniques. Conservation of mass, momentum and energy equations for convective heat-transfer problems are presented with analytical and semi-empirical solutions to free and forced convection in the laminar and turbulent regimes.
Credit 3 units. EN: DU, SU, TU

E37 MEMS 5404 Combustion Phenomena
Introduction to fundamental aspects of combustion phenomena including relevant thermochemistry, fluid mechanics and transport processes. Emphasis is on elucidation of the physico-chemical processes, problem formulation and analytical techniques. Topics covered include: ignition, extinction, diffusion flames, particle combustion, deflagrations and detonations. Prerequisite: graduate standing or permission of instructor.
Credit 3 units. EN: DU, SU, TU

**E37 MEMS 5410 Fluid Dynamics I**
Formulation of the basic concepts and equations governing a Newtonian, viscous, conducting, compressible fluid. Topics include: transport coefficients and the elements of kinetic theory of gases; vorticity, incompressible potential flow; singular solutions; flow over bodies and lifting surfaces; similarity method; viscous flow, boundary layer, low Reynolds number flows, laminar and turbulent flows.
Credit 3 units. EN: DU, SU, TU

**E37 MEMS 5411 Fluid Dynamics II**
Governing equations and thermodynamics relations for compressible flow. Topics include: kinetic theory of gases; steady, one-dimensional flows with friction and heat transfer; shock waves; Rankine-Hugoniot relations; oblique shocks; reflections from walls and flow interfaces, expansion waves, Prandtl-Meyer flow, flow in nozzles, diffusers and inlets, two-and three dimensional flows; perturbation methods; similarity rules; compressible laminar and turbulent boundary layers; acoustic phenomena. Emphasis is relevant to air vehicles.
Credit 3 units. EN: DU, SU, TU

**E37 MEMS 5412 Computational Fluid Dynamics**
Computational fluid dynamics relevant to engineering analysis and design. Topics include: fundamentals of finite-difference, finite-volume and finite-element methods; numerical algorithms for parabolic, elliptic and hyperbolic equations; convergence, stability and consistency of numerical algorithms; application of numerical algorithms to selected model equations relevant to fluid flow, grid-generation techniques and convergence acceleration schemes. Prerequisite: senior or graduate standing or permission of the instructor.
Credit 3 units. EN: DU, SU, TU

**E37 MEMS 5413 Advanced Computational Fluid Dynamics**
Credit 3 units. EN: DU, SU, TU

**E37 MEMS 5414 Aeroelasticity and Flow-Induced Vibrations**
This course deals with the interactions between aerodynamics, dynamics and structures in aerospace systems. Topics covered include unsteady aerodynamics, finite-state aerodynamic models, classical fixed-wing flutter, rotary-wing aerelasticity and experimental methods in aerelasticity. Emphasis is given to the prediction of flutter and limit cycles in aerelastic systems.
Credit 3 units.

**E37 MEMS 5415 Viscous Fluid Dynamics**
Credit 3 units.

**E37 MEMS 5420 HVAC Analysis and Design I**
Credit 3 units. EN: DU, SU, TU

**E37 MEMS 5421 HVAC Analysis and Design II**
Energy calculations to estimate the quantity of energy needed to heat and cool building structures. Fundamentals of incompressible flow, basics of centrifugal pump performance, and design procedures for water piping systems. Space air diffuser design to assure that temperatures, humidities and air velocities within occupied spaces are acceptable. Air duct design and fan analysis for optimally distributing air through building air.
duct systems. Performance analysis of refrigeration systems, including the effects of pressure losses and heat transfer. Direct contact heat and mass transfer.
Credit 3 units.  EN : DU , SU , TU

E37 MEMS 5422 Solar Energy Thermal Processes
Extraterrestrial solar radiation, solar radiation on earth’s surface, and weather bureau data. Review of selected topics in heat transfer. Methods of solar energy collection and solar energy storage. Transient and long-term solar system performance. Prerequisite: MEMS 342 or equivalent.
Credit 3 units.  EN : DU , SU , TU

E37 MEMS 5423 Sustainable Environmental Building Systems
Sustainable design of building lighting and HVAC systems considering performance, life cycle cost and downstream environmental impact. Criteria, codes and standards for comfort, air quality, noise/vibration and illumination. Life cycle and other investment methods to integrate energy consumption/conservation, utility rates, initial cost, system/component longevity, maintenance cost and building productivity. Direct and secondary contributions to acid rain, global warming and ozone depletion.
Credit 3 units.  EN : SU , TU

E37 MEMS 5424 Thermo-Fluid Modeling of Renewable Energy Systems
Overview of sustainable energy systems. Fundamentals of energy conversion. Renewable energy sources and energy conversion from wind, biomass, solar-thermal, geothermal and ocean/waves. Applications to energy storage, fuel cells, green air and ground transportation, energy-efficient buildings. Energy-economics modeling, emissions modeling, global warming and climate change.
Credit 3 units.  EN : SU , TU

E37 MEMS 5500 Elasticity
Credit 3 units.  EN : DU , SU , TU

E37 MEMS 5501 Mechanics of Continua
A broad survey of the general principles governing the mechanics of continuous media. Topics include: large deformation theory, general tensor analysis, deformation, stress and stress rate, principles of continuum mechanics and thermodynamics, constitutive relations, two-dimensional continua. Prerequisite: ESE 501-502 or instructor’s permission.
Credit 3 units.  EN : DU , SU , TU

E37 MEMS 5502 Plates and Shells
Introduction to the linear theory of thin elastic plates and shells. The emphasis is on application and the development of physical intuition. The first part of the course focuses on the analysis of plates under various loading and support conditions. The remainder of the course deals mainly with axisymmetric deformation of shells of revolution. Asymptotic methods are used to solve the governing equations. Applications to pressure vessels, tanks and domes. Prerequisites: BME 240 or MEMS 253; ESE 317 or equivalent.
Credit 3 units.  EN : DU , SU , TU

E37 MEMS 5503 Structural Stability
Theorems of Equilibrium and Stability. Topics include: classification of instability phenomena, postbuckling behavior and imperfection-sensitivity, systems with multiple degrees of freedom, buckling of columns, beam-columns, and frames using classical and variational methods and stability and nonlinear behavior of plates and shells.
Credit 3 units.  EN : DU , SU , TU

E37 MEMS 5504 Fracture Mechanics
Classical fracture and fatigue analysis and their limitations. Topics include: Griffith-Irwin, linear-elastic fracture-mechanics analysis, historical aspects, formulation of stability criteria, subcritical crack growth, anisotropic and inhomogeneous effects, fracture-control analysis, with applications to fracture-safety analysis relating to nuclear reactors, aircraft, rotating machinery, elastic-plastic fracture-mechanics analysis and future prospects and applications. Prerequisites: graduate standing or permission of instructor.
Credit 3 units.  EN : DU , SU , TU

E37 MEMS 5510 Finite Element Analysis
Theory and application of the finite element method. Topics include: basic concepts, generalized formulations, construction of finite element spaces, extensions, shape functions, parametric mappings, numerical integration, mass matrices, stiffness matrices and load vectors, boundary conditions, modeling techniques, computation of stresses, stress resultants and natural frequencies, and control of the errors of approximation. Prerequisite: graduate standing or permission of instructor.
Credit 3 units.  EN : DU , SU , TU

E37 MEMS 5512 Composite Structures
Introduction to composite materials. Topics include: anisotropic elasticity and laminate theory; beams and columns of composite materials; plates and panels; transverse shear deformation
effects; twisting and stretching shear coupling; honeycomb core sandwich panels; composite shells; energy methods for statics, stability and dynamics; hygrothermal effects; strength and failure theories.

Credit 3 units. EN : DU, SU, TU

E37 MEMS 5513 Computational Structural Mechanics
An introduction to the analysis and design of structures using finite elements. Topics include: elementary theory of elasticity, plate theories and buckling of plate structures, finite element formulation of 2-D elasticity and plate problems. Hands-on use of finite element software is emphasized. A major design project is included.

Credit 3 units. EN : DU, SU, TU

E37 MEMS 5520 Advanced Analytical Mechanics
Lagrange’s equations and their applications to holonomic and nonholonomic systems. Topics include: reduction of degrees of freedom by first integrals, variational principles, Hamilton-Jacobi theory, general transformation theory of dynamics, applications such as theory of vibrations and stability of motion, and use of mathematical principles to resolve nonlinear problems. Prerequisite: senior or graduate standing or permission of instructor.

Credit 3 units. EN : DU, SU, TU

E37 MEMS 5601 Mechanical Behavior of Materials
A materials science-based study of mechanical behavior of materials with emphasis on mechanical behavior as affected by processes taking place at the microscopic and/or atomic level. The response of solids to external or internal forces as influenced by interatomic bonding, crystal/molecular structure, crystalline/noncrystalline defects and material microstructure are studied. The similarities and differences in the response of different kinds of materials viz., metals and alloys, ceramics, polymers and composites are discussed. Topics covered include physical basis of elastic, visco elastic and plastic deformation of solids; strengthening of crystalline materials; visco elastic deformation of polymers as influenced by molecular structure and morphology of amorphous, crystalline and fibrous polymers; deformation and fracture of composite materials; mechanisms of creep, fracture and fatigue; high strain-rate deformation of crystalline materials; and deformation of noncrystalline materials.

Credit 3 units. EN : DU, SU, TU

E37 MEMS 5602 Non-metallics
Structure, mechanical and physical properties of ceramics and cermets, with particular emphasis on the use of these materials for space, missile, rocket, high-speed aircraft, nuclear and solid-state applications.

Credit 3 units. EN : DU, SU, TU

E37 MEMS 5603 Materials Characterization Techniques I
An introduction to the basic theory and instrumentation used in transmission electron, scanning electron and optical microscopy. Practical laboratory experience in equipment operations, experimental procedures and material characterization.

Credit 3 units. EN : DU, SU, TU

E37 MEMS 5604 Materials Characterization Techniques II
Introduction to crystallography and elements of X-ray physics. Diffraction theory and application to materials science including following topics: reciprocal lattice concept, crystal-structure analysis, Laue methods, rotating crystal methods, powder method and laboratory methods of crystal analysis.

Credit 3 units. EN : SU, TU

E37 MEMS 5605 Mechanical Behavior of Composites
Analysis and mechanics of composite materials. Topics include micromechanics, laminated plate theory, hygrothermal behavior, creep, strength, failure modes, fracture toughness, fatigue, structural response, mechanics of processing, nondestructive evaluation and test methods. Prerequisite: permission of the instructor.

Credit 3 units. EN : DU, SU, TU

E37 MEMS 5606 Soft Nanomaterials
Soft nanomaterials, which range from self-assembled monolayers (SAMs) to complex 3-D polymer structures, are gaining increased attention owing to their broad-range applications. The course introduces the fundamental aspects of nanotechnology pertaining to soft matter. Various aspects related to the design, fabrication, characterization and application of soft nanomaterials are discussed. Topics covered include but are not limited to SAMs, polymer brushes, Layer-by-layer assembly, responsive polymers structures (films, capsules), polymer nanocomposites, biomolecules as nanomaterials and soft lithography.

Credit 3 units.

E37 MEMS 5607 Introduction to Polymer Blends and Composites
The course covers topics in multicomponent polymer systems (polymer blends and polymer composites) such as: phase separation and miscibility of polymer blends; surfaces and interfaces in composites; microstructure and mechanical behavior; rubber-toughened plastics; thermoplastic elastomers; block copolymers; fiber-reinforced and laminated composites; techniques of polymer processing with an emphasis on composites processing; melt processing methods such as injection molding and extrusion; solution processing of thin films; selection of suitable processing methods; and materials selection criteria for specific applications. Advanced topics include: nanocomposites such as polymer/CNT composites, biomimetic
approaches and current research challenges. Prerequisite: MEMS 361 or equivalent or permission of instructor. Credit 3 units. EN : SU, TU

E37 MEMS 5608 Introduction to Polymer Science and Engineering
The course introduces: the concept of long-chain or macromolecules; polymer chain structure and configuration; microstructure and mechanical (rheological) behavior; polymer phase transitions (glass transition, melting, crystallization); physical chemistry of polymer solutions (Flory-Huggins theory, solubility parameter, thermodynamics of mixing and phase separation); polymer surfaces and interfaces; overview of polymer processing (extrusion, injection molding, film formation, fiber spinning); and modern applications of synthetic and bio-polymers. Credit 3 units. EN : DU, SU, TU

E37 MEMS 5609 Electronic Materials Processing
This course covers “unit processes” for manufacturing semiconductor chips. Topics include: crystal growth and doping of wafers, oxidation and diffusion, ion implantation, deposition, etching, cleaning and lithography. Processes are described with key concepts derived from science and engineering and process integration is covered for devices such as transistors and light emitting diodes. Nanoprocessing concepts are highlighted in the end to provide students with practical and advanced knowledge of semiconductor manufacturing. Prerequisites: undergraduate engineering mathematics, materials science and basic electronics or instructor’s permission. Credit 3 units. EN : DU, SU, TU

E37 MEMS 5610 Quantitative Materials Science and Engineering
Quantitative Materials Science and Engineering provide students with the basic mathematical foundation needed to understand primary concepts in Materials Science and Engineering (MSE). The course structure involves introduction of mathematical techniques, including Fourier series, ordinary and partial differential equations, special functions, matrix algebra and vector calculus. The introduction of each technique is followed by its direct application to fundamental concepts in MSE, which include topics from thermodynamics, kinetics and phase transformations, structure and properties of hard and soft matter and characterization techniques. This course is intended especially for students pursuing graduate study in materials science, but with little background in upper-level mathematics. Credit 3 units. EN : SU, TU

E37 MEMS 5700 Aerodynamics
Fundamental concepts of aerodynamics, equations of compressible flows, irrotational flows and potential flow theory, singularity solutions, circulation and vorticity, Kutta-Joukowksi theorem, thin airfoil theory, finite wing theory, slender body theory, subsonic compressible flow and Prandtl-Glauert rule, supersonic thin airfoil theory, introduction to performance, basic concepts of airfoil design. Prerequisite: graduate standing or permission of instructor. Credit 3 units. EN : DU, SU, TU

E37 MEMS 5701 Aerospace Propulsion
Propeller, jet, ramjet and rocket propulsion. Topics include: fundamentals of propulsion systems, gas turbine engines, thermodynamics and compressible flow, one-dimensional gas dynamics, analysis of engine performance, air breathing propulsion system, the analysis and design of engine components, and the fundamentals of ramjet and rocket propulsion. Credit 3 units. EN : DU, SU, TU

E37 MEMS 5703 Analysis of Rotary-Wing Systems
This course introduces the basic physical principles that govern the dynamics and aerodynamics of helicopters, fans and wind turbines. Simplified equations are developed to illustrate these principles, and the student is introduced to the fundamental analysis tools required for their solution. Topics include: harmonic balance, Floquet theory and perturbation methods. Credit 3 units. EN : DU, SU, TU

E37 MEMS 5704 Aircraft Structures
Basic elements of the theory of elasticity; application to torsion of prismatic bars with open and closed thin-wall sections; the membrane analogy; the principle of virtual work applied to 2-D elasticity problems. Bending, shear and torsion of open and closed thin-wall section beams; principles of stressed skin construction, structural idealization for the stress analysis of wings, ribs and fuselage structures. Margin of safety of fastened connections and fittings. Stability of plates, thin-wall section columns and stiffened panels. Application of the finite element method for the analysis of fastened connections, structural fittings and problems of local stability of aircraft structural components. Credit 3 units.

E37 MEMS 5705 Wind Energy Systems
A comprehensive introduction to wind energy systems, a practical means of extracting green and sustainable energy. Topics include: a historical perspective of wind turbines; horizontal axis and vertical axis wind turbines; the basic parameters such as power rating and efficiency; the structural components ranging from blade and hub to nacelle and tower; wind turbine aerodynamics, aeroelasticity and control systems; blade fatigue; statistical wind modeling; unsteady airfoil aerodynamics and downstream wake; and environmental considerations such as noise and aesthetics. Prerequisite:
senior or graduate standing in engineering or permission of the instructor.
Credit 3 units. EN: DU, SU, TU

E37 MEMS 5801 Micro-Electro-Mechanical Systems I
Introduction to MEMS. Topics include: electronic microsensors; thermocouples; thermopiles; diodes; capacitors and transistors; transducer principles; virtual work; electro-mechanical analysis; testing; dynamical macro-models; material properties; fabrication and micro-machining; design principles; and case study. Prerequisite: graduate standing or permission of the instructor. Credit 3 units. EN: DU, SU, TU

E37 MEMS 5802 Micro-Electro-Mechanical Systems II
A second course in MEMS. Topics include: physical microsystems; pressure sensors; accelerometers; microfluids and micro-scale thermal phenomena; electro-osmotic flows; microvalves; micropumps; optical MEMS; active flow control; system and constraints on microsystem design; compliant mechanisms; microfabricated electrochemical sensors; bio-MEMS; and case studies. Prerequisite: MEMS 5801 or permission of instructor. Credit 3 units. EN: DU, SU, TU

E37 MEMS 5804 Engineering Project Management
Basic fundamentals and advanced concepts of engineering project management applicable to projects and programs, both large and small. Project management skills, techniques, systems, software and application of management science principles are covered and related to research, engineering, architectural and construction projects from initial evaluations through approval, design, procurement, construction and startup. Credit 3 units. EN: DU, SU, TU

E37 MEMS 5912 Biomechanics Journal Club
This journal club is intended for graduate students and advanced undergraduates with an interest in biomechanics. We review landmark and recent publications in areas such as brain, cardiovascular and orthopedic biomechanics, discussing both experimental and modeling approaches. This course meets once weekly at a time to be arranged. Credit 1 unit. EN: SU, TU

E37 MEMS 598 Energy Design Project
Credit -6 unit.

E37 MEMS 599 Masters Research
Credit -6 unit.
Process Control Systems
A Jointly Sponsored Undergraduate Program

Process Control Systems is a program intended to provide students with a broad background in chemical and systems engineering, with emphasis on the science and technology of process automation. Through a careful selection of courses in chemical engineering and systems engineering, a unified approach is developed to the analysis, design, operation and control of chemical and other manufacturing processes. Electives in systems engineering allow further in-depth specialization in applied mathematics, discrete-event systems, robotics, quality control, optimization and dynamical systems.

In addition to the traditional laboratory work in chemistry, physics and chemical engineering, a laboratory course in digital process control is offered based on computers and advanced commercial distributed-control equipment. Familiarity with computers and with process modeling, data acquisition and control software is an essential component of the training. In the senior year, you can elect to complete a major design project either in chemical processing systems (chemical engineering) or in technological or engineering systems (systems engineering).

Upon successful completion, you receive both the Bachelor of Science in Chemical Engineering and the Bachelor of Science in Systems Science and Engineering.

The Process Control Systems program satisfies an increasing demand by manufacturing and petrochemical companies for professionals trained in advanced automation to improve product quality, to reduce costs, to improve capital productivity, and to improve safety and environmental quality. This interdisciplinary program provides the background necessary to combine traditional engineering skills with new systems engineering techniques and meet these challenges. The program is staffed by faculty members from both departments and is supervised by a coordinating committee. You are assigned two advisers, one from each department, who are members of the committee.

Further information about the program can be obtained from the coordinating committee through either of the cooperating departments.

The Process Control Systems Program

<table>
<thead>
<tr>
<th>Units</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
</table>
| First Year
General Chemistry Laboratory I, II (Chem 151, 152) | 2 | 2 |
Calculus II, III (Math 132, 233) | 3 | 3 |
General Physics I, II (Physics 117A, 118A) | 4 | 4 |
| Second Year
General Chemistry I, II (Chem 111A, 112A) | 3 | 3 |
Matrix Algebra (Math 309) | 3 | — |
Introduction to Systems Science and Engineering (ESE 251) | — | 3 |
| | 15 | 15 |
| Second Year
Organic Chemistry I with Lab (Chem 261) | 4 | — |
Differential Equations (Math 217) | 3 | — |
Thermodynamics (ChE 320) | 3 | — |
Engineering Analysis of Chemical Systems (ChE 351) | 3 | — |
Humanities or social sciences elective | 3 | 3 |
Principles of Biology I (Biol 2960) | — | 4 |
Engineering and Scientific Computing or Modeling and Computing in Chemical Engineering (CSE 200 or ChE 275) | — | 4 |
Engineering Mathematics (ESE 317) | — | 3 |
Probability and Statistics for Engineering (ESE 326) | — | 3 |
| | 16 | 17 |
| Third Year
Signals and Systems (ESE 351) | 3 | — |
Operations Research (ESE 403) | 3 | — |
Transport Phenomena I, II (ChE 367, 368) | 3 | 3 |
Materials Science (ChE 325) | 3 | — |
Systems science and engineering elective | 3 | 3 |
Engineering Ethics and Sustainability (Engr 4501) | — | 1 |
Engineering Leadership and Team Building (Engr 4502) | 1 | — |
Conflict Management and Problem Solving in Engineering (Engr 4503) | 1 | — |
Mass Transfer Operations (ChE 357) | — | 3 |
Molecular Transport Processes and Chemical Kinetics (ChE 359) | — | 3 |
Humanities or social sciences elective | — | 3 |
Technical Writing (Engr 310) | — | 3 |
| | 18 | 18 |
| Fourth Year
Chemical Reaction Engineering (ChE 471) | 3 | — |
Chemical Engineering Laboratory (ChE 473A) | 4 | — |
Computer science elective from approved list (excluding CSE 200) | 3 | — |
Systems science and engineering elective | 3 | 3 |
Humanities or social sciences elective | 3 | 3 |
Control Systems or Chemical Process Dynamics and Control (ESE 441 or ChE 462) 3 —
Systems Design Project or Process and Product Design (ESE 499 or ChE 478A) — 3
Digital Process Control Laboratory (ESE 449 or ChE 433) — 3
Chemical Engineering elective — 3
Energy Transfer Processes (ChE 369) — 3

19 18

Coordinating Committee

Pratim Biswas
Lucy and Stanley Lopata Professor
PhD, California Institute of Technology
(Energy, Environmental and Chemical Engineering)

I. Norman Katz
PhD, Massachusetts Institute of Technology
(Electrical and Systems Engineering)

Hiroaki Mukai
PhD, University of California–Berkeley
(Electrical and Systems Engineering)

Jay R. Turner
DSc, Washington University
(Chemical Engineering)

To satisfy the core requirements of the School of Engineering & Applied Science, the following courses are required:

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics 117A, 118A</td>
</tr>
<tr>
<td>Chem 111A, 112A, 151, 152</td>
</tr>
<tr>
<td>Math 132, 233, 217</td>
</tr>
<tr>
<td>Humanities/social sciences electives</td>
</tr>
</tbody>
</table>

To complete the core requirements of both chemical engineering and systems engineering, the following additional requirements apply:

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chem 261 Organic Chemistry I with Lab</td>
</tr>
<tr>
<td>ChE 325 Materials Science</td>
</tr>
<tr>
<td>ESE 317 Engineering Mathematics</td>
</tr>
<tr>
<td>ESE 326 Probability and Statistics for Engineering</td>
</tr>
<tr>
<td>Engr 310 Technical Writing</td>
</tr>
<tr>
<td>CSE 200 Engineering and Scientific Computing</td>
</tr>
<tr>
<td>Biol 2960 Principles of Biology I</td>
</tr>
</tbody>
</table>

The balance of the curriculum is carefully structured to satisfy the combined degree requirements and to meet the objectives of the program. See the accompanying Process Control Systems program chart (p. 853) for the details. The general degree requirements include the residency and other applicable requirements of the university and the School of Engineering & Applied Science.

The curriculum meets the requirements of both degrees and can be completed in four years. The total number of units required is 141. The semester course load exceeds the usual schoolwide average of 15 units per semester, so you must be highly motivated to accomplish this objective in eight semesters. The course load in individual semesters may be lightened by attending summer school or by adding an additional semester. A number of courses (e.g., ChE 320, ENGR 310, Math 309, ESE 317, ESE 326, ESE 351; and humanities and social sciences courses) usually are offered in the summer as well.

There is no minor in this area.

There are no courses specific to this program.
University of Missouri–St. Louis/Washington University Joint Undergraduate Engineering Program

In 1993, Washington University and the University of Missouri–St. Louis held the first classes in the Joint Undergraduate Engineering Program. This partnership, the first of its kind in the United States, offers University of Missouri–St. Louis students the opportunity to benefit from the engineering program at Washington University and its century-long tradition of excellence. Effective in October 1999, the three bachelor’s degrees (civil, electrical and mechanical engineering) offered in our joint program were accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET). Besides being the first undergraduate engineering degrees offered in a public/private partnership, they are also the first such degrees to receive ABET accreditation.

The courses are organized for both full-time students and part-time students with daytime commitments who need to attend classes in the evening. Students who enter the program take about half their course work — mathematics, physics, chemistry, humanities and social sciences — on the campus of the University of Missouri–St. Louis. The remaining half of the degree program, consisting of upper-level engineering courses and laboratories, is taken on the Washington University campus. Students may choose civil, electrical or mechanical engineering. Students receive their undergraduate engineering degrees from the University of Missouri.

For information about this program, please contact the University of Missouri–St. Louis Joint Undergraduate Engineering Program at 314/516-6800 or the Washington University School of Engineering at 314/935-6510.

Phone: 314/516-6800 or 314/935-6510
Departmental website: http://engineering.wustl.edu/
UmslWustlJointProgram.aspx

Dean
(at University of Missouri–St. Louis)

Joseph A. O’Sullivan
Samuel C. Sachs Professor of Electrical Engineering
PhD, University of Notre Dame

Associate Dean
(at University of Missouri–St. Louis)

Bernard J. Feldman
PhD, Harvard University
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